

# User's Guide Specification

답 당

관 리 자

CHOI MJ  
08.01.21

KIM JO  
08.01.21

## 1. Model Description

MODEL	42/47/52LG70ED-CA		BRAND	LG	Part No.	MFL36914907 (0801-REV00)
SUFFIX	LGEND	Product Name	42/47/52LG70ED			

## 2. Printing Specification

1. Trim Size (Format) : 185 mm x 260 mm
2. Printing Colors : 1 Color (BLACK)
3. Stock (Paper)
  - Cover : Coated paper, S/W 150 g/㎡
  - Inside : Uncoated paper, 백상지 60 g/㎡
4. Printing Method : Off-set
5. Bindery : Perfect bind
6. Language : EN (1)
7. Number of pages : 108 pages

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S

“This part contain Eco-hazardous substances (Pb, Cd, Hg, Cr6+, PBB, PBDE, etc.) within LG standard level, Details should be followed Eco-SCM management standard[LG(56)-A-2524]. Especially, Part should be followed and controlled the following specification.  
(1)Eco-hazardous substances test report should be submitted when Part certification test and First Mass Production.  
(2) Especially, Don't use or contain lead(Pb) and cadmium(Cd) in ink.

## 3. Special Instructions

### (1) Origin Notification

\* LGEIN : Printed in Indonesia

\* LGEWA : Printed in U.K.

\* LGEMA : Printed in Poland

\* LGESP : Printed in Brazil

\* LGEMX : Printed in Mexico

\* LEGEND : Printed in China

\* LGEIL : Printed in India

\* Other Oversea Factories : NON

## 3. Changes

10				
9				
8				
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6				
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2				
1				
REV. NO.	MM/DD/YY	SIGNATURE	CHANGE NO.	CHANGE CONTENTS

## Pagination sheet

P/N0. **MFL36914907**

Total pages : 108 pages

Front Cover								Back Cover
P/NO.	1	2	...	...	...	104	105	

# LCD TV OWNER'S MANUAL

## LCD TV MODELS

42LG70ED

47LG70ED

52LG70ED

Please read this manual carefully before operating your TV.

Retain it for future reference.

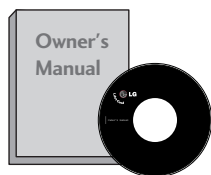
Record model number and serial number of the TV. Refer to the label on the back cover and quote this information.

To your dealer when requiring service.

“ This product incorporates copy protection technology that is protected by U.S. and foreign patents, including patent numbers 5,315,448 and 6,836,549, and other intellectual property rights. The use of Macrovision’s copy protection technology in the product must be authorized by Macrovision. Reverse engineering or disassembly is prohibited. ”

# ACCESSORIES

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



Owner's Manual



Batteries



Remote Control



Power Cord



Protection Cover

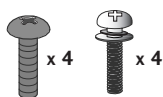


## Polishing Cloth

Polishing cloth for use on the screen.

Lightly wipe any stains or fingerprints on the surface of the TV with the polishing cloth.

Do not use excessive force. This may cause scratching or discolouration.



**Bolts for stand assembly**  
(Refer to p. 6)  
(Only 42LG70ED)

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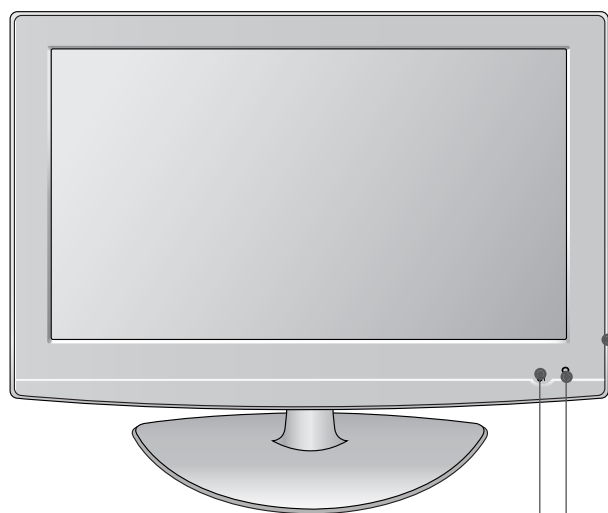
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# PREPARATION

## FRONT PANEL CONTROLS

- Image shown may differ from your TV.
- If your TV has a protection film attached, remove the film and then wipe the TV with a polishing cloth.



### POWER

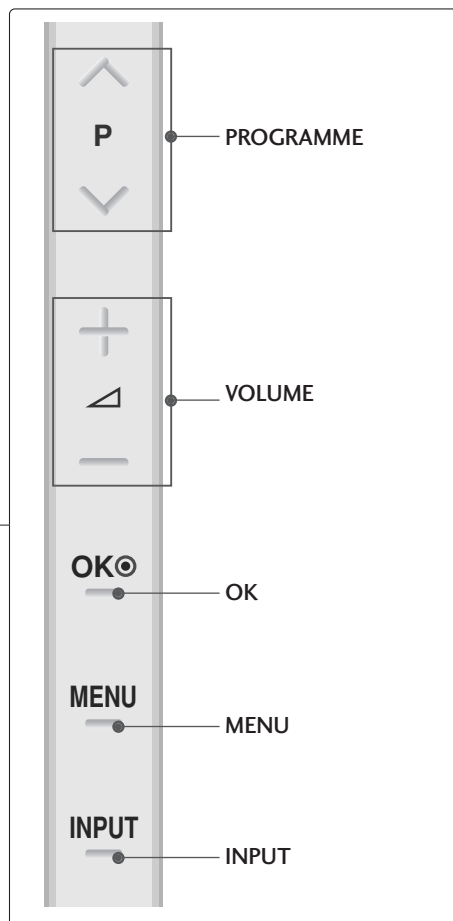
#### Remote Control Sensor

#### Power/Standby Indicator

- illuminates red in standby mode.

- illuminates blue when the TV is switched on.

Note: You can adjust **Power Indicator** in the **OPTION** menu.



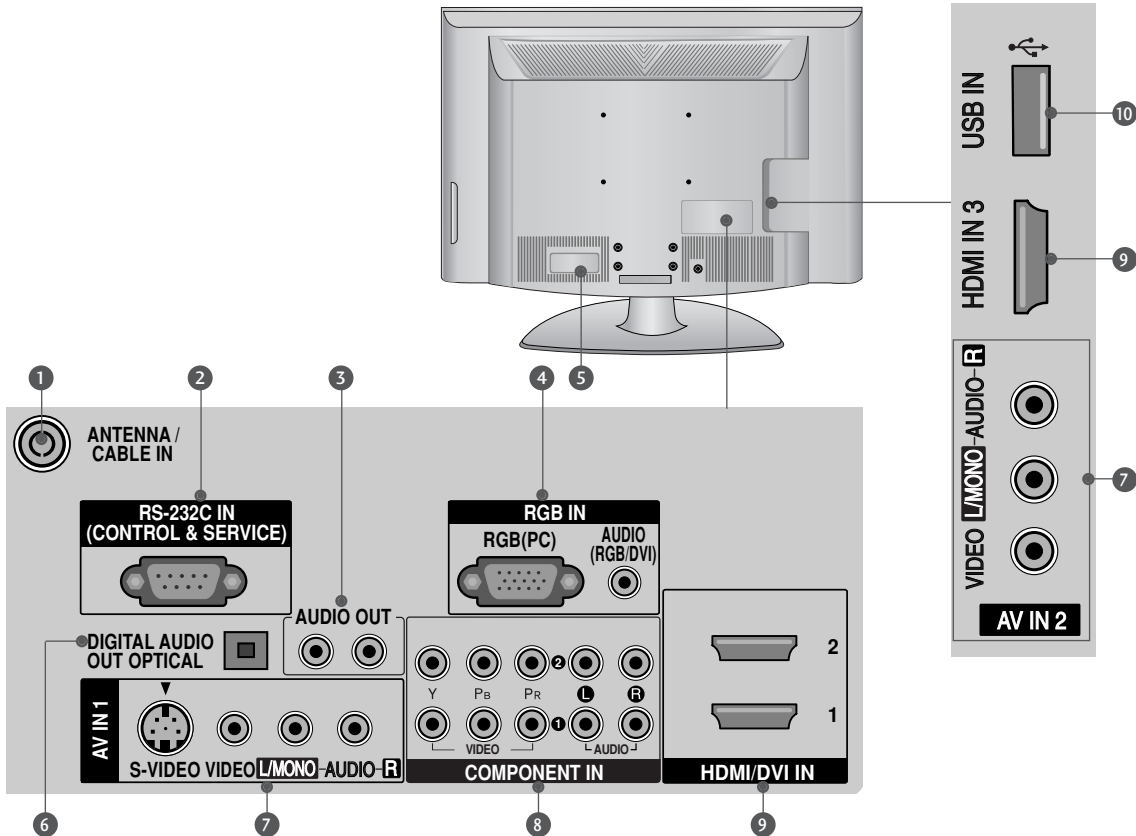
### Intelligent Sensor

Adjusts picture according to the surrounding conditions.



# BACK PANEL INFORMATION

■ Image shown may differ from your TV.

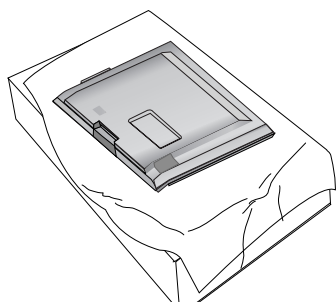


- 1 **Antenna Input**  
Connect RF antenna to this jack.
- 2 **RS-232C IN (CONTROL & SERVICE) PORT**  
Connect to the RS-232C port on a PC.
- 3 **Audio Out**  
Connect an external amplifier or add a subwoofer to your surround sound system.
- 4 **RGB IN (PC)**  
Connect the output from a PC.  
**AUDIO IN (RGB/DVI)**  
Connect the audio from a PC or DTV.
- 5 **Power Cord Socket**  
This TV operates on an AC power. The voltage is indicated on the Specifications page. Never attempt to operate the TV on DC power.
- 6 **DIGITAL AUDIO OUT OPTICAL**  
Connect digital audio from various types of equipment.  
Note: In standby mode, these ports do not work.
- 7 **AV (Audio/Video) IN 1/2**  
Connect audio/video output from an external device to these jacks.  
**S-VIDEO**  
Connect S-Video out from an S-VIDEO device.
- 8 **Component Input 1/2**  
Connect a component video/audio device to these jacks.
- 9 **HDMI IN 1/2/3**  
Connect a HDMI signal to HDMI IN. Or DVI (VIDEO) signal to HDMI/DVI port with DVI to HDMI cable.
- 10 **USB Input**

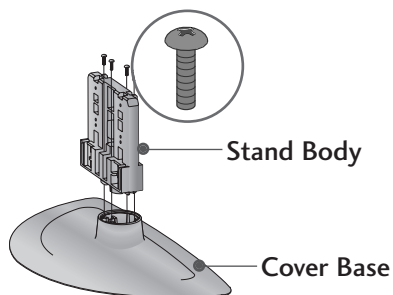
# PREPARATION

## STAND INSTALLATION (42LG70ED only)

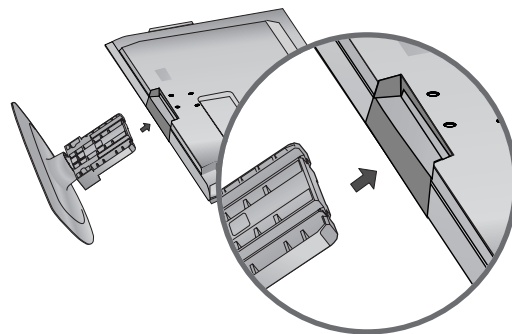
- 1 Carefully place the TV screen side down on a cushioned surface to protect the screen from damage.



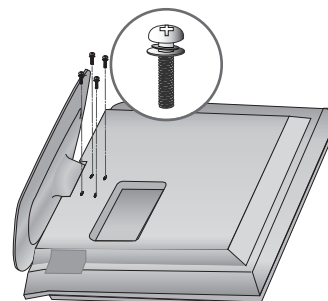
- 2 Assemble the parts of the **Stand Body** with the **Cover Base** of the TV.



- 3 Assemble the TV as shown.

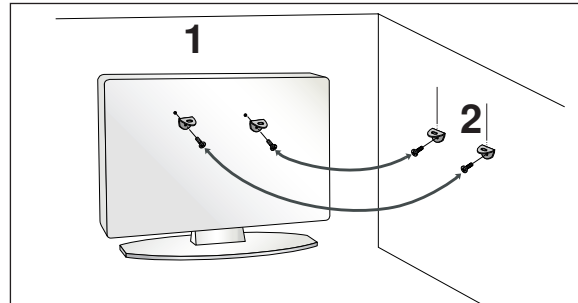
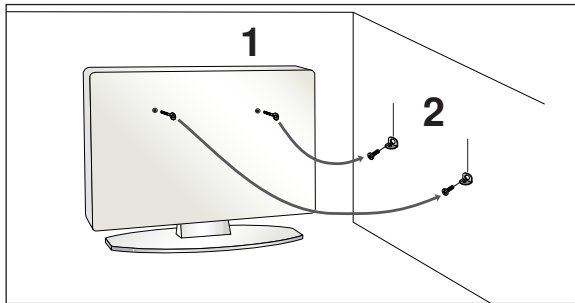


- 4 Fix the 4 bolts securely using the holes in the back of the TV.

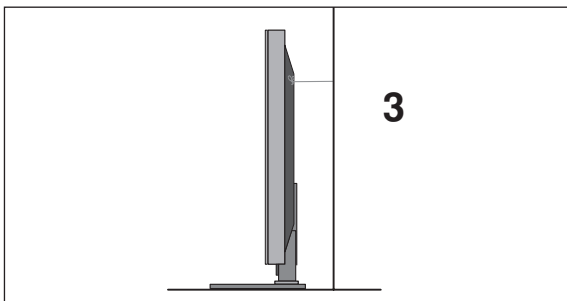


## PLEASE SET IT UP CAREFULLY SO THE PRODUCT DOES NOT FALL OVER.

- You should purchase necessary components to fix the TV to the wall on the market.
- Position the TV close to the wall to avoid the possibility of it falling when pushed.
- The instructions shown below are a safer way to set up the TV, which is to fix it to the wall, avoiding the possibility of it falling forwards if pulled. This will prevent the TV from falling forward and causing injury. This will also prevent the TV from damage. Ensure that children do not climb or hang from the TV.



- 1 Use the eye-bolts or TV brackets/bolts to fix the TV to the wall as shown in the picture.  
(If your TV has bolts in the eyebolts, loosen these bolts.)  
\* Insert the eye-bolts or TV brackets/bolts and tighten them securely in the upper holes.
- 2 Secure the wall brackets with the bolts on the wall. Match the height of the bracket that is mounted on the wall.



- 3 Use a sturdy rope to tie the TV. It is safer to tie the rope so it becomes horizontal between the wall and the TV.

### ! NOTE

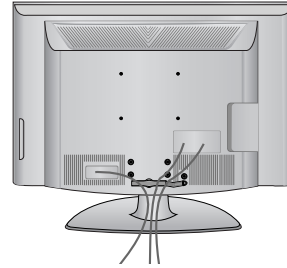
- ▶ When moving the TV undo the cords first.
- ▶ Use a platform or cabinet strong and large enough to support the size and weight of the TV.
- ▶ To use the TV safely make sure that the height of the bracket on the wall and on the TV is the same.

# PREPARATION

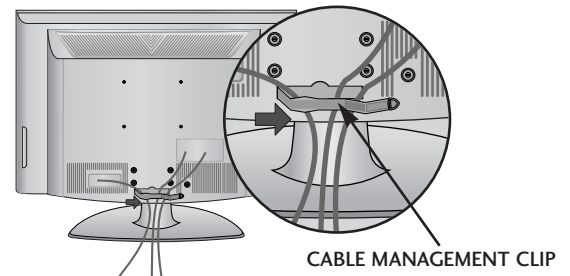
## BACK COVER FOR WIRE ARRANGEMENT

- 1 Connect the cables as necessary.

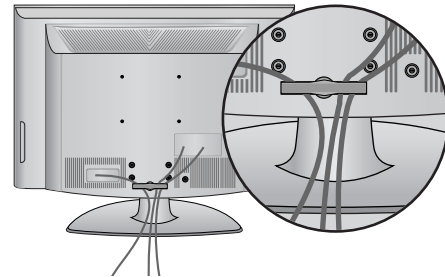
To connect additional equipment, see the **External Equipment Setup** section of the manual.



- 2 Open the **CABLE MANAGEMENT CLIP** as shown and manage the cables.



- 3 Fit the **CABLE MANAGEMENT CLIP** as shown.

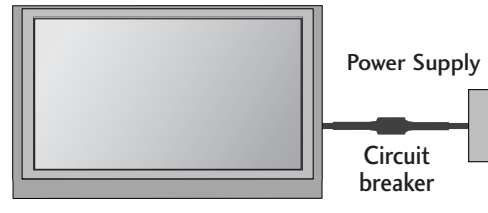


- The TV can be installed in various ways such as on a wall, or on a desktop etc.
- The TV is designed to be mounted horizontally.

## EARTHING

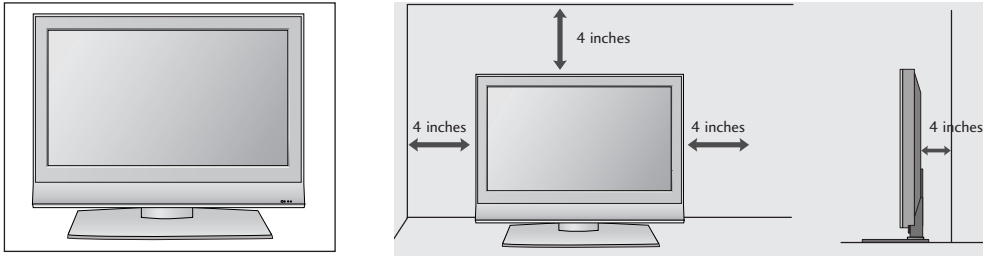
Ensure that you connect the earth wire to prevent possible electric shock. If grounding methods are not possible, have a qualified electrician install a separate circuit breaker.

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



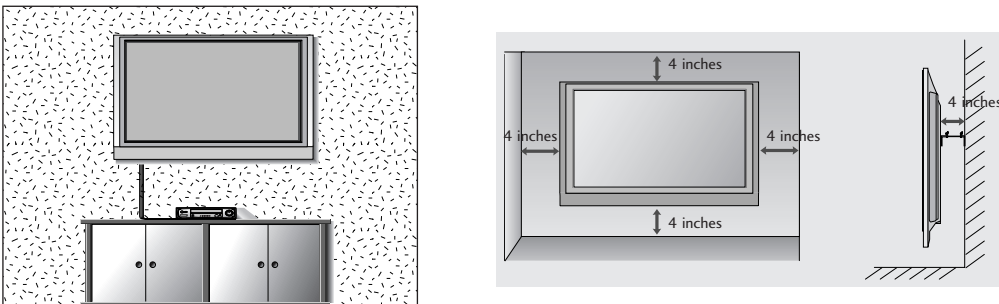
## DESKTOP PEDESTAL INSTALLATION

For adequate ventilation allow a clearance of 4" (10cm) all around the TV.



## WALL MOUNT: HORIZONTAL INSTALLATION

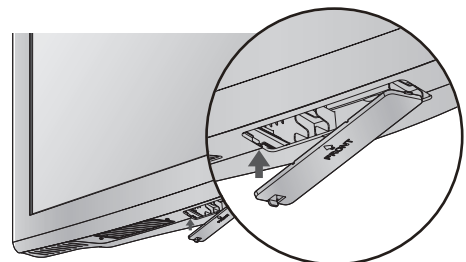
For adequate ventilation allow a clearance of 4" (10cm) all around the TV. Detailed installation instructions are available from your dealer, see the optional Tilt Wall Mounting Bracket Installation and Setup Guide.



## Protection cover

You can remove the stand before installing the TV on a wall mount by performing the previous stand instructions in reverse. After removing the stand, install the included **protection cover** over the hole for the stand.

Insert the **PROTECTION COVER** into the TV until clicking sound.

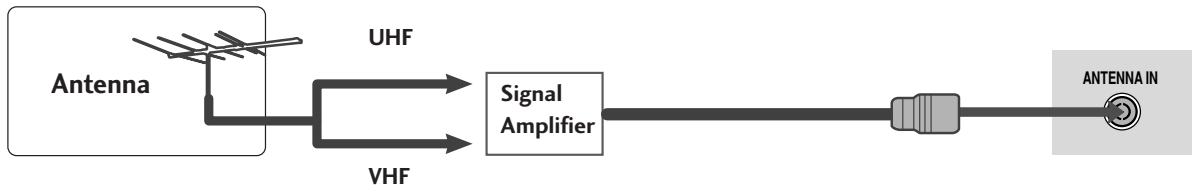
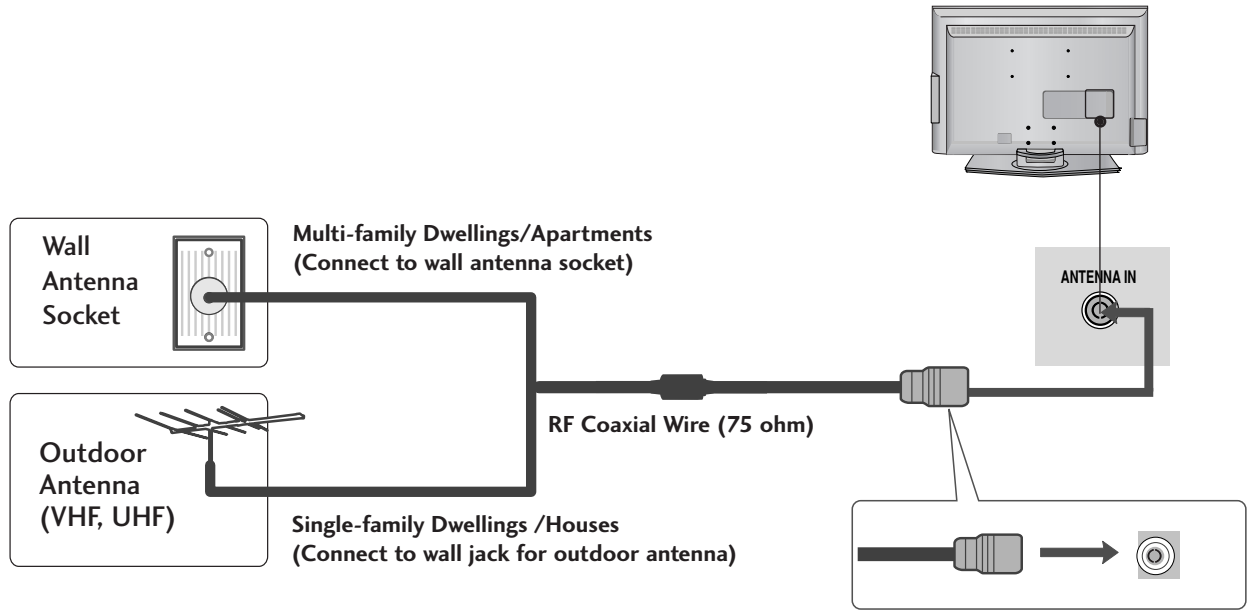


# PREPARATION

- To prevent damage do not connect to the mains outlet until all connections are made between the devices.

## ANTENNA CONNECTION

- For optimum picture quality, adjust antenna direction.
- An antenna cable and converter are not supplied.



- In poor signal areas, to achieve better picture quality it may be necessary to install a signal amplifier to the antenna as shown above.
- If signal needs to be split for two TVs, use an antenna signal splitter for connection.

# EXTERNAL EQUIPMENT SETUP

■ To avoid damaging any equipment, never plug in any power cords until you have finished connecting all equipment.

## HD RECEIVER SETUP

■ This TV can receive Digital RF/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 diagram as shown below.

### Connecting with a component cable

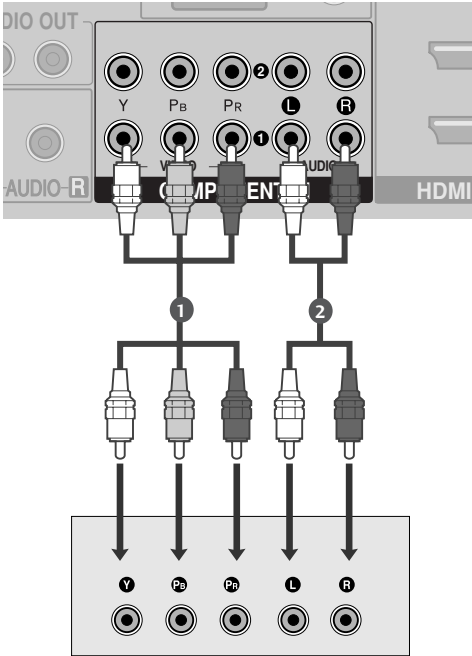
- 1

Connect the video outputs (Y, PB, PR) of the digital set top box to the **COMPONENT IN VIDEO** jacks on the TV.
- 2

Connect the audio output of the digital set-top box to the **COMPONENT IN AUDIO** jacks on the TV.
- 3

Turn on the digital set-top box.  
(Refer to the owner's manual for the digital set-top box.)
- 4

Select **COMPONENT** input source using the **INPUT** button on the remote control.

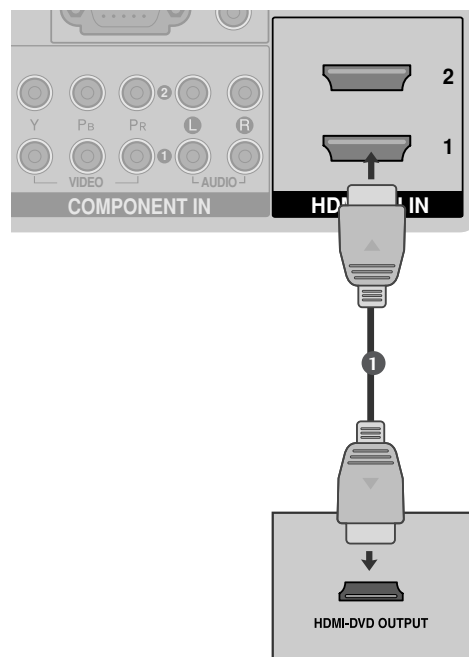


Signal	Component	HDMI
480i/576i	Yes	No
480p/576p	Yes	Yes
720p/1080i	Yes	Yes
1080p	Yes	Yes

# EXTERNAL EQUIPMENT SETUP

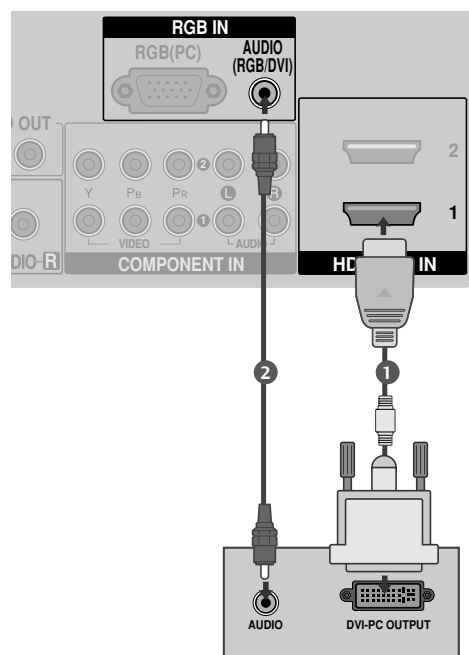
## Connecting a set-top box with an HDMI cable

- 1 Connect the HDMI output of the digital set-top box to the **HDMI/DVI IN 1**, **HDMI IN 2** or **HDMI IN 3** jack on the TV.
- 2 Turn on the digital set-top box.  
(Refer to the owner's manual for the digital set-top box.)
- 3 Select **HDMI1**, **HDMI2** or **HDMI3** input source using the **INPUT** button on the remote control.



## Connecting with a HDMI to DVI cable

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





# DVD SETUP

## When connecting with a component cable

- 1

Connect the video outputs (Y, P<sub>B</sub>, P<sub>R</sub>) of the DVD to the **COMPONENT IN VIDEO** jacks on the TV.
- 2

Connect the audio outputs of the DVD to the **COMPONENT IN AUDIO** jacks on the TV.
- 3

Turn on the DVD player, insert a DVD.
- 4

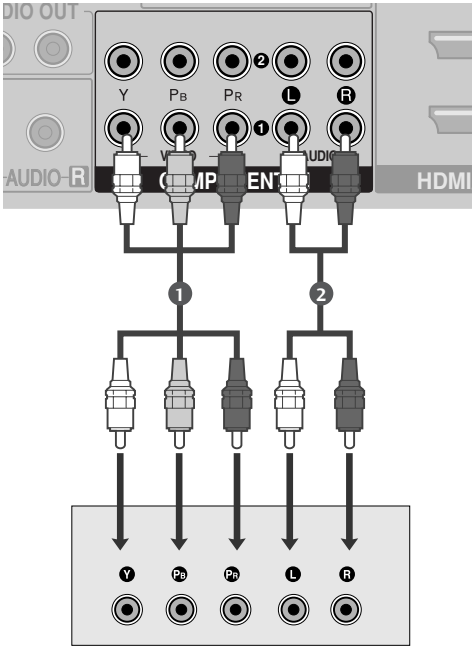
Select **COMPONENT** input source using the **INPUT** button on the remote control.
- 5

Refer to the DVD player's manual for operating instructions.

### Component Input ports

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

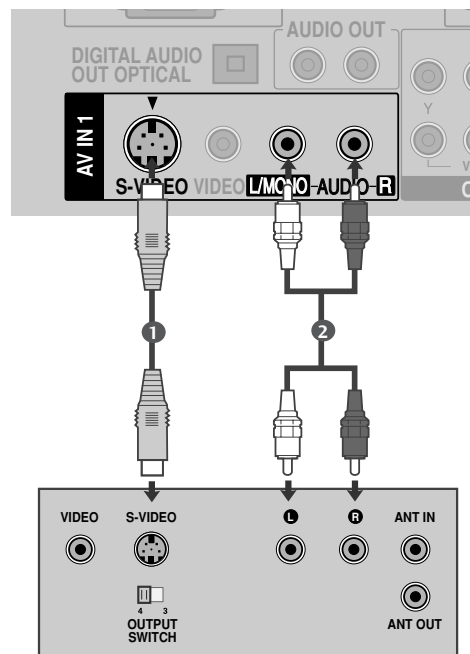
Component ports on the TV	Y	P <sub>B</sub>	P <sub>R</sub>
Video output ports on DVD player	Y	P <sub>B</sub>	P <sub>R</sub>
	Y	B-Y	R-Y
	Y	Cb	Cr
	Y	Pb	Pr



# EXTERNAL EQUIPMENT SETUP

## Connecting with a S-Video cable

- 1 Connect the S-VIDEO output of the DVD to the **S-VIDEO** input on the TV.
- 2 Connect the audio outputs of the DVD to the **AUDIO** input jacks on the TV.
- 3 Turn on the DVD player, insert a DVD.
- 4 Select **AV1** input source using the **INPUT** button on the remote control.
- 5 Refer to the DVD player's manual for operating instructions.

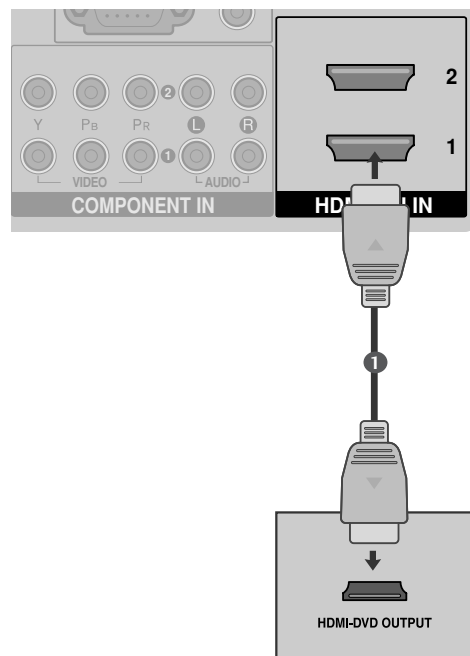


## Connecting the HDMI cable

- 1 Connect the HDMI output of the DVD to the **HDMI/DVI IN 1**, **HDMI IN 2** or **HDMI IN 3** jack on the TV.
- 2 Select **HDMI1**, **HDMI2** or **HDMI3** input source using the **INPUT** button on the remote control.
- 3 Refer to the DVD player's manual for operating instructions.

### ! NOTE

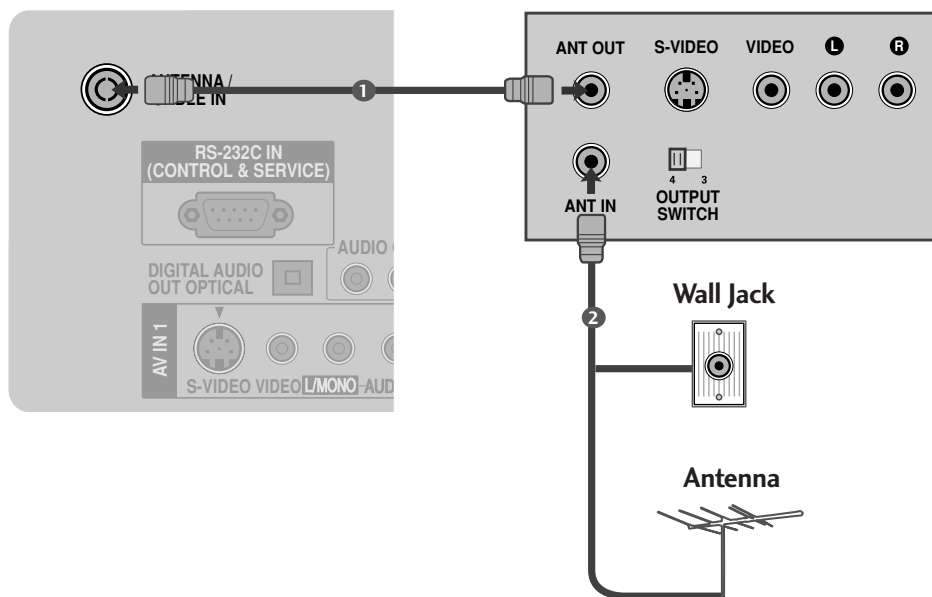
- ▶ The TV can receive video and audio signals simultaneously when using a HDMI cable.
- ▶ If the DVD supports Auto HDMI function, the output resolution of the source device will be automatically set to 1280x720p.
- ▶ If the DVD does not support Auto HDMI, you must set the output resolution appropriately.  
To get the best picture quality, adjust the output resolution of the source device to 1280x720p.



## VCR SETUP

- To avoid picture noise (interference), allow adequate distance between the VCR and TV.
- If 4:3 picture format is used for an extended period the fixed images on the sides of the screen may remain visible.

### When connecting with a RF Cable



- 1 Connect the **ANT OUT** socket of the VCR to the **ANTENNA / CABLE IN** socket on the TV.
- 2 Connect the antenna cable to the **ANT IN** socket of the VCR.
- 3 Press the **PLAY** button on the VCR and match the appropriate channel between the TV and VCR for viewing.

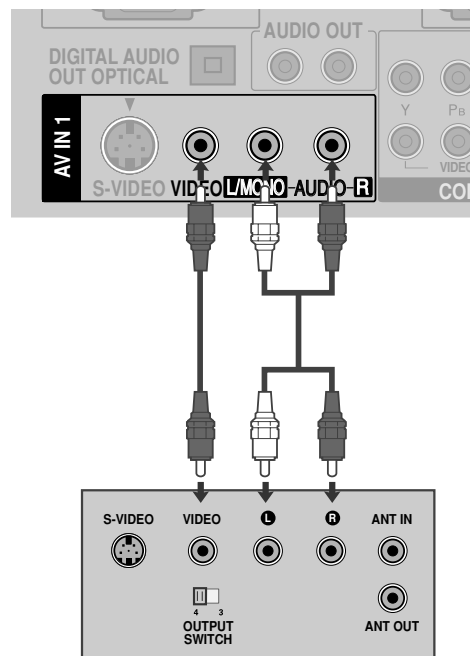
# EXTERNAL EQUIPMENT SETUP

## Connecting with a RCA cable

- 1 Connect the **AUDIO/VIDEO** jacks between TV and VCR. Match the jack colours (Video = yellow, Audio Left = white, and Audio Right = red)
- 2 Insert a video tape into the VCR and press **PLAY** on the VCR. (Refer to the VCR owner's manual.)
- 3 Select **AV1** input source using the **INPUT** button on the remote control.  
If connected to **AV IN 2** socket, 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 TV.

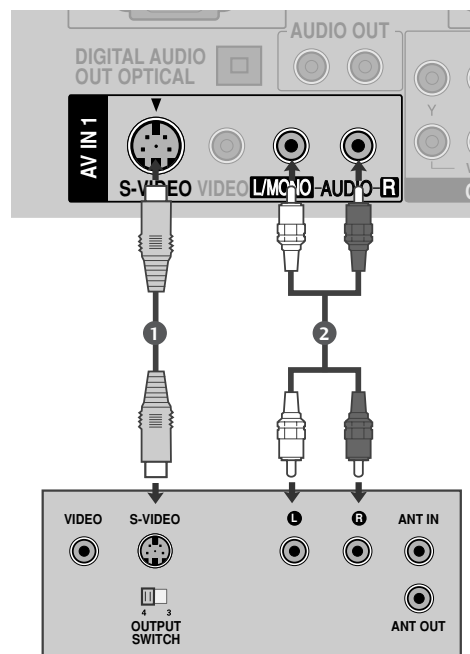


## Connecting with a S-Video cable

- 1 Connect the S-VIDEO output of the VCR to the S - VIDEO input on the TV. The picture quality is improved; compared to normal composite (RCA cable) input.
- 2 Connect the audio outputs of the VCR to the AUDIO input jacks on the TV.
- 3 Insert a video tape into the VCR and press **PLAY** on the VCR. (Refer to the VCR owner's manual.)
- 4 Select **AV1** input source using the **INPUT** button on the remote control.

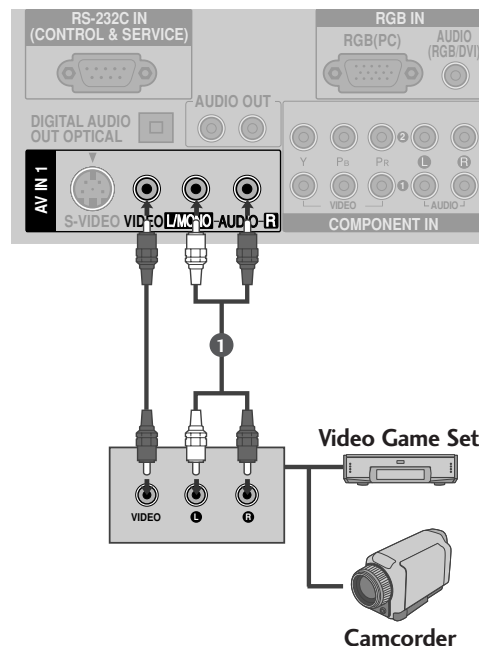
### ! NOTE

- If both S-VIDEO and VIDEO sockets have been connected to the S-VHS VCR simultaneously, only the S-VIDEO can be received.



## OTHER A/V SOURCE SETUP

- 1 Connect the **AUDIO/VIDEO** jacks between TV and external equipment. Match the jack colors. (Video = yellow, Audio Left = white, and Audio Right = red)
- 2 Select **AV1** input source using the **INPUT** button on the remote control.  
If connected to **AV IN 2** socket, select **AV2** input source.
- 3 Operate the corresponding external equipment.  
Refer to external equipment operating guide.



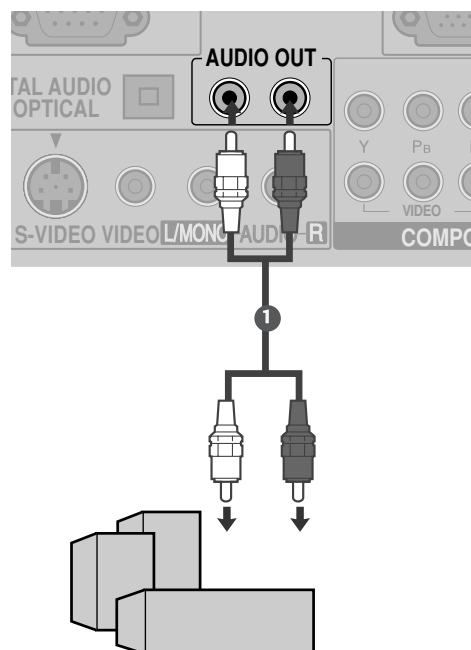
## EXTERNAL STEREO SETUP

Use to connected either an external amplifier, or add a sub-woofer to your surround sound system.

- 1 Connect the input jack of the stereo amplifier to the **AUDIO OUT** jacks on the TV.
- 2 Set up your speakers through your analog stereo amplifier, according to the instructions provided with the amplifier.

### ! NOTE

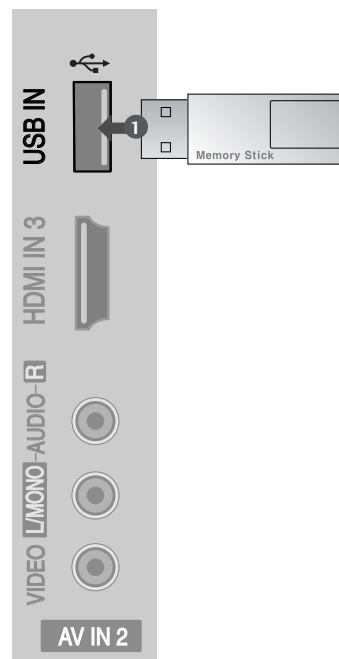
- ▶ When connecting with external audio equipments, such as amplifiers or speakers, please turn the TV speakers off.  
(▶ p. 86)



# EXTERNAL EQUIPMENT SETUP

## USB IN SETUP

- 1 Connect the USB device to the **USB IN** jacks on the side of TV.
- 2 After connecting the **USB IN** jacks, you use the **USB** function. (► p.53)



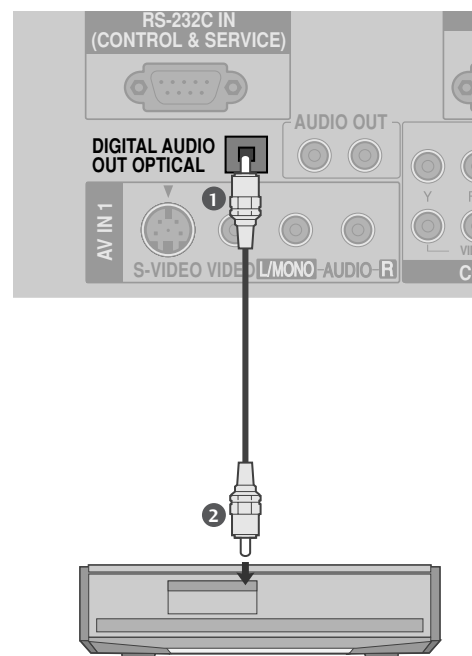
## DIGITAL AUDIO OUT SETUP

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

- 1 Connect one end of an optical cable to the TV Digital Audio (Optical) Output port.
- 2 Connect the other end of the optical cable to the digital audio (optical) input on the audio equipment.
- 3 Set the "TV Speaker option - Off" in the **AUDIO** menu.(► p. 86). Refer to the external audio equipment instruction manual for operation.

### ⚠ CAUTION

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

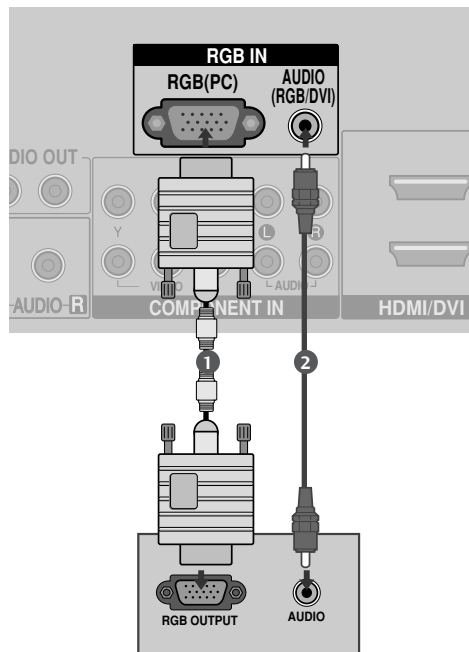


## PC SETUP

This TV provides Plug and Play capability, meaning that the PC adjusts automatically to the TV's settings.

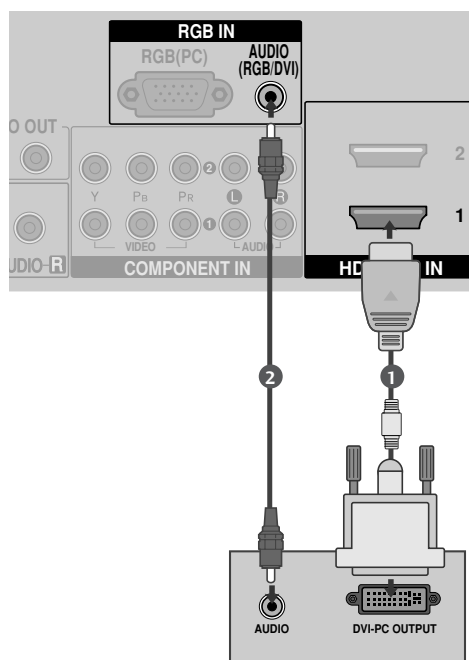
### Connecting with a D-sub 15 pin cable

- 1 Connect the RGB output of the PC to the **RGB IN (PC)** jack on the TV.
- 2 Connect the PC audio output to the **AUDIO (RGB/DVI)** jack on the TV.
- 3 Turn on the PC and the TV
- 4 Select **RGB** input source using the **INPUT** button on the remote control.



### Connecting with a HDMI to DVI cable

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



# EXTERNAL EQUIPMENT SETUP

## ! NOTE

- ▶ To enjoy vivid picture and sound, connect a PC to the TV.
- ▶ Avoid keeping a fixed image on the TV's screen for prolonged periods of time. The fixed image may become permanently imprinted on the screen; use a screen saver when possible.
- ▶ Connect the PC to the RGB (PC) or HDMI IN (or HDMI/DVI IN) port of the TV; change the resolution.
- ▶ There may be interference relating to resolution, vertical pattern, contrast or brightness in PC mode. Change the PC mode to another resolution or change the refresh rate to another rate or adjust the brightness and contrast on the 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.
- ▶ The synchronization input waveform for Horizontal and Vertical frequencies are separate.
- ▶ We recommend using 1024x768, 60Hz for the PC mode, these should provide the best picture quality.
- ▶ Connect the signal cable from the monitor output port of the PC to the RGB (PC) port of the TV or the signal cable from the HDMI output port of the PC to the HDMI IN (or HDMI/DVI IN) port on the TV.
- ▶ Connect the audio cable from the PC to the Audio input on the TV. (Audio cables are not included with the TV).
- ▶ If using a sound card, adjust PC sound as required.
- ▶ This TV uses a VESA Plug and Play Solution. The TV provides EDID data to the PC system with a DDC protocol. The PC adjusts automatically when using this TV.
- ▶ DDC protocol is preset for RGB (Analog RGB), HDMI (Digital RGB) mode.
- ▶ If required, adjust the settings for Plug and Play functionality.
- ▶ If the graphic card on the PC does not output analogue and digital RGB simultaneously, connect only one of either RGB or HDMI IN (or HDMI/DVI IN) to display the PC output on the TV.
- ▶ If the graphic card on the PC does output analogue and digital RGB simultaneously, switch the TV to either RGB or HDMI; (the other mode is set to Plug and Play automatically by the TV.)
- ▶ DOS mode may not work depending on the video card if you use a HDMI to DVI cable.
- ▶ If you use too long an RGB-PC cable, there may be interference on the screen. We recommend using under 5m of cable. This provides the best picture quality.



## Supported Display Resolution

RGB[PC], HDMI[PC] mode

Resolution	Horizontal Frequency(kHz)	Vertical Frequency(Hz)
720x400	31.469	70.08
640x480	31.469	59.94
800x600	37.879	60.31
1024x768	48.363	60.00
1280x768	47.776	59.87
1360x768	47.70	60.00
1280x1024	64.00	60.00
1600x1200	75.00	60.00
1920x1080	66.587	59.934
	67.5	60

RGB[PC]

HDMI[PC]

HDMI[DTV] mode

Resolution	Horizontal Frequency(kHz)	Vertical Frequency(Hz)
720x480	31.50	60.00
720x576	31.25	50.00
1280x720	45.00	60.00
	37.50	50.00
1920x1080	33.75	60.00
	28.125	50.00
	27.00	24.00
	28.125	25
	33.750	30.00
	56.25	50
	67.5	60.00

# EXTERNAL EQUIPMENT SETUP






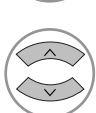



## Screen Setup for PC mode

### Screen Reset

Returns to the default settings Resolution, Position, Size and Phase at the factory.

This function works in the following mode : RGB[PC].



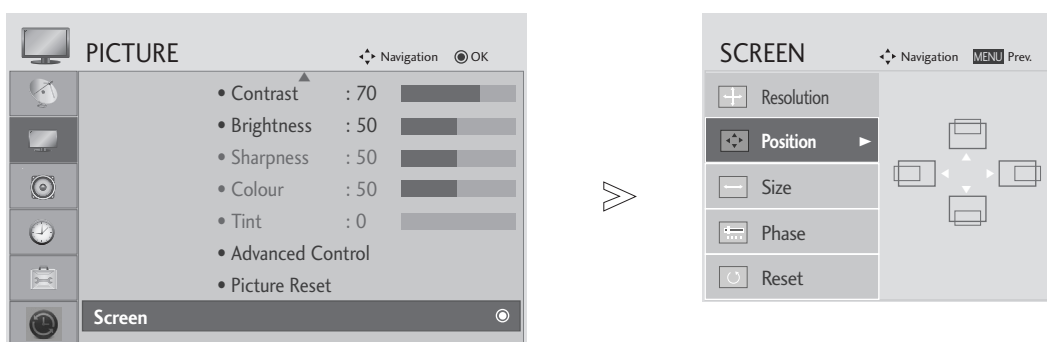
- 1   Select TV SETUP.
- 2   Select PICTURE.
- 3   Select SCREEN.
- 4   Select Reset.
- 5  Run Reset.










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

## Adjustment for screen Position, Size, Phase

If the picture is not clear and especially if characters are still trembling, adjust the picture phase manually.

This function works in the following mode : RGB[PC].



- 1   Select TV SETUP.
- 2   Select PICTURE.
- 3   Select SCREEN.
- 4   Select Position, Size or Phase.
- 5  Make appropriate adjustments.

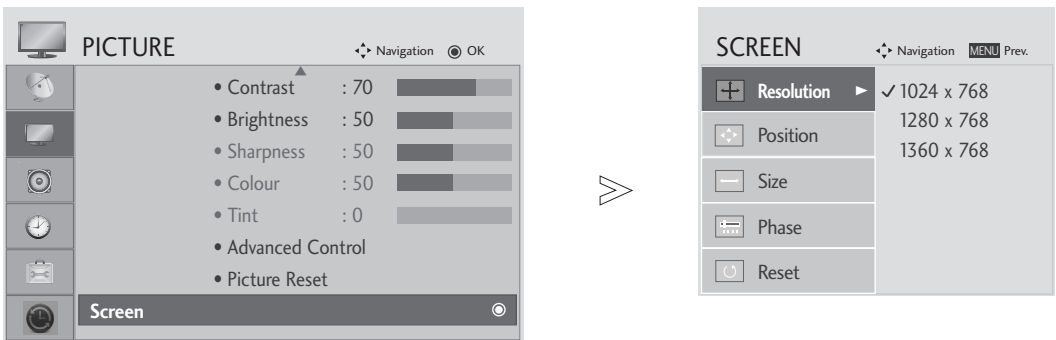
- Press the **MENU** or **EXIT** button to return to normal TV viewing.
- Press the **BACK** or **RETURN** button to move to the previous menu screen.


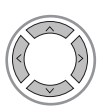

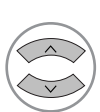

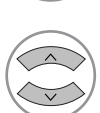

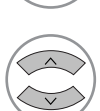

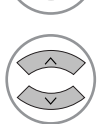
# EXTERNAL EQUIPMENT SETUP

## Selecting Resolution

To view a normal picture, match the resolution of RGB mode and selection of PC mode.

This function works in the following mode: RGB[PC] mode.




-   Select TV SETUP.
-   Select PICTURE.
-   Select SCREEN.
-   Select Resolution.
-   Select the desired resolution.

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

# WATCHING TV / PROGRAMME CONTROL

## REMOTE CONTROL KEY FUNCTIONS

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



**1** MODE Selects the remote operating modes.

POWER Switches the TV on from standby or off to standby.

INPUT External input mode rotate in regular sequence.  
Switches the TV on from standby.

INFO ⓘ Shows the present screen information.

GUIDE Shows programme schedule.

Q. MENU Select the desired quick menu source. (Aspect Ratio, Power Saving(Plasma TV models), Brightness (LCD TV models), Clear Voice, Picture Mode, Sound Mode, Audio, Sleep Timer)

MENU Selects a menu.  
Clears all on-screen displays and returns to TV viewing from any menu.

LIVE TV In Delayed mode, the screen returns to Live programme from TV, AV1, AV2 and Component1, Component2 modes.

THUMBSTICK (Up/Down/Left Right) Allows you to navigate the on-screen menus and adjust the system settings to your preference.

OK Accepts your selection or displays the current mode.

RETURN Allows the user to move back one step in an interactive application, EPG or other user interaction function.

SIMPLINK/ USB Controls SIMPLINK or USB Menu (Photo List and Music List) buttons.

Coloured buttons These buttons are used for **Programme edit.**

PIP Switches the sub picture PIP, DW mode.

**SIMPLINK** See a list of AV devices connected to TV.  
When you toggle this button, the Simplink menu appears at the screen.

TV/RAD Selects Radio, TV, DTV channel.

AV MODE It helps you select and set images and sounds when connecting AV devices.

# WATCHING TV / PROGRAMME CONTROL



**VOLUME UP /DOWN** Adjusts the volume.

**MARK** Check and un-check programmes in the USB Menu.

**FAV** Displays the selected favourite programme.

**MUTE** Switches the sound on or off.

**Programme UP/DOWN** Selects a programme.

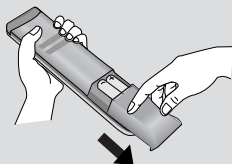
**PAGE UP/DOWN** Move from one full set of screen information to the next one.

**0~9 number button** Selects a programme.  
Selects numbered items in a menu.

**LIST** Displays the programme table.

**Q.VIEW** Returns to the previously viewed programme.

## Installing Batteries



- Open the battery compartment cover on the back and install the batteries matching correct polarity (+with +,-with -).
- Install two 1.5V AAA batteries. Do not mix old or used batteries with new ones.
- Close cover.

## TURNING ON THE TV

- When your TV is turned on, you will be able to use its features.

- 1 Firstly, connect the power cord correctly.  
At this stage, the TV switches to standby mode.
- 2 In standby mode to turn TV on, press the  $\odot$  / I, INPUT or PR  $\wedge \vee$  button on the TV or press the POWER, INPUT, D/A, PR  $\wedge \vee$  or NUMBER button on the remote control and the TV will switch on.

### Initializing setup

If the OSD (On Screen Display) is displayed on the screen after turning on the TV, you can adjust the Language, Auto programme tuning.

#### Note:

- a. It will automatically disappear after approx. 40 seconds unless a button is pressed.
- b. Press the RETURN button to change the current OSD to the previous OSD.

## PROGRAMME SELECTION

- 1 Press the PR  $\wedge \vee$  or NUMBER buttons to select a programme number.

## VOLUME ADJUSTMENT

- 1 Press the VOL + - button to adjust the volume.

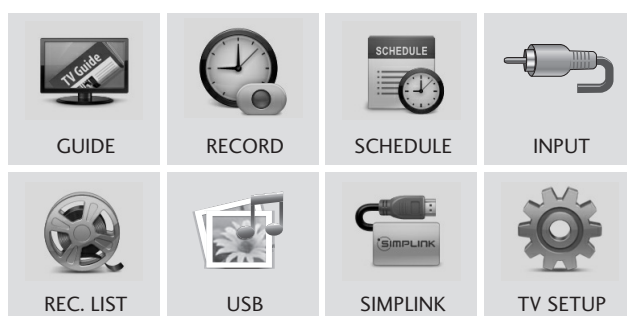
If you wish to switch the sound off, press the MUTE button.

You can cancel this function by pressing the MUTE, VOL + -, or I/II button.

# WATCHING TV / PROGRAMME CONTROL

## ON SCREEN MENUS SELECTION AND ADJUSTMENT

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



- 1 Display each menu.
- 2 Select a menu item.
- 3 Move to the pop up menu.

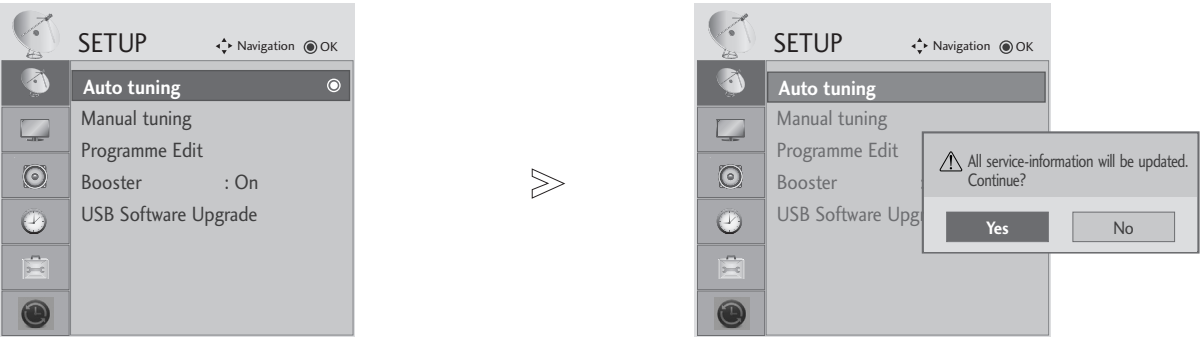
- Press the **MENU** button to return to normal TV viewing.
- Press the **RETURN** button to move to the previous menu screen.



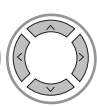

# AUTO PROGRAMME TUNING

Use this to automatically find and store all available programmes.

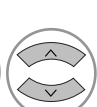

When you start auto programming, all previously stored service information will be deleted.



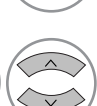

- 1





Select TV SETUP.
- 2




Select SETUP.
- 3



Select Auto Tuning.
- 4



Select Yes.
- 5



Run Auto tuning.

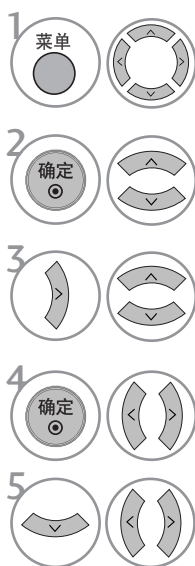
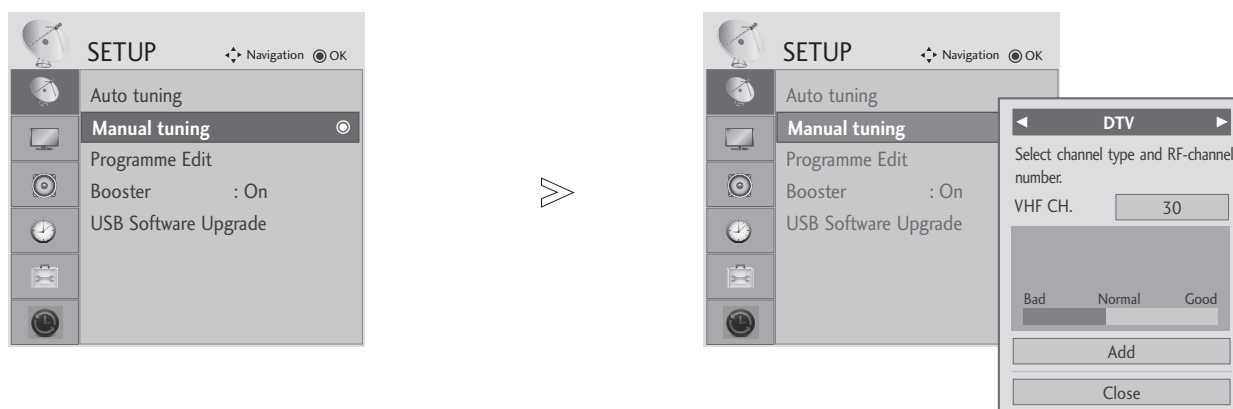
• If you wish to keep on auto tuning select YES using the < > button. Then, press the OK button. Otherwise select NO.

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

# WATCHING TV / PROGRAMME CONTROL

## MANUAL PROGRAMME TUNING (IN DIGITAL MODE)

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



Select **TV SETUP**.

Select **SETUP**.

Select **Manual Tuning**.

Select **DTV**.

Select the desired channel number.

- If you want to keep on manual tuning, select **YES** using the < > button. Then, press the **OK** button. Otherwise select **NO**.

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

# MANUAL PROGRAMME TUNING (IN ANALOGUE MODE)

Manual Tuning lets you manually tune and arrange the stations in whatever order you desire.



- 1 Select TV SETUP.
- 2 Select SETUP.
- 3 Select Manual Tuning.
- 4 Select TV.
- 5 or Select the desired programme number on.
- 6 Select a TV system.

- 7 Select V/UHF or Cable.
- 8 or Select the desired channel number.
- 9 Select Store.

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

- **BG** : PAL B/G (Asia/New Zealand/M.East/Africa/Australia)
- **I** : PAL I/II (Hong Kong/South Africa)
- **DK** : PAL D/K (East Europe/China/Africa/CIS)
- **M** : (USA/Korea/Philippines)
- To store another channel, repeat steps 5 to 9.

# WATCHING TV / PROGRAMME CONTROL

## ■ Assigning a station name

You can assign a station name with five characters to each programme number.

- |   |  |                       |   |  |  |
|---|--|-----------------------|---|--|--|
| 1 |  | Select TV SETUP.      | 5 |  | Select Name.   |
| 2 |  | Select SETUP.         | 6 |  | Select the position and make your choice of the second character, and so on. You can use an the alphabet <b>A</b> to <b>Z</b> , the number <b>0</b> to <b>9</b> , +/ -, and blank. |
| 3 |  | Select Manual Tuning. | 7 |  | Select Store.  |
| 4 |  | Select TV.            | 8 |  | Save.  |

## ■ Fine Tuning

Normally fine tuning is only necessary if reception is poor.

- |   |  |                       |   |  |   |
|---|--|-----------------------|---|--|---|
| 1 |  | Select TV SETUP.      | 5 |  | Select Fine.                              |
| 2 |  | Select SETUP.         | 6 |  | Fine tune for the best picture and sound. |
| 3 |  | Select Manual Tuning. | 7 |  | Select Store.                             |
| 4 |  | Select TV.            | 8 |  | Save.                                     |

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

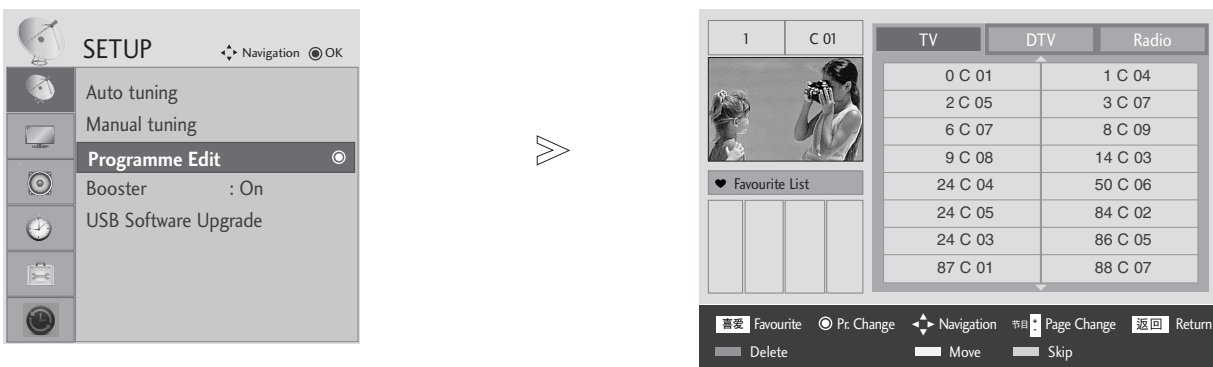
## PROGRAMME EDIT








When a programme number is skipped, it means that you will be unable to select it using **PR**  $\wedge$   $\vee$  button during TV viewing.

If you wish to select the skipped programme, directly enter the programme number with the **NUMBER** buttons or select it in the Programme edit menu

This function enables you to skip the stored programmes.

In some countries it is possible to move a programme number by using the **YELLOW** button only.



- 1   Select TV **SETUP**.
- 2   Select **SETUP**.
- 3   Select **Programme Edit**.
- 4  Enter the **Programme Edit**.

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

# WATCHING TV / PROGRAMME CONTROL

## (IN DTV/RADIO MODE)

### ■ Skipping a programme number



Select a programme number to be skipped.



Turn the skipped programme number to blue.



Release the skipped programme.

- When a programme number is skipped it means that you will be unable to select it using the **PR**  $\wedge$   $\vee$  button during normal TV viewing.
- If you wish to select a skipped programme, directly enter the programme number with the **NUMBER** buttons or select it in the programme edit or EPG.

### ■ Selecting favourite programme



Select your favourite programme number.

- It will automatically include the selected programme into your favourite programme list.

## IN TV MODE

This function enables you to delete or skip the stored programmes. You can also move some channels to other programme numbers.

### ■ Deleting a programme



Select a programme number to be deleted.



Turn the deleted programme number to red.



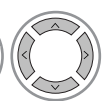
Release the deleted programme.

- The selected programme is deleted, all the following programmes are shifted up one

### ■ Moving a programme



Select a programme number to be moved.



Turn the moved programme number to YELLOW.



Release the moved programme.

### ■ Skipping a programme number



Select a programme number to be skipped.



Turn the skipped programme number to blue.



Release the skipped programme.

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

### ■ Selecting a Favourite Programme



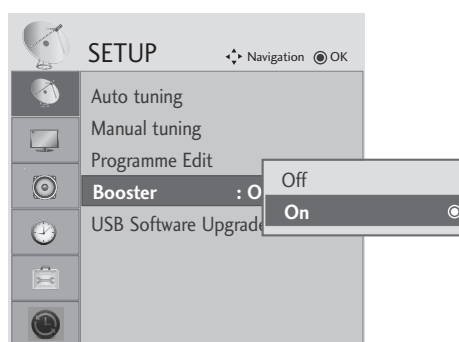
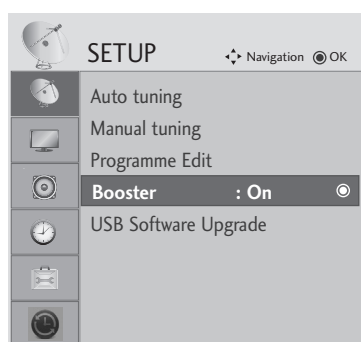
Select your favourite programme number.




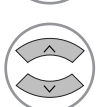
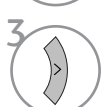
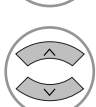

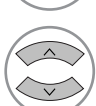

- The selected programme will be added to the favourite programme list.

# WATCHING TV / PROGRAMME CONTROL

## BOOSTER

If reception is poor, select **Booster** to **On**.  
When the signal is strong, select "Off".



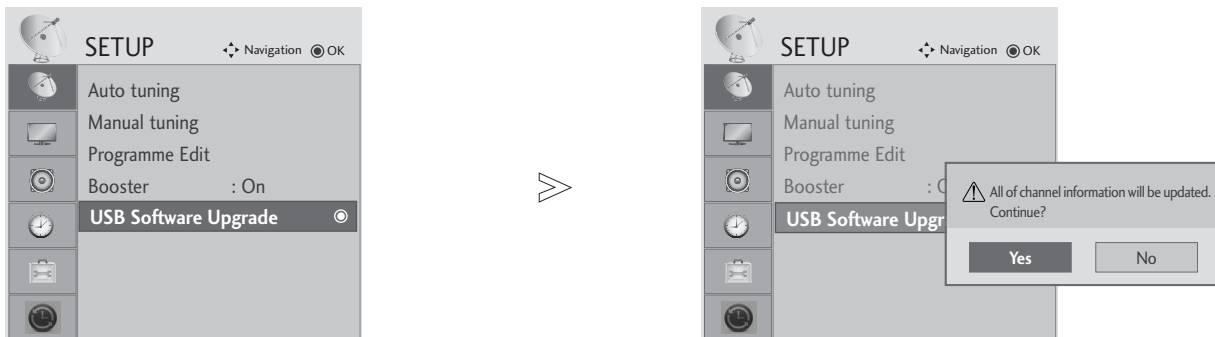
- 1   Select TV SETUP.
- 2   Select SETUP.
- 3   Select **Booster**.
- 4   Select **On** or **Off**.
- 5  Save it.







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





# USB SOFTWARE UPGRADE

USB Software Upgrade means software can be downloaded by USB memory.



- 1   Select TV SETUP.
- 2   Select SETUP.
- 3   Select USB Software Upgrade.

- 4   Select On or Off.  
 • If you select On, a user confirm message box will be displayed to notify that new software is found.

- During Progress of a USB Software Upgrade, please note the following:
  - Power to the TV must not be interrupted.
  - The TV must not be switched off.
  - After Software Update, you can confirm the updated software version in Diagnostics menu.

# WATCHING TV / PROGRAMME CONTROL

## SELECTING THE PROGRAMME TABLE

You can check which programmes are stored in the memory by displaying the programme table.

### ■ Displaying programme LIST



display the PROGRAMME LIST.

- You may find some blue programmes. These 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.



Switch to the chosen programme number.



From the programme you are currently watching, the mode will change from TV to DTV to Radio.

### ■ Paging through a programme list



Turns the pages.



Return to normal TV viewing.

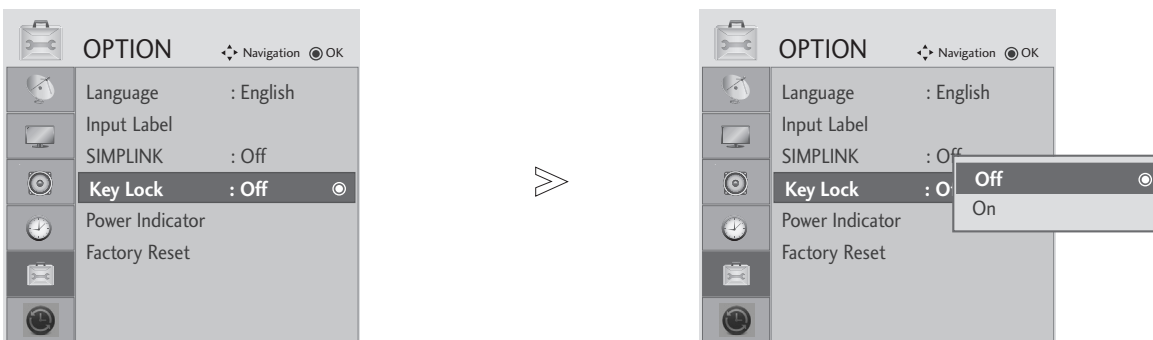
### ■ Displaying the favourite programme table








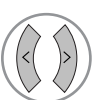



Display the Favourite Programme table.

## KEY LOCK

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



- 1   Select TV SETUP.
- 2   Select OPTION.
- 3   Select Key Lock.
- 4   Select On or Off.
- 5  Save it.

- In **Key Lock 'On'**, if the TV is turned off, press the **⏻ / I**, **INPUT**, **PR ^ v** button on the TV or **POWER**, **INPUT**, **D/A TV**, **PR ^ v** or **NUMBER** buttons on the remote control.
- With the **Key Lock On**, the display '**Key Lock On**' appears on the screen if any button on the front panel is pressed while viewing the TV.

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

# WATCHING TV / PROGRAMME CONTROL



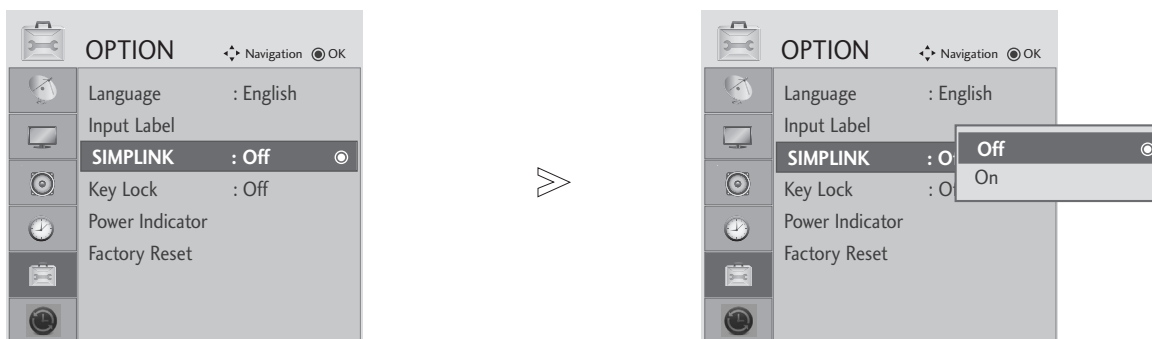
This function operates only with devices with the SIMPLINK logo.


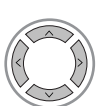

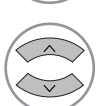
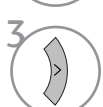
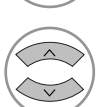

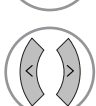

Please check the SIMPLINK logo.

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

If you require the SIMPLINK menu, select "On".

SIMPLINK function is not supported by HDMI IN 3 input.



- 1   Select TV SETUP.
- 2   Select OPTION.
- 3   Select SIMPLINK.
- 4   Select On or Off.
- 5  Save it.

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

## SIMPLINK Functions

### Disc playback

Control connected AV devices by pressing the  $\wedge$   $\vee$   $<$   $>$ , OK,  $\blacktriangleright$ ,  $\blacksquare$ ,  $\text{I}$ ,  $\ll$  and  $\gg$  buttons. (The  $\bullet$  button does not provide such functions.)

### Direct Play

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

### Select AV device

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

### Power off all devices

When you switch off the TV, all connected devices are turned off.

### Switch audio-out

Offers an easy way to switch audio-out.

### Sync Power on

When you play the connected AV device, TV will automatically turn on.

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

## SIMPLINK Menu

Press the  $\wedge$   $\vee$   $<$   $>$  button and then OK button to select the desired SIMPLINK source.

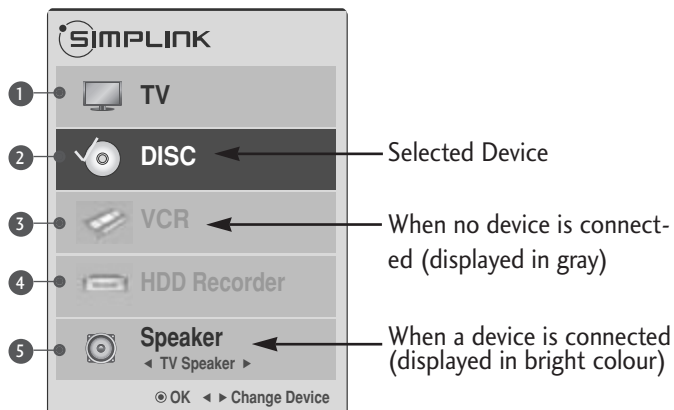
① **TV viewing** : Switch to the previous TV programme regardless of the current mode.

② **DISC playback** : Select and play connected discs.  
When multiple discs are available, the titles of 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.

⑤ **Audio Out to Home theater/Audio Out to TV:**  
Select Home theater or TV speaker for Audio Out.



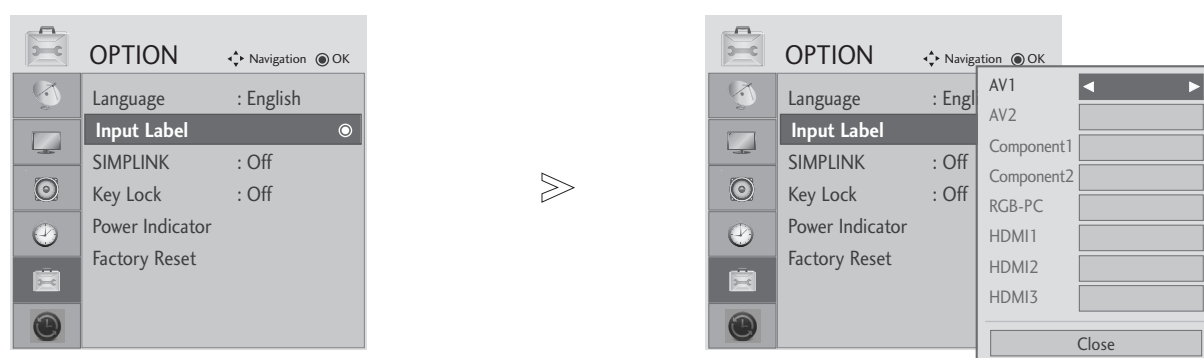
### ! NOTE

- ▶ 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 theatre with the SIMPLINK function using the above method, connect the DIGITAL AUDIO OUT terminal on the back of the TV to the DIGITAL AUDIO IN terminal on the back of the SIMPLINK device with the OPTICAL cable.
- ▶ When operating an external device with SIMPLINK, press the TV button from the MODE buttons on the remote control.
- ▶ When you switch the Input source using the INPUT button on the remote control, you can stop the operation of a device controlled by SIMPLINK
- ▶ When you select or operate a media device with home theater function, the speaker automatically switches to home theater speaker (HT speaker).

# WATCHING TV / PROGRAMME CONTROL

## INPUT LABEL

Selects a label for each input source which is in use.

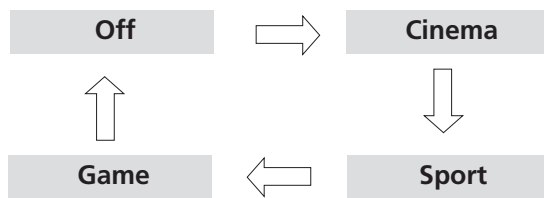


- 1 菜单 (Menu) Select TV SETUP.
- 2 确定 (Enter) Select OPTION.
- 3 右 (Right) Select Input Label.
- 4 确定 (Enter) Select the source.
- 5 左右 (Left/Right) Select the label.

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

## AV MODE

You can select the optimal images and sounds when connecting AV devices to external input.



Select the desired source.

- If you select Cinema Mode in AV mode, Cinema mode will be selected both for Picture Mode and Sound Mode in PICTURE menu and AUDIO menu respectively.
- If you select “Off” in AV mode, the picture and image which you initially set will be selected.

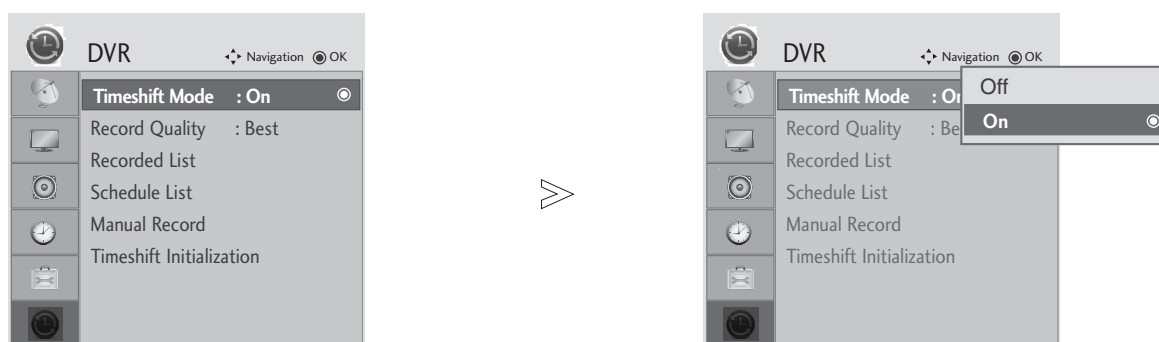
# TIME MACHINE

## TIMESHIFT MODE (PAUSE & REPLAY OF LIVE TV)

This function allows the unit to automatically record live TV and make it available for viewing at any time.

With the TimeShift turned on, you may pause and rewind normal TV viewing at any time without missing any of the live broadcast.

(TimeShift Mode and Recording functions may not work if the signal strength is weak.)

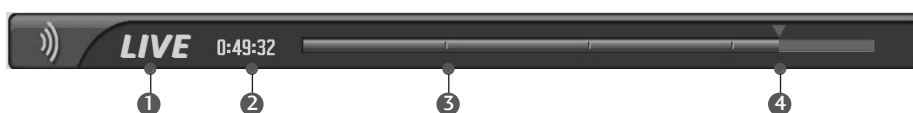


- 1 菜单 Select TV SETUP.
- 2 确定 Select DVR.
- 3 Select Timeshift Mode.
- 4 确定 Select On or Off.

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



## Using the TimeShift Mode function



- 1 After selecting **TimeShift Mode On**, press the **OK** button.
  - As soon as Timeshift starts, a progress bar indicating the current recording status is displayed in the bottom of the screen.
  - Press the **EXIT** button to hide the 'Progress Bar' or press the **OK** button to display the 'Progress Bar'.
  - This function is preserved even change a programme on progressing the Timeshift.

### The 'Progress Bar'?

This function indicates what TIME MACHINE reviewing is possible, a current on-screen and live broadcasting position.

- 1 Status of current displayed video.
- 2 Current save time.
- 3 15 minute intervals from TimeShift Mode start time. (Total - one hour).
- 4 Indicates current TimeShift Mode position.

- 2 When finishing the Timeshift function, enter the **TIME MACHINE** menu and turn **TimeShift Mode Off**.

### ! NOTE

- ▶ **TIME MACHINE** : A device which records and plays broadcast programme contents onto a hard disk in set or SET TOP BOX.
- ▶ In order to save hard-disk space, nothing is saved when there is no signal.
- ▶ The total storage space of the hard-disk is 160 GB. 4 GB minimum is reserved for TimeShift Mode.
- ▶ When turning power on, it may take up to a maximum of 3 minutes to initialize the HDD.
- ▶ The Recording function will not initiate for a copy-protected programme.
- ▶ Because an analogue broadcast is converted to a digital signal, video which contains rapid movement may show "cross stripes". This happens when the analog signal is compressed and then restored in the digital signal. The unit will attempt to reduce excessive picture interference.
- ▶ When using the PIP/DW mode, Timeshift is stopped.
- ▶ TimeShift Mode is available in TV, AV1, AV2, Component(480i/480p/576i/576p/720p/1080i) mode.
- ▶ TimeShift Mode is not available for Audio only channels.
- ▶ Maximum recording file size is up to 16GB(3Hr).

## Using the TimeShift Mode function, play

- When in timeshift mode, the following options are available.

- When pressing the ● button delaying Timeshift, Timeshift is dumped. And delayed time is recording.

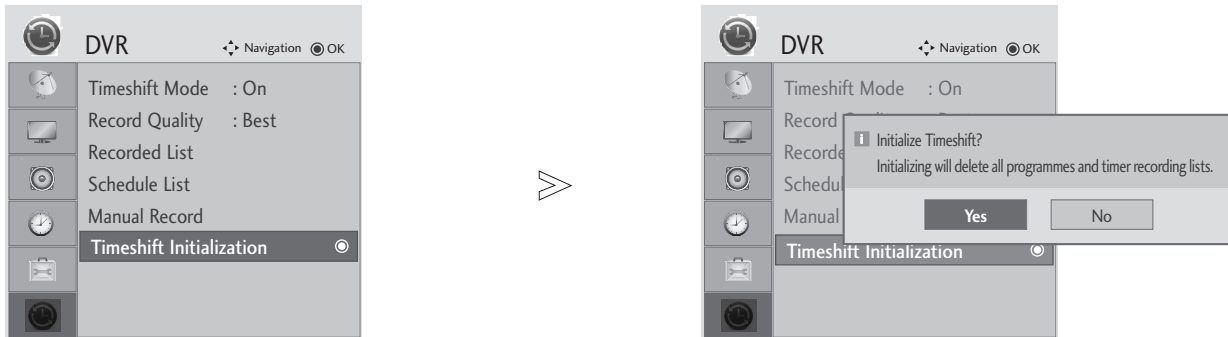
## Using the remote control








You can shift playback to any point within the recorded programme

	<p>When playing,</p> <p>repeatedly, press the <b>REW(◀◀)</b> button to speed up ◀◀ -&gt; ◀◀◀ -&gt; ◀◀◀◀ -&gt; ◀◀◀◀◀ -&gt; ◀◀◀◀◀◀ .</p> <p>repeatedly, press the <b>FF(▶▶)</b> button to speed up ▶▶-&gt; ▶▶▶ -&gt; ▶▶▶▶ -&gt; ▶▶▶▶▶ -&gt; ▶▶▶▶▶▶ .</p> <ul style="list-style-type: none"><li>■ Pressing these buttons repeatedly increases the fast forward/reverse speed.</li></ul>
	<p>During playback, press the <b>Pause(II)</b> button.</p> <ul style="list-style-type: none"><li>■ Still screen is displayed.</li><li>■ Repeatedly press the <b>Pause(II)</b> button to advance frame by frame.</li><li>■ Press the <b>Pause(II)</b> button and then use the <b>FF(▶▶)</b> button for slow motion (the <b>II▶</b> icon is displayed.)</li><li>■ Press the <b>Pause(II)</b> button and then use the <b>FF(◀◀)</b> button for slow motion (the <b>◀II</b> icon is displayed.)</li></ul>
	<ul style="list-style-type: none"><li>■ When using the ◀ or ▶ button during playback a cursor indicating the position can be viewed on the screen.</li></ul>
	<p>Press the <b>PLAY(▶)</b> button to return to normal playback.</p>
	<p>If you want to return to the current live broadcast, press the <b>LIVE TV</b> button.</p>

# TIMESHIFT INITIALIZATION

Erases all programmes and initializes the hard disk.



- 1   Select TV SETUP.
- 2   Select DVR.
- 3   Select Timeshift Initialization.
- 4  Start Timeshift Initialization.

- if you select Yes, this message is displayed.

HDD formatting is started

- When completing, this message is displayed.

HDD formatting is completed.


# TIME MACHINE

## INSTANT RECORDING

Use this function to record the programme you are watching on the main screen.

### Instant Record

This function records the currently displayed programme.

- 1 Select the programme you wish to record and then press the ● button.  
During recording  is displayed. Use this feature to record up to 2 hours of programming.

- 2 If you wish to stop recording, press the ■ button.

- While recording, if you press the ■ button less than 10 seconds after recording started, this message is displayed.



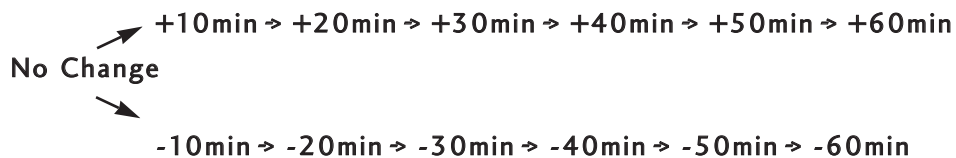
Recording is not completed.  
Recording time must exceed 10 seconds.

- If you press the ■ button more than 10 seconds after recording started, this message is displayed.



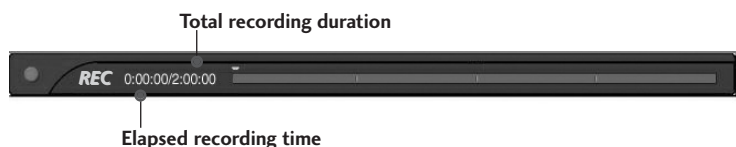
Recording is completed.

- 3 You can increase or decrease the recording time by pressing the ● button while recording. After pressing the ● button, press the ◀ / ▶ buttons repeatedly to increase or decrease the recording time. Each time you press ◀ / ▶ button the recording duration changes as shown below.



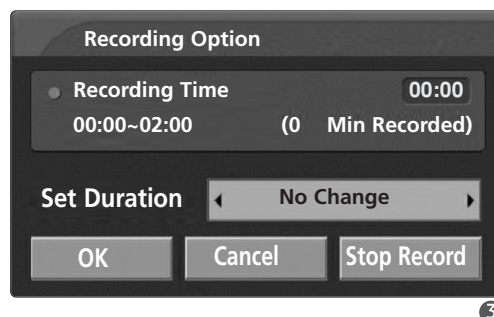
The extra recording time added to the existing setting equals the final recording time.

- 4 After adjusting the recording time, select **OK**. The Status bar will be displayed.



- Press the **EXIT** button to hide the Status bar. Press the **OK** button to display the Status bar.

- 5 Recording stops when the selected duration is reached or when you press the **■** button. Although recording has stopped, the Timeshift feature remains active.



## ! NOTE

- When recording, if the available storage space is not sufficient, the recording will automatically Stop.
- Recordings of less than 10 seconds will not be saved.
- To save disk space while recording broadcasts, no data will be saved if there is no signal.
- The recording function will not initiate for a copy-protected programme.
- The displayed time may differ slightly from the actual time.
- When there is no signal or a film source is being viewed, the displayed time may differ slightly from the actual time.
- Timeshift recording is not possible with copy-protected programmes.

**i** Stop recording due to copy protection.

- When a poor quality external source is recorded (for example old VHS tape) the quality of the recording will not be optimal.
- Programmes are stored separately according to the colour system used. e.g. PAL/NTSC.
- Manual Recording available time is maximum 4 hours and minimum 5 minutes.


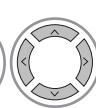







# TIME MACHINE

## MANUAL RECORD

This function is easy to register to reserved recording.

When Manual Recording, the default sound of the set is stored.



- 1   Select TV SETUP.
- 2   Select DVR.
- 3   Select Manual Record.
- 4  Enter the Manual Record.
- 5  Select the **Input**, **PR**, **Date**, **Time**, **Duration**, **Frequency**.
- 6 

- ▶ **Input** : Select the input source from the TV, AV1, AV2, Component1/2(480i/576i).
- ▶ **PR** : Select either the current programme or a scanned programme.
- ▶ **Date** : You can select a date up to one month in advance.
- ▶ **Time /Duration** : Ensure you have set correctly.
- ▶ **Frequency** : Choose among Once, Daily and Weekly.









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

## SCHEDULE LIST

This function is used to show scheduled recordings.

You can store up to 6 programmes.



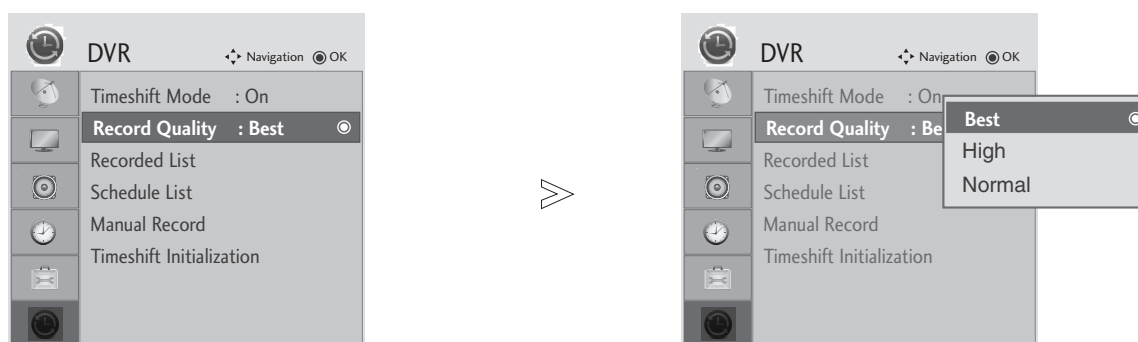
- 1   Select TV SETUP.
- 2   Select DVR.
- 3   Select Schedule List.
- 4  Enter the Schedule List.
- 5  Select a recorded programme.

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

# TIME MACHINE

## RECORD QUALITY

When recording analogue broadcasts and external input signals, the Record Quality can be selected. This function is not available while a recording is taking place.



- 1   Select TV SETUP.
- 2   Select DVR.
- 3   Select Record Quality.
- 4   Select the **Best**, **High** or **Normal**.

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



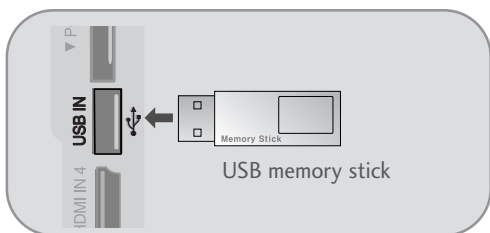
# TO USE THE USB DEVICE

## When connecting the USB device

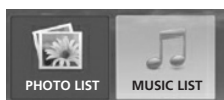
When you connect a USB device, this screen is displayed, automatically.

In USB device, you can not add a new folder or delete the existing folder.

- 1 Connect the USB device to the **USB IN** jacks on the side of TV.



- 2 Select **PHOTO LIST** or **MUSIC LIST**



- 3 确定 (Confirm)

- It doesn't support USB HDD
- This TV Supports on JPEG and MP3.

### When removing the USB device

Select the USB EJECT menu before removing the USB device.

- 1 快捷菜单 (Quick Menu) → Select **USB Eject**
- 2 确定 (Confirm)

### Precautions when using the USB device

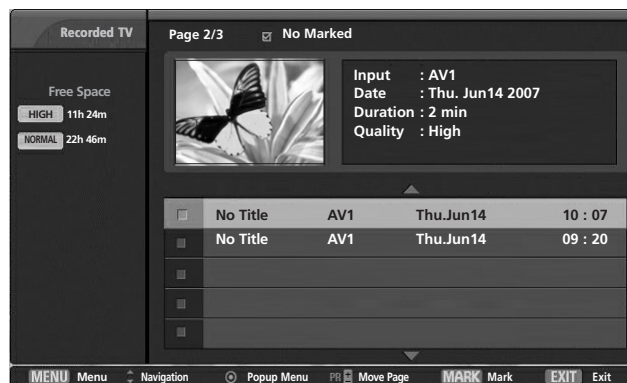
- ▶ Only a USB storage device is recognizable.
- ▶ If the USB storage device is connected through a USB hub, the device is not recognizable.
- ▶ A USB storage device using an automatic recognition programme may not be recognized.
- ▶ A USB storage device which uses its own driver may not be recognized.
- ▶ The recognition speed of a USB storage device may depend on each device.
- ▶ Please do not turn off the TV or unplug the USB device when the connected USB storage device is working. When such device is suddenly separated or unplugged, the stored files or the USB storage device may be damaged.
- ▶ Please do not connect the USB storage device which was artificially maneuvered on the PC. The device may cause the product to malfunction or fail to be played. Never forget to use only a USB storage device which has normal music files or image files.
- ▶ Please use only a USB storage device which was formatted as a FAT32 file system provided with the Windows operating system. In case of a storage device formatted as a different utility programme which is not supported by Windows, it may not be recognized.
- ▶ Please connect power to a USB storage device which requires an external power supply. If not, the device may not be recognized.
- ▶ Please connect a USB storage device with cable is offered by USB maker. If connected with cable is not offered by USB maker or an excessively long cable, the device may not be recognized.
- ▶ Some USB storage devices may not be supported or operated smoothly.
- ▶ If the name of a folder or file is too long, it will not be displayed or recognized.
- ▶ Please up the important file because a data of USB device may be damaged. Data management is consumer's responsibility and in consequence the manufactures does not cover the product bearing data damage.

# TIME MACHINE

## RECORDED TV PROGRAMME LIST

You can view the recorded programme list at a glance.  
This function is also available in the TIME MACHINE menu.

- 1 Press the **TIME MACHINE** button to display **HOME** menu.  
Use the **▲ / ▼** button to select **Recorded TV** and then use the **OK** or **▶** button.



## Screen Components

- 1 Usable HDD space
- 2 Current page/Total pages
- 3 Marked title or programme
- 4 Corresponding buttons on the remote control



## Recorded programme Selection and Popup Menu

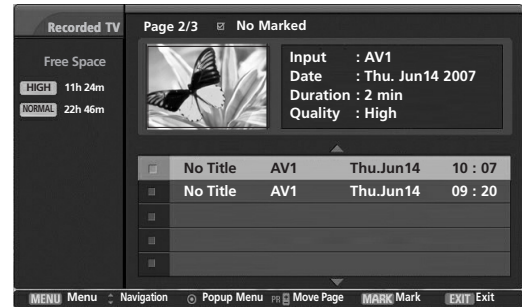
The recorded programme stored in the internal HDD or the USB storage device can be played.

The preview recorded list is shown above.

1 Use the **PR +/-** button for page up/down navigation.

2 Use the **MARK** button to delete from the list. A ☒ is displayed next to the preview window if an item is marked.

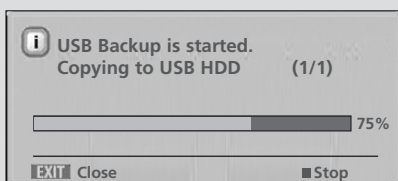
3 Use **▲ / ▼** button to navigation the appropriate Recorded programme, then press the **OK** button to open the Pop-up Menu.



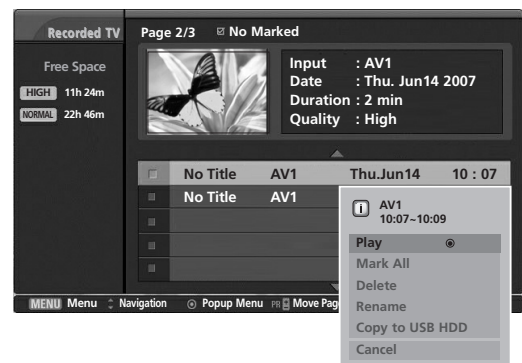
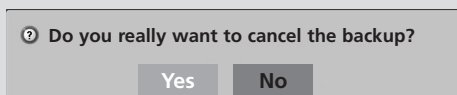
1

- ▶ **Play** : Begin playback of selected recorded programme.
  - ▶ **Mark All** : mark all recorded programmes on the screen.
  - ▶ **Unmark All** : Change marked recorded programmes to unmarked recorded programmes.
  - ▶ **Delete** : Delete the selected recorded programmes.
  - ▶ **Rename** : Edit recorded programme title.
  - ▶ **Copy to USB HDD** : Copies the recorded programme in the internal HDD to the USB storage device.
- It is activated only when a USB HDD available for backup is connected.

<HDD Backup process screen>



- if you press the **■** button, this message is displayed.



2 3

# TIME MACHINE

- When 'Yes' is selected, the backup is cancelled and is converted back to input mode. If more than two files are transferred, the transferred file is stored, and the backup operations on the files in progress of transferring and scheduled for backup are cancelled.
- When 'No' is selected, returns to the backup process screen.




While backup is being performed in the background, the status of the copy progress can be checked by pressing the 'OK' button.

► **Cancel** : Close the Pop-up menu.

- 4 Repeatedly, press the **EXIT** button to return to TV viewing or press the **TIME MACHINE** button to return to the **Home** menu.

- If the HDD has a problem performing a recording related function, this message is displayed.
- If the temperature is below zero (0°), a warning message is displayed and you will not be able to use the **TIME MACHINE** functions.

 HDD initialisation is in progress.

 Cannot operate **TIME MACHINE** at low temperature.

# PHOTO LIST

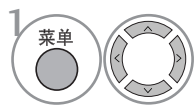
The On Screen Display may be different from your TV. Images are an example to assist with the TV operation.

## PHOTO(\*.JPEG) supporting file

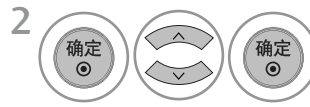
Baseline: 10928 x 6144

- You can play JPEG files only.
- Only baseline scan is supported among JPEG(SOF0, SOF1 only).
- Non-supported files are displayed in the form of bitmap.

## Screen Components

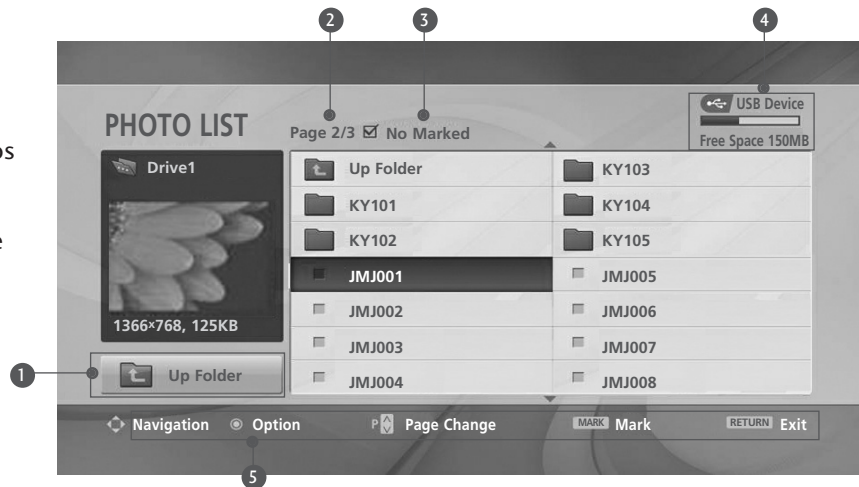


Select USB.



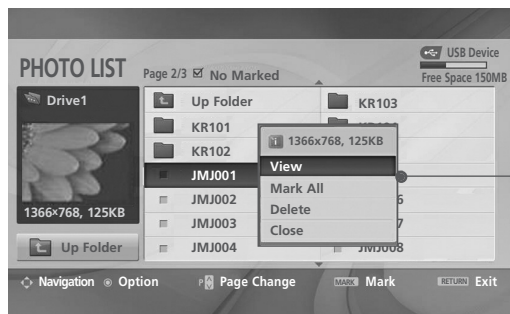
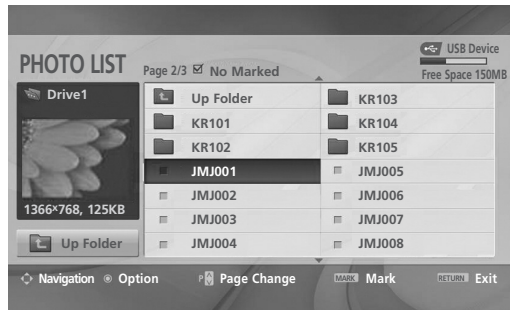
Select USB Photo List

- ① Moves to upper level file
- ② Current page/Total pages
- ③ Total number of marked photos
- ④ Usable USB memory
- ⑤ Corresponding buttons on the remote control











# TIME MACHINE

## Photo Selection and PopUp Menu



- ▶ **View** : Display the selected item.
- ▶ **Mark All** : Mark all photos on the screen.
- ▶ **Unmark All** : Deselect all marked photos.
- ▶ **Delete** : Delete the selected photo item.
- ▶ **Close** : Close the pop-up menu.

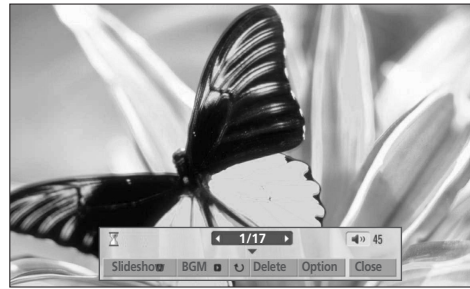
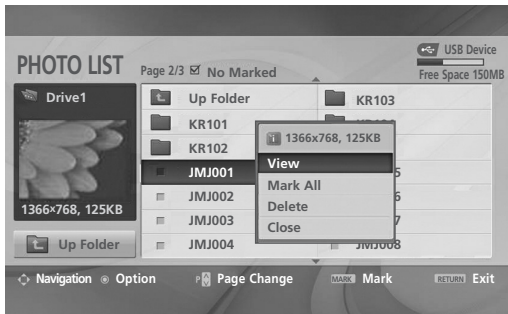
- 1  Select the target folder or drive.
- 2   Select the desired photos.
- 3  Show the PopUp menu.
- 4   Select the desired PopUp menu.

- Use the **PR**   button to navigation in the photo page.
- Use the **MARK** button to mark or unmark a photo. When one or more photos are marked, you can view individual photos or a slide show of the marked photos. If no photos are marked, you can view all photos individually or all photos in the folder in a slide show.

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







## Set up the menu in Full-Sized Screen

You can change the settings to display photos stored on a USB device, on a full-sized screen.  
Detailed operations are available on full-sized photo view screen.



The aspect ratio of a photo may change the size of the photo displayed on the screen in full size.

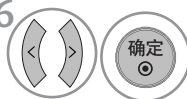
Press the **RETURN** button to move to the previous menu screen.

- 1  Select the target folder or drive.
- 2   Select the desired photos.
- 3  Show the PopUp menu.
- 4  Select **View**
- 5  The selected photo is displayed in full size.

- Use the **PR** ^ v button to navigation in the photo page.

# TIME MACHINE

6



Select the **Slideshow**, **BGM**,  (**Rotate**), **Delete**, **Option** or **Close**




- Use **^** **v** **<** **>** button to select the previous or next photo.
- Use **^** **v** **<** **>** button to select and control the menu on the full-sized screen.

► **Slideshow** : When no picture is selected, all photos in the current folder are displayed during slide show. When selected, the selected photos are displayed during slide show.

- Set the time interval of the slide show in **Option**.

► **BGM** : Listen to music while viewing photos in full size.

- Set the BGM device and album in **Option**.

►  (**Rotate**) : Rotate photos.

- Rotates the photo 90° clockwise.

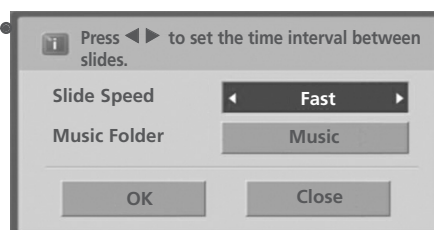
► **Delete** : Delete photos.

► **Option** : Set values for **Slide Speed** and **Music Folder**.

- Use **<** **>** button and **OK** button to set values. Then go to **OK** and press **OK** to save the settings.
- You cannot change **Music Folder** while BGM is playing.

► **Close** : Hide the menu on the full-sized screen.

- To see the menu again on the full-sized screen, press **OK** button to display.





# MUSIC LIST

Purchased music files(\*.MP3) may contain copyright restrictions. Playback of these files may not be supported by this model.

Music file on your USB device can be played by this unit.



The On Screen Display may be different from your TV. Images are an example to assist with the TV operation.


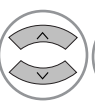

## MUSIC(\*.MP3) supporting file

Bit rate 32 ~ 320

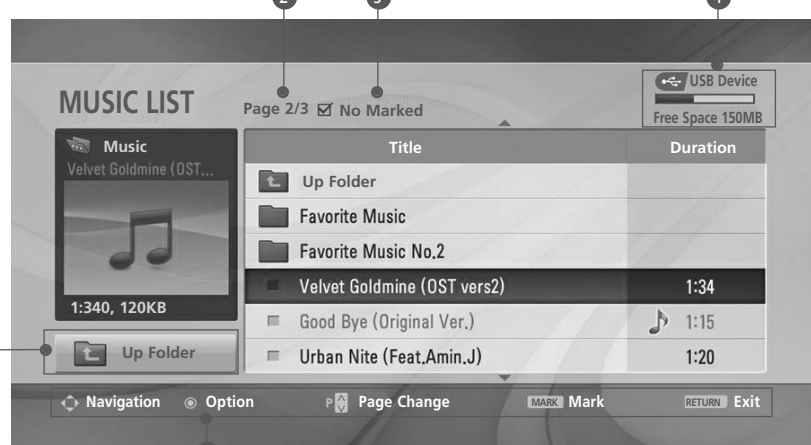
- Sampling rate MPEG1 layer 3 : 32khz, 44.1 khz, 48khz.

## Screen Components

1   Select USB.

2    Select USB Music List

- ① Moves to upper level file
- ② Current page/Total pages
- ③ Total number of marked musics
- ④ Usable USB memory
- ⑤ Corresponding buttons on the remote control

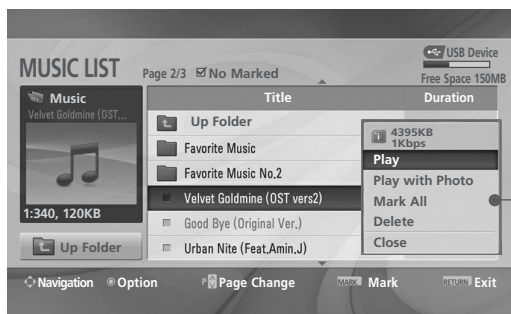
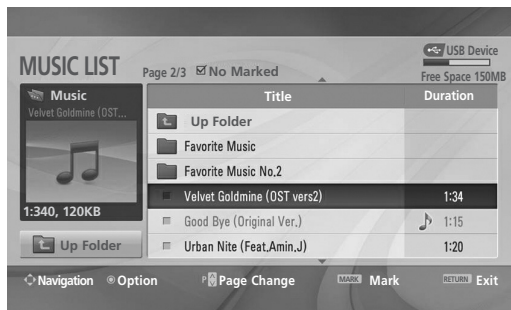


The screenshot shows the 'MUSIC LIST' interface. At the top, it displays 'Page 2/3' and 'No Marked'. A 'USB Device' status bar at the top right shows 'Free Space 150MB'. The main area is a table with columns 'Title' and 'Duration'. The table lists several folders and songs, with 'Velvet Goldmine (OST vers2)' highlighted. At the bottom, there is a navigation bar with buttons for 'Navigation', 'Option', 'Page Change', 'Mark', and 'Exit'.







# TIME MACHINE



## Music Selection and PopUp Menu

As shown , up to 6 music titles are listed per page.



- ▶ **Play (During stop)** : Play the selected musics.  
Once a music finishes playing, the next selected one will be played. When there are no selected musics to play, the next one in the current folder will be played. If you go to a different folder and press the **OK** button, the current music in playback will stop.
- ▶ **Play Marked** : Play the selected musics.  
Once a music finishes playing, the next selected one will be played automatically.
- ▶ **Stop Play (During playback)** : Stop the playing musics.
- ▶ **Play with Photo** : Start playing the selected musics and then move to the Photo List.
- ▶ **Mark All** : Mark all musics in the folder.
- ▶ **Unmark All** : Deselect all marked musics.
- ▶ **Delete** : Delete the selected musics.
- ▶ **Close** : Close the pop-up menu.

- 1  Select the target folder or drive.
- 2   Select the desired musics.
- 3  Show the PopUp menu.
- 4   Select the desired PopUp menu.

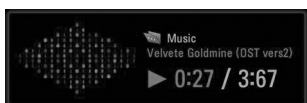
- Use the **PR**   button to navigation in the music page.
- Use **MARK** button to mark or unmark a music. When one or more music files are marked, the marked musics will be played in sequence. For example, if you want to listen to only one music repeatedly, just mark the music only and play it. If no music is marked, all the music in the folder will be played in sequence.

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




- If you don't press any button for a while during the playing, the play information box (as shown in the below) will float as a screen saver.

- The 'Screen Saver'?

Screen saver is to prevent screen pixel damage due to an fixed image remaining on the screen for a extended period of time.



## ! NOTE

- ▶ When music is playing,  is displayed in back of the music title.
- ▶ A damaged or corrupted music does not play but displays 00:00 in playtime.
- ▶ A music downloaded from a paid service with copyright protection does not start but displays inappropriate information in playtime.
- ▶ If you press **OK**,  buttons, screen saver is stopped.
- ▶ The **PLAY(▶)**, **Pause(II)**, , **▶▶**, **◀◀** buttons on the remote control are also available in this mode.
- ▶ You can use the **▶▶** button to select the next music and the **◀◀** button to select the previous music.

# EPG (ELECTRONIC PROGRAMME GUIDE) (IN DIGITAL MODE)


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.

The EPG displays the programme description for next 8 days.

## Switch on/off EPG

- 1  Switch on or off EPG.

PROGRAMME GUIDE

1 YLE TV1

2 YLE TV2

4 TV..

5 YLE FST

6 CNN

8 YLE24

06 Mar 2006 15:09

06 Mar

14:00

15:00

No Information

No Information

No Information

No Information

No Information

No Information

Kungskonsumente

TV2: farmen

No Information

No Information

No Information

Tänään otsikoissa

ALL

14:00

15:00

No Information

No Information

No Information

No Information

No Information

No Information

No Information

Tänään otsikoissa

▼

广播

Radio

喜爱

Favourite

信息

Information

●




Popup

Mode











Date

Schedule List












## Select a programme

- 1  or  Select desired programme.
- 2  Display the selected programme.




## Button Function in NOW/NEXT Guide Mode

 <b>RED</b>	Change EPG mode.		Select the Broadcast Programme.
 <b>BLUE</b>	Switch the Schedule list On or off.		Page Up/Down.
	Move to the pop up menu.		Switch off EPG.
	Select a Programme.		Select TV or RADIO Programme.
	Change the favourite programme mode.		The detail information on or off.

## Button Function in 8 Day Guide Mode

 <b>RED</b>	Change EPG mode.		Select the Broadcast Programme.
 <b>GREEN</b>	Enter Date setting mode.		Page Up/Down.
 <b>BLUE</b>	Switch the Schedule list On or off.		Switch off EPG.
	Move to the pop up menu.		Select TV or RADIO Programme.
	Select a Programme.		The detail information on or off.
	Change the favourite programme mode.		

## Button Function in Date Change Mode

 <b>GREEN</b>	Switch off Date setting mode.		Switch off EPG.
	Select a date and change to the selected date.		

# EPG (ELECTRONIC PROGRAMME GUIDE) (IN DIGITAL MODE)

## Button Function in Detailed Information Menu



Text Up/Down.



Switch off EPG.



The detail information on or off.

## Button Function in Schedule List Mode



Change to Guide mode.



Select Schedule list.

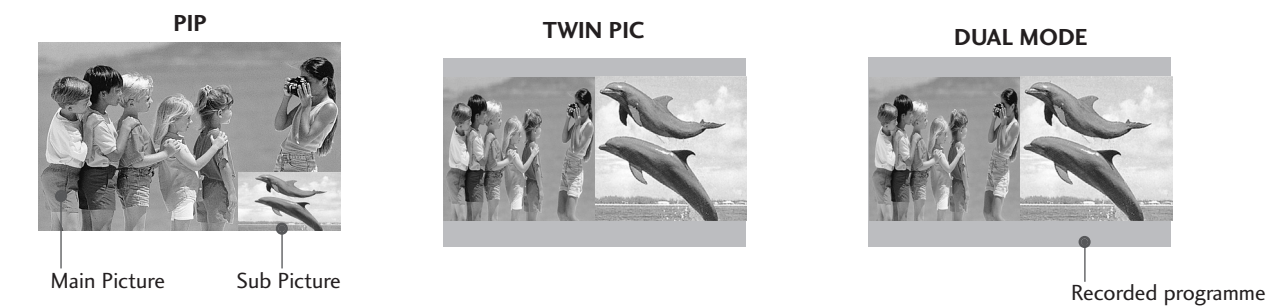
# PICTURE CONTROL



## WATCHING PIP (PICTURE-IN-PICTURE)

It's not available to use this function on recording programme.



PIP lets you view 2 different inputs (sources) on your TV screen at the same time.

### Watching PIP/Twin Picture/Dual Mode



-  Switch on or off PIP.
-  Select **PIP**, **TWIN PIC** or **DUAL MODE**.



### Input Source Selection for Sub Picture (PIP and TWIN PIC only)

-  Select **Sub Input**.
-  Select **Antenna**, **AV1** or **AV2**.



< PIP Menu >

### Programme Selection for Sub Picture (PIP and TWIN PIC only)

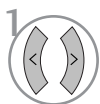
-  Select **Channel**.
-  Select a programme.



< PIP Menu >

# PICTURE CONTROL

## Audio Selection for Sub Picture (PIP and TWIN PIC only)



Select **Audio**.

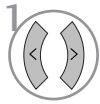
	Sub Input	Channel	Audio	PIP Off
Swap	Antenna	ATV 1	SUB PIC	Close

< PIP Menu >



Select **MAIN PIC** or **SUB PIC**.

## Swapping between main and sub pictures (PIP and TWIN PIC only)



Select **Swap**.

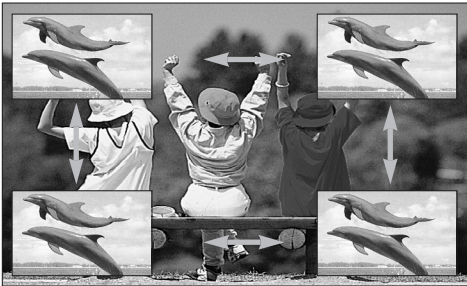
	Sub Input	Channel	Audio	PIP Off
Swap	Antenna	ATV 1	MAIN PIC	Close

< PIP Menu >

## Moving the Sub Picture (PIP mode only)



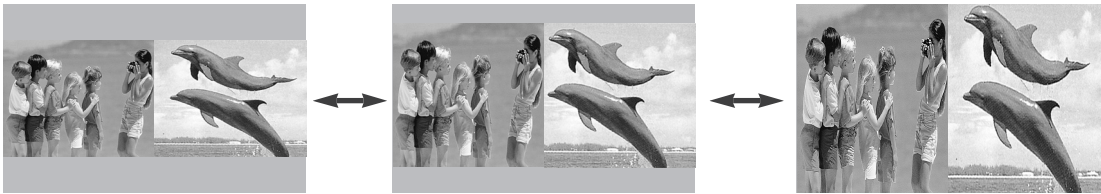
Move the sub picture.



## Sub Picture Size Adjustment (TWIN PIC and DUAL MODE only)



Adjust the sub picture size.





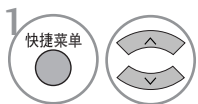
## PICTURE SIZE (ASPECT RATIO) CONTROL

You can watch the screen in various picture formats; 16:9, Just Scan, Original, 4:3, 14:9 and Zoom1/2.

If a fixed image is displayed on the screen for a long time, that fixed image may become imprinted on the screen and remain visible.

You can adjust the enlarge proportion using  $\wedge \vee$  button.

This function works in the following signal.



Select **Aspect Ratio**.



Select the desired picture format.

- You can also adjust **Aspect Ratio** in the **PICTURE**.
- For Zoom Setting, select **14:9**, **Zoom1** and **Zoom2** in Ratio Menu. After completing Zoom Setting, the display goes back to Q.MENU.

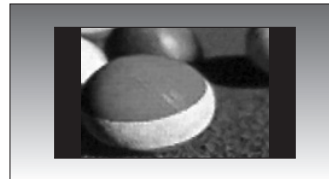
### • 16:9

The following selection will allow you to adjust the picture horizontally, in linear proportion, to fill the entire screen (useful for viewing 4:3 formatted DVDs).



### • 4:3

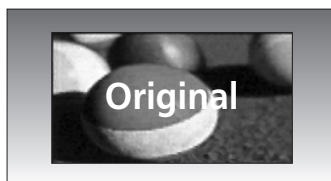
The following selection will allow you to view a picture with an original 4:3 aspect ratio, grey bars will appear on both the left and right of the screen.



# PICTURE CONTROL

- **Original**

When your TV receives a wide screen signal it will automatically change to the picture format broadcast.



- **14:9**

You can view a picture format of 14:9 or a general TV programme in the 14:9 mode. The 14:9 screen is viewed in the same way as in 4:3, but is magnified to the left and right.



- **Zoom1**

The following selection will allow you to view the picture without any alteration, while filling the entire screen. However, the top and bottom of the picture will be cropped.



- **Zoom2**

Choose Zoom 2 when you wish the picture to be altered, both horizontally extended and vertically cropped. The picture adopting a compromise between alteration and screen coverage.



- **Just Scan**

Following Selection will lead to you view the picture of best quality without loss of original picture in high resolution image.

**Note:**

1. If there are interference in original picture, you can view interference at the edge.
2. Specification is subject to change without prior notice.

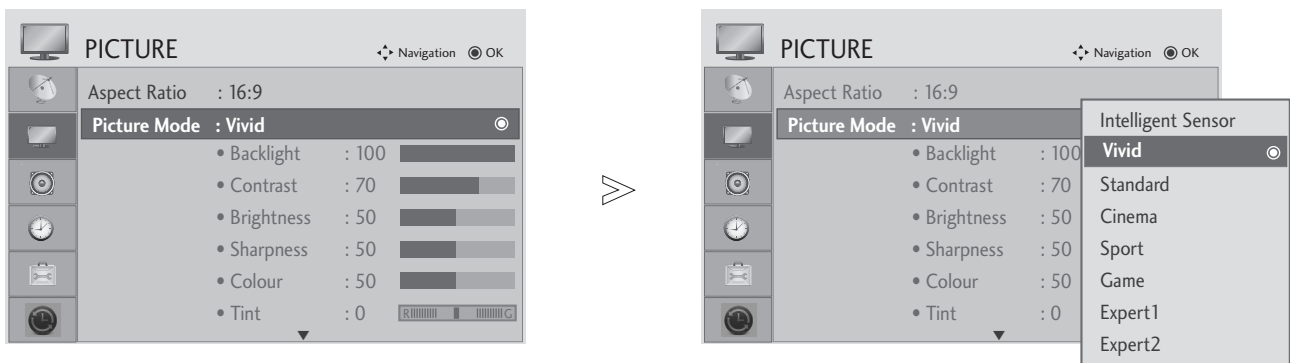










## ! NOTE

- ▶ You can only select 16:9 (Wide), Original, 4:3, 14:9, Zoom 1/2 in Component (under 720p) mode.
- ▶ You can only select 4:3, 16:9 (Wide) in RGB/HDMI[PC] mode only.
- ▶ In HDMI/Component (over 720p) mode, Just Scan is available.

# PRESET PICTURE SETTINGS

## Picture Mode-Preset



- 1   Select TV SETUP.
- 2   Select PICTURE.
- 3   Select Picture Mode.
- 4   Select desired picture value.

- **Picture Mode** adjusts the TV for the best picture appearance. Select the preset value in the **Picture Mode** menu based on the programme category.
- When the Intelligent sensor function is on, the most suitable picture is automatically adjusted according to the surrounding conditions.
- You can also adjust **Picture Mode** in the **Q. Menu**.
- **Intelligent Sensor** : Adjusts picture according to the surrounding conditions.

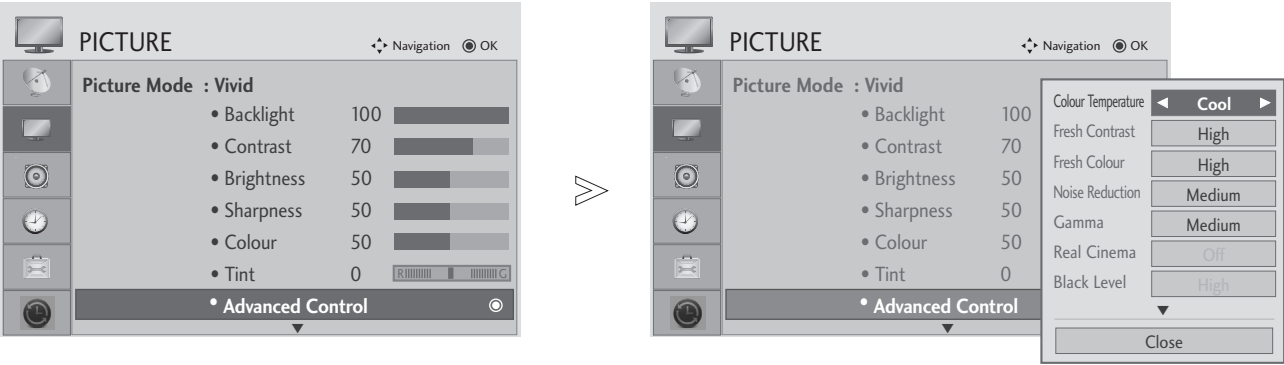
- Press the **MENU** button to return to normal TV viewing.
- Press the **RETURN** button to move to the previous menu screen.











# PICTURE CONTROL

## Auto Colour Tone Control (Warm/Medium/Cool)

To initialize values (reset to default settings), select the Cool option.

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.

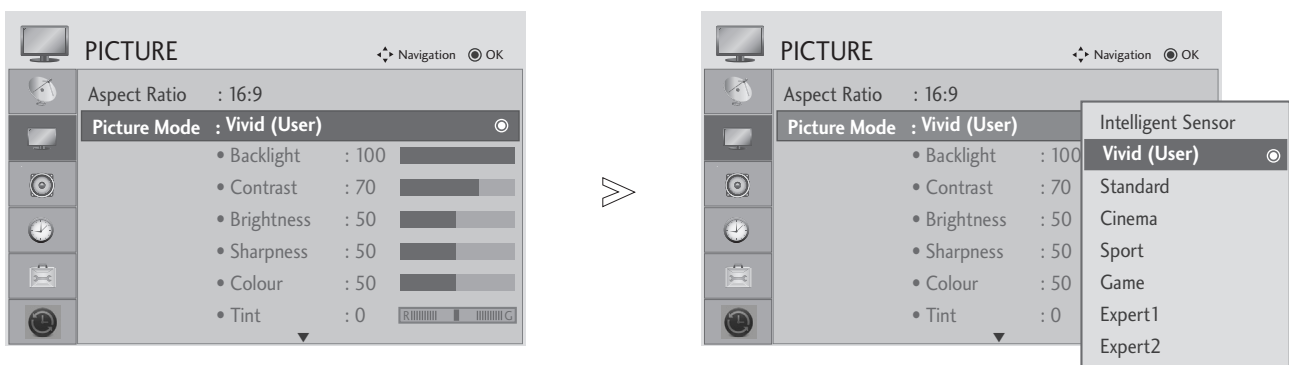














- 1   Select TV SETUP.
- 2   Select PICTURE.
- 3   Select Advanced Control.
- 4   Select Colour Temperature.
- 5   Select either Cool, Medium or Warm.

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

# MANUAL PICTURE ADJUSTMENT

## Picture Mode-User option



- 1   Select TV SETUP.
- 2   Select PICTURE.
- 3   Select Picture Mode.
- 4   Select desired picture value.
- 5   Select Backlight, Contrast, Brightness, Sharpness, Clolour or Tint.
- 6   Make appropriate adjustments.

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

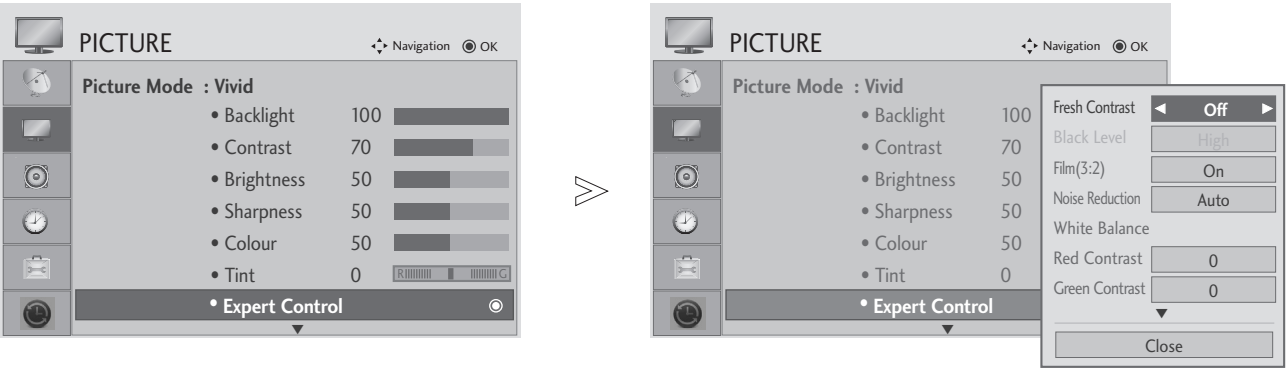
### ! NOTE






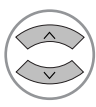

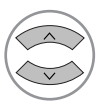






- ▶ You can not adjust colour, sharpness and tint in the RGB-PC mode.

# PICTURE CONTROL

## Picture Mode-Expert Control

By segmenting categories, Expert1 and Expert2 provide more categories which users can set as they see fit, offering the optimal picture quality for users.



- 1   Select TV SETUP.
- 2   Select PICTURE.
- 3   Select Picture Mode.
- 4   Select Expert1 or Expert2.
- 5   Select Expert Control.
- 6   Select your desired Source.
- 7   Make appropriate adjustments.

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

# PICTURE IMPROVEMENT TECHNOLOGY

## Fresh Contrast

Optimizes the contrast automatically according to the brightness of the reflection.

## Fresh Colour

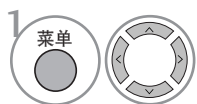
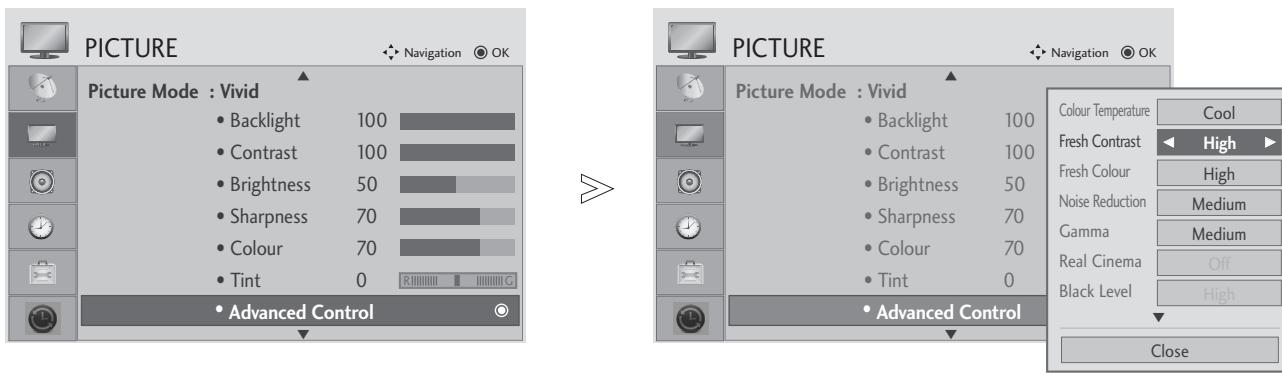
Adjusts the colour of the reflection automatically to reproduce as close as possible natural colours.

## Noise Reduction

Removes interference up to the point where it does not damage the original picture.

## Gamma.

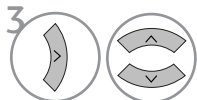
High gamma values display whitish images and low gamma values display high contrast images.



Select TV SETUP.



Select PICTURE.



Select Advanced Control.



Select Fresh Contrast, Fresh Colour, Noise Reduction or Gamma.



Select your desired Source.

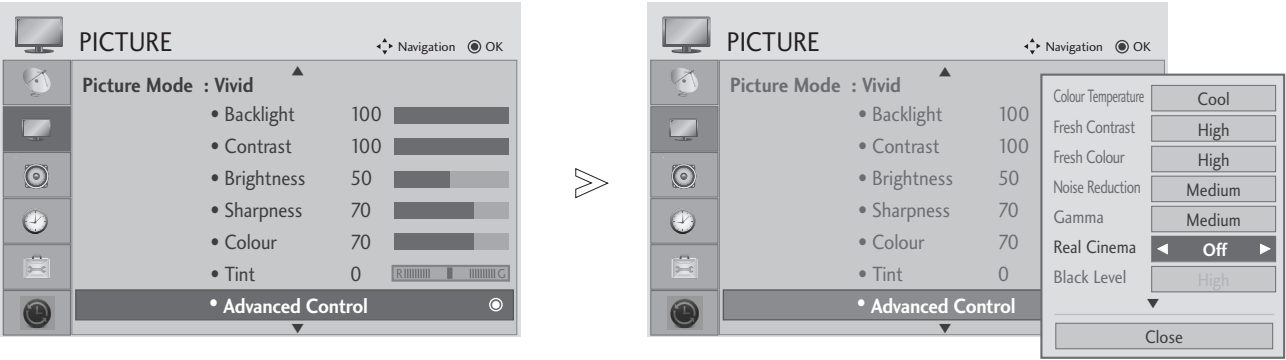
- Press the **MENU** button to return to normal TV viewing.
- Press the **RETURN** button to move to the previous menu screen.










# PICTURE CONTROL

## ADVANCED - REAL CINEMA

To set the TV up for the best picture quality for viewing films.

This feature operates only in TV, AV and Component 480i/576i/1080i mode.



- 1   Select TV SETUP.
- 2   Select PICTURE.
- 3   Select Advanced Control.
- 4   Select Real Cinema.
- 5  Select On or Off.

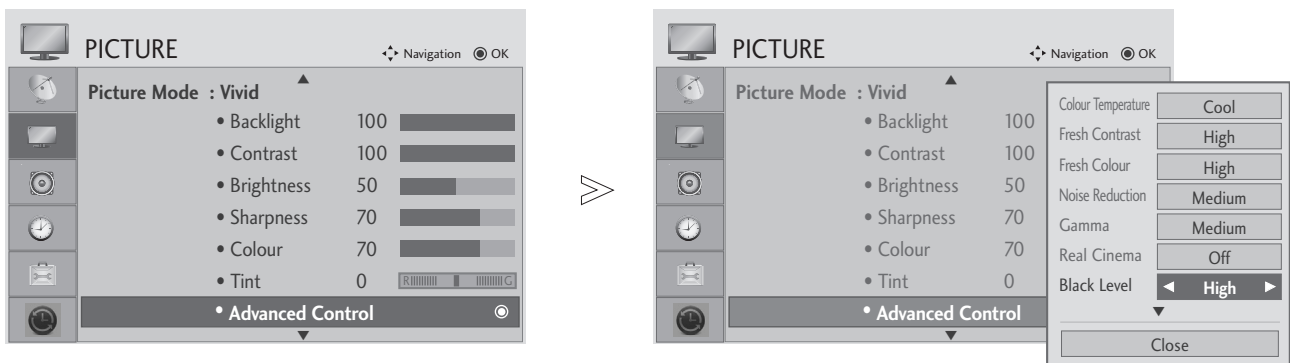
- Press the **MENU** button to return to normal TV viewing.
- Press the **RETURN** button to move to the previous menu screen.






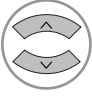

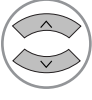



## ADVANCED - BLACK(DARKNESS) LEVEL

When you view a film this function adjusts the TV to best picture quality.

This function works in the following mode: AV (NTSC-M), HDMI or Component.



- 1   Select TV SETUP.
- 2   Select PICTURE.
- 3   Select Advanced Control.
- 4   Select Black Level.
- 5  Select Low or High.

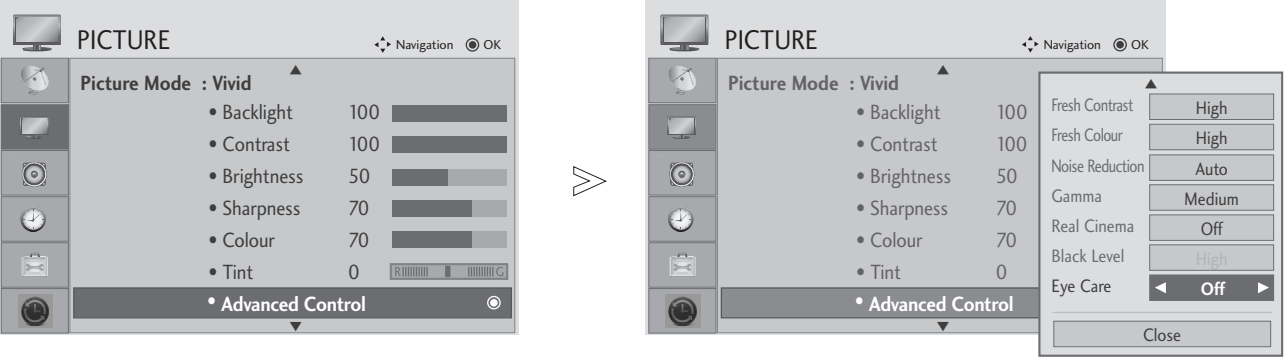
- **Low** : The reflection of the screen gets darker.
- **High** : The reflection of the screen gets brighter.
- **Auto** : Realizing the black level of the screen and set it to High or Low automatically.




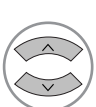

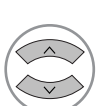

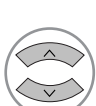

- Press the **MENU** button to return to normal TV viewing.
- Press the **RETURN** button to move to the previous menu screen.

# PICTURE CONTROL

## EYE CARE

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

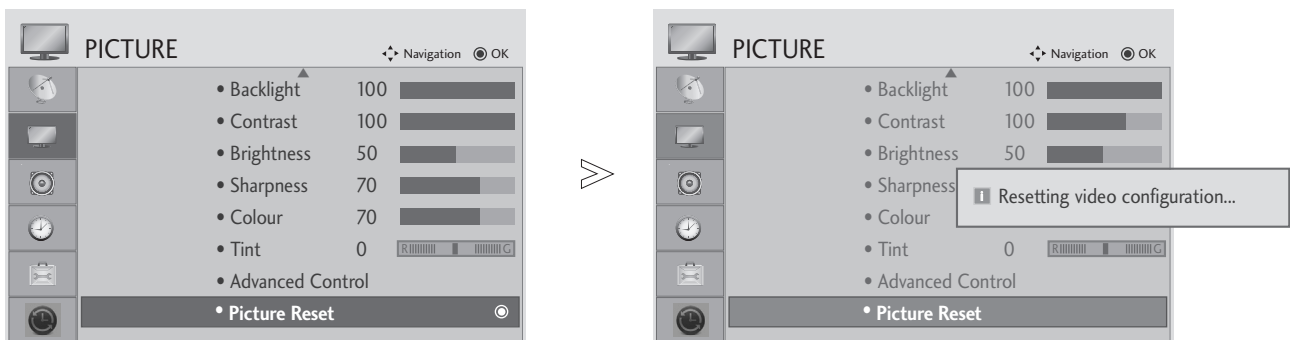









- 1   Select TV SETUP.
- 2   Select PICTURE.
- 3   Select Advanced Control.
- 4   Select Eye Care.
- 5  Select On or Off.

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

# PICTURE RESET

Returns to the default factory setting for Picture Mode, Colour, Temperature, XD and Advanced.



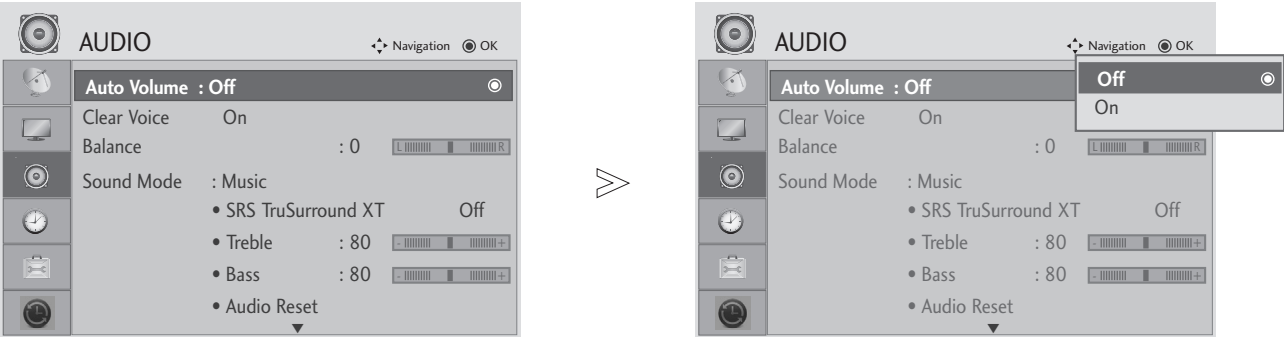
- 1   Select TV SETUP.
- 2   Select PICTURE.
- 3   Select Picture Reset.
- 4  Initialize the adjusted value.









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

# SOUND & LANGUAGE CONTROL

## AUTO VOLUME LEVELER

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



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

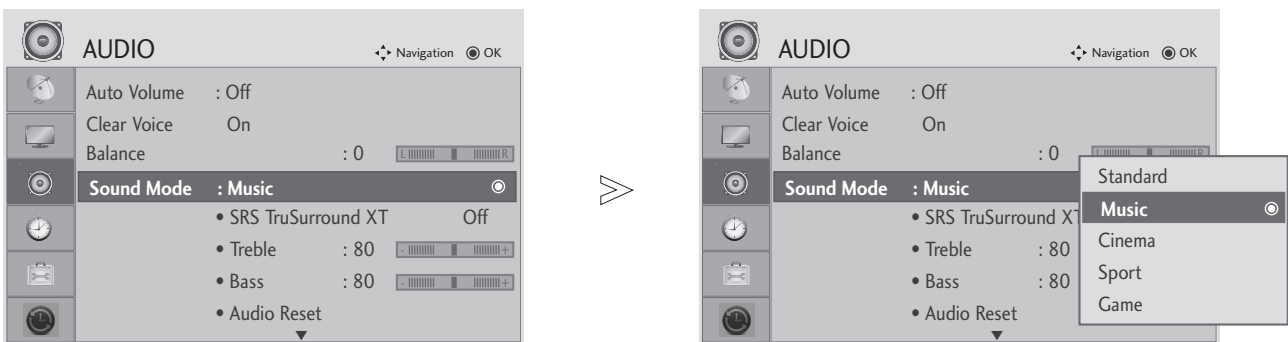
- Press the **MENU** button to return to normal TV viewing.
- Press the **RETURN** button to move to the previous menu screen.









## PRESET SOUND SETTINGS-SOUND MODE

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

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

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



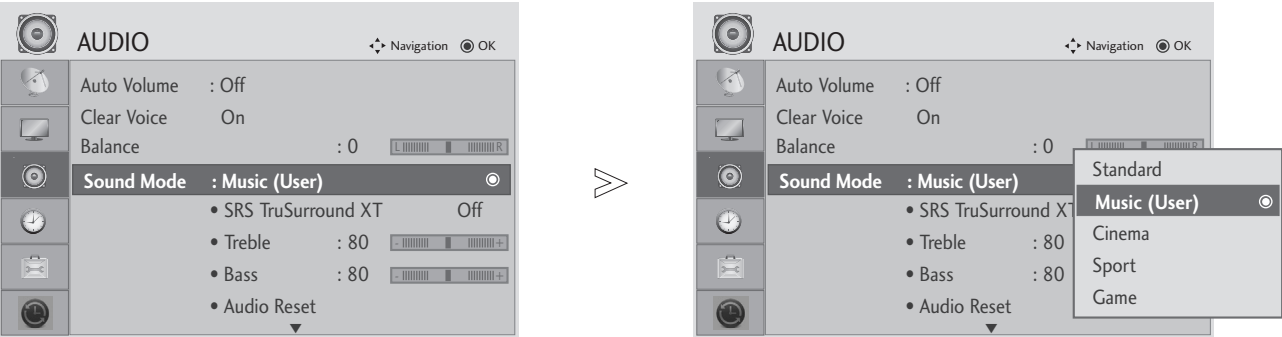
- 1   Select **TV SETUP**.
- 2   Select **AUDIO**.
- 3   Select **Sound Mode**.
- 4   Select **Standard, Music, Cinema, Sport or Game**.


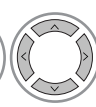











- Press the **MENU** button to return to normal TV viewing.
- Press the **RETURN** button to move to the previous menu screen.

# SOUND & LANGUAGE CONTROL

## SOUND SETTING ADJUSTMENT -USER MODE

Adjusting the audio equalizer.

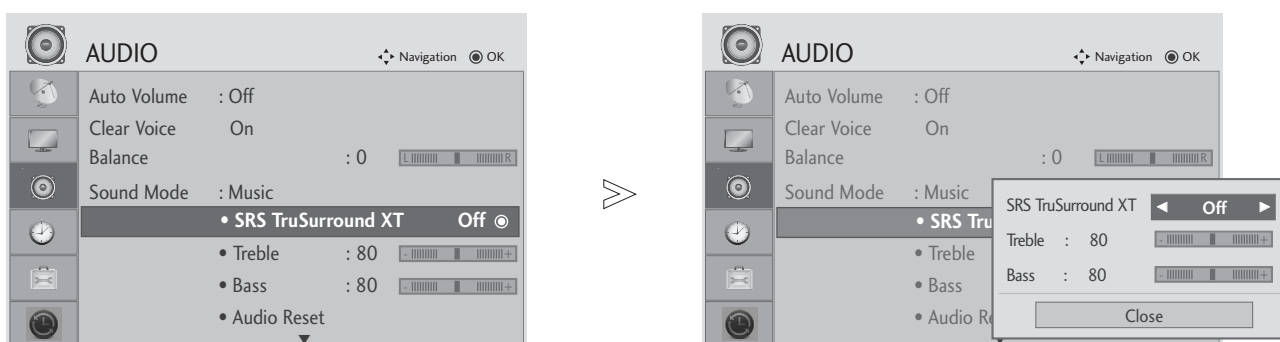










- 1   Select TV SETUP.
- 2   Select AUDIO.
- 3   Select Sound Mode.
- 4   Select Standard, Music, Cinema, Sport or Game.
- 5   Select a frequency band.
- 6    Set the desired sound level.

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


# SRS TRUSURROUND XT

SRS TruSurround XT Select this option to sound realistic.



- 1   Select TV SETUP.
- 2   Select AUDIO.
- 3   Select SRS TruSurround XT.
- 4   Select On or Off.

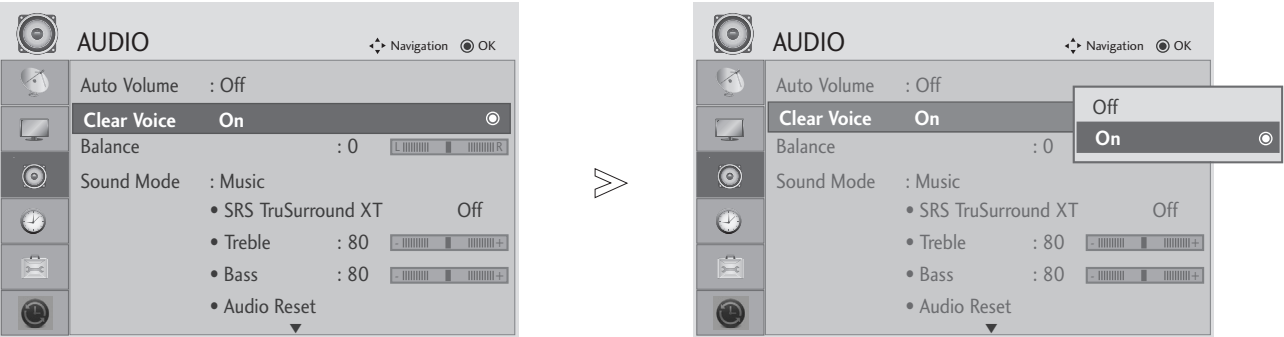
- Press the **MENU** button to return to normal TV viewing.
- Press the **RETURN** button to move to the previous menu screen.





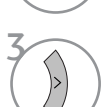
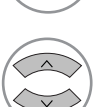
- ▶  is a trademark of SRS Labs, Inc.
- ▶ TruSurround XT technology is incorporated under license from SRS Labs, Inc.

# SOUND & LANGUAGE CONTROL

## CLEAR VOICE

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



1.   Select TV SETUP.
2.   Select AUDIO.
3.   Select **Clear Voice**.
4.   Select **On** or **Off**.

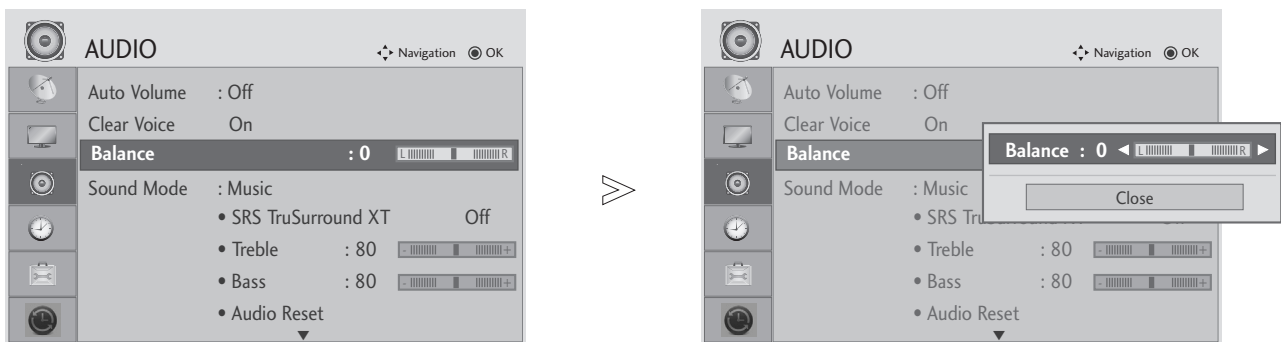
- If you select “On” for **Clear Voice**, SRS TruSurround XT feature will not work.









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



## BALANCE

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



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

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

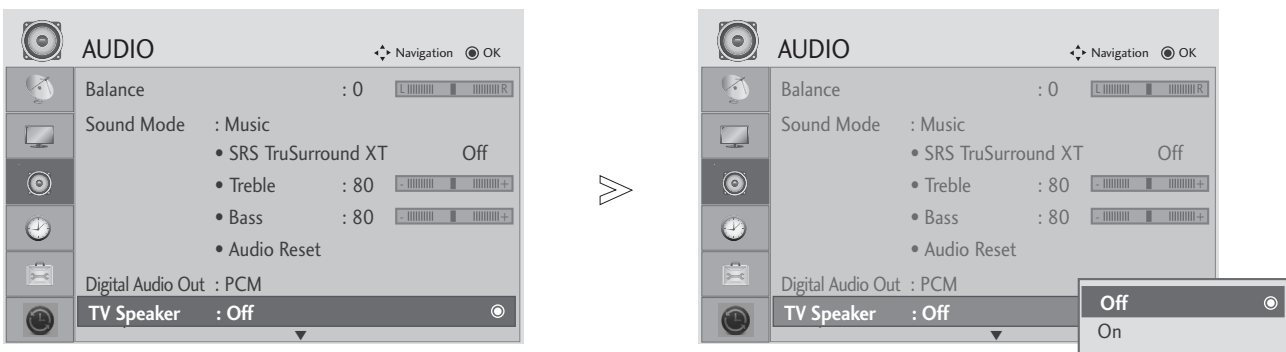
# SOUND & LANGUAGE CONTROL

## TV SPEAKERS ON/ OFF SETUP

You can adjust the internal speaker status.

In AV1/2, COMPONENT1/2, RGB and HDMI1 with HDMI to DVI cable, the TV speaker can be operational even when there is no video signal.

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



1. Select TV SETUP.
2. Select AUDIO.
3. Select TV Speaker.
4. Select On or Off.

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

## SELECTING DIGITAL AUDIO OUT

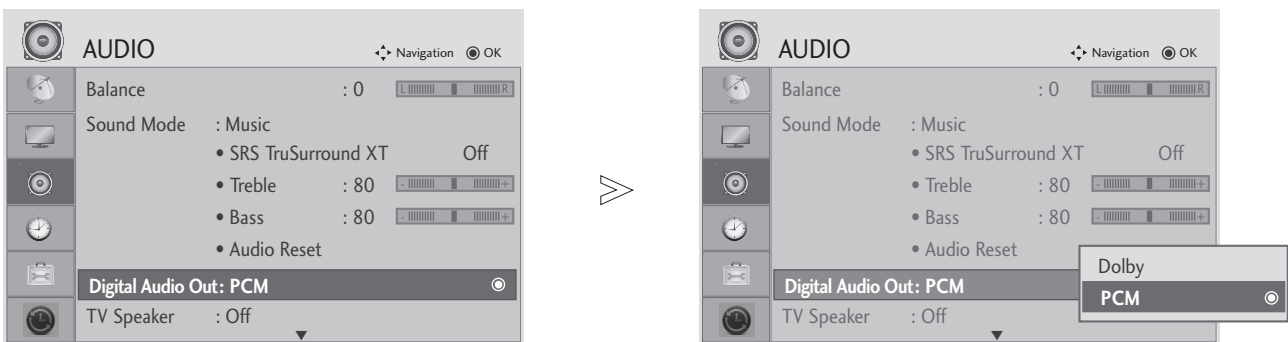
This function allows you to select your preferred Digital Audio Output.









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

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

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

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



- 1   Select TV SETUP.
- 2   Select AUDIO.
- 3   Select Digital Audio Out.
- 4   Select Dolby or PCM.



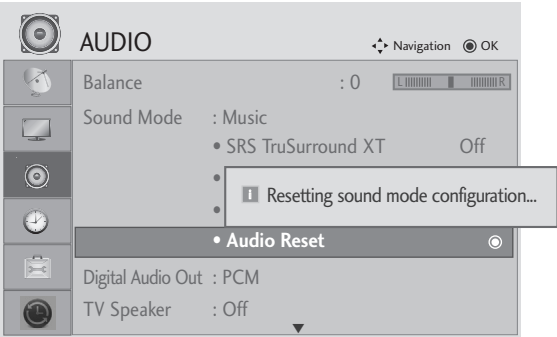
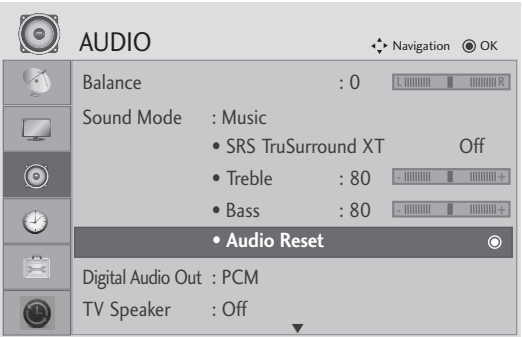
Manufactured under license from Dolby Laboratories. "Dolby" and the double-D symbol are trademarks of Dolby Laboratories.

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

# SOUND & LANGUAGE CONTROL

## AUDIO RESET

Returns to the default factory setting for Sound Mode, Auto Volume and Balance.



- 1 菜单 Select TV SETUP.
- 2 确定 Select AUDIO.
- 3 Select Reset.
- 4 确定 Initialize the adjusted value.

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

I/II

## Stereo/Dual Reception (In Analogue Mode Only)

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

- 1   Select AUDIO.
- 2   Select the sound output.

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

### ■ Mono sound selection

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

### ■ Language selection for dual language broadcast

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

- DUAL I      Sends the primary broadcast language to the loudspeakers.
- DUAL II     Sends the secondary broadcast language to the loudspeakers.
- DUAL I+II   Sends a separate language to each loudspeaker.

# SOUND & LANGUAGE CONTROL

## NICAM Reception (In Analogue Mode Only)

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

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

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

## Speaker Sound Output Selection

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

Select the sound output.




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

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










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

## ON-SCREEN MENU LANGUAGE

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

- 1   Select your desired language.
- 2  Save.

\* If you want to change Language selection

- 1   Select TV SETUP.
- 2   Select OPTION.
- 3   Select Language.
- 4   Select Menu.
- 5  Select your desired language.
- 6  Save.

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

### ! NOTE

- ▶ If you do not finish the set-up Installation Guide by pressing **RETURN** or if you time out on the OSD (On Screen Display) the installation menu will continuously appear until the set up is completed whenever the TV is switched on.

# SOUND & LANGUAGE CONTROL

## AUDIO LANGUAGE SELECTION (IN DIGITAL MODE ONLY)

The Audio function allows selection of a preferred language.  
If audio data in a selected language is not broadcast, the default language audio will be played.

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

- 1

Select TV SETUP.
- 2

Select OPTION.
- 3

Select Language.
- 4

Select Audio.
- 5

Select your desired language.
- 6

Save.

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

### < Audio Language Selection >

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

- 1

Select **Audio**
- 2

Select an audio language.

- 3

Select L+R, L+L or R+R.

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

### Audio Language OSD Information

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

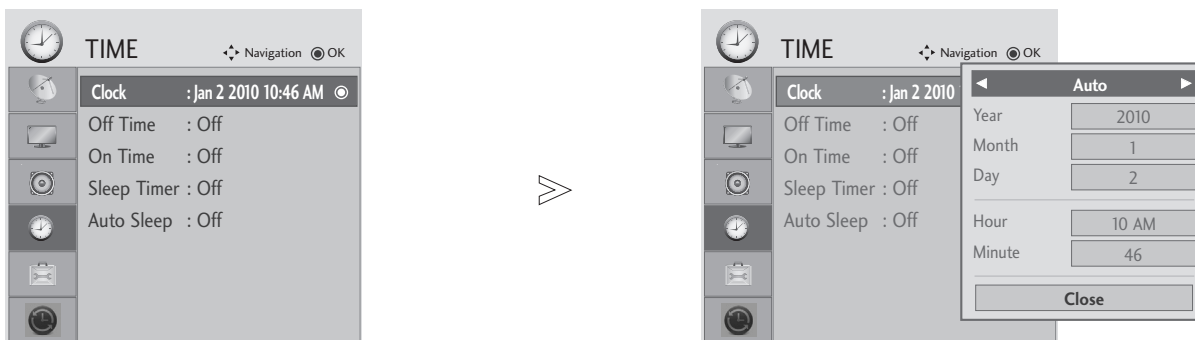












# TIME SETTING

## CLOCK SETUP

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

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



- 1   Select TV SETUP.
- 2   Select TIME.
- 3   Select Clock.
- 4   Select Manual.
- 5  Select either the year, date, or time option.
- 6  Set the year, date, and time options.

• The clock is set automatically when selecting **Auto**.

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

# TIME SETTING

## AUTO ON/OFF TIMER SETTING

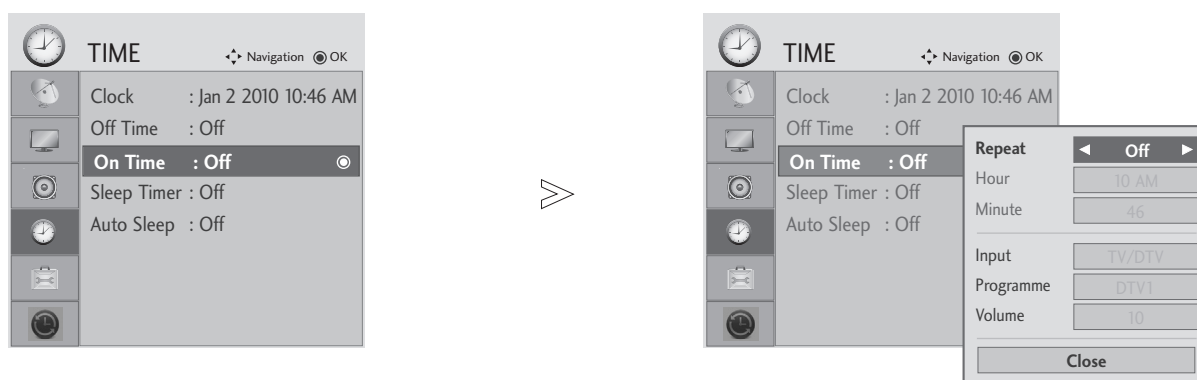
The Off time function automatically switches the TV to standby at a preset time.

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

Once the on time/off time is set, these functions operate daily at the preset time.

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

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



- 1 菜单 Select TV SETUP.
- 2 确定 Select TIME.
- 2 Select Off time or On time.
- 3 确定 Select Repeat.
- 4 Select Off, Once, Daily, Mon ~ Fri, Mon ~ Sat, Sat ~ Sun or Sun.
- 5 Set the hour.
- 6 Set the minutes.

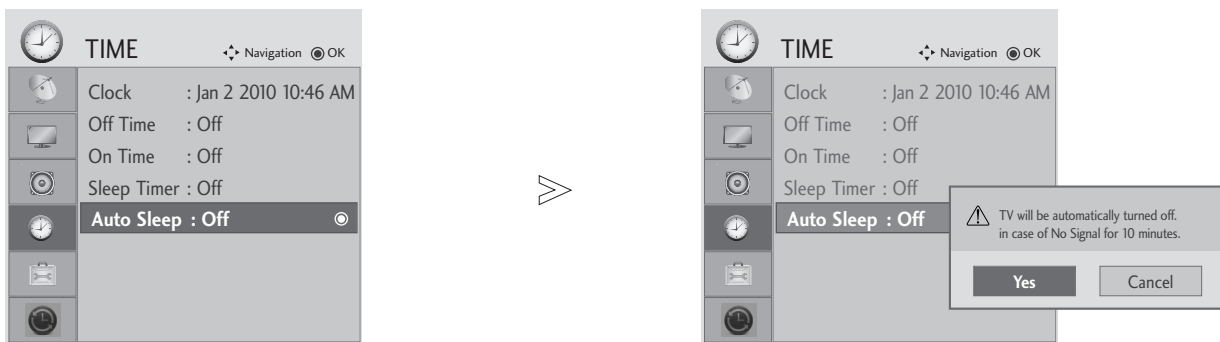
- To cancel On/Off Time function, select Off.
- For On Time function only









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

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

# AUTO SHUT-OFF SETTING

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



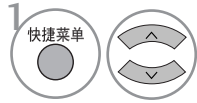
- 1   Select TV SETUP.
- 2   Select TIME.
- 2   Select Auto Sleep.
- 3   Select Yes or Cancel.

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

# TIME SETTING

## SLEEP TIMER SETTING

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



Select **Sleep Timer**.



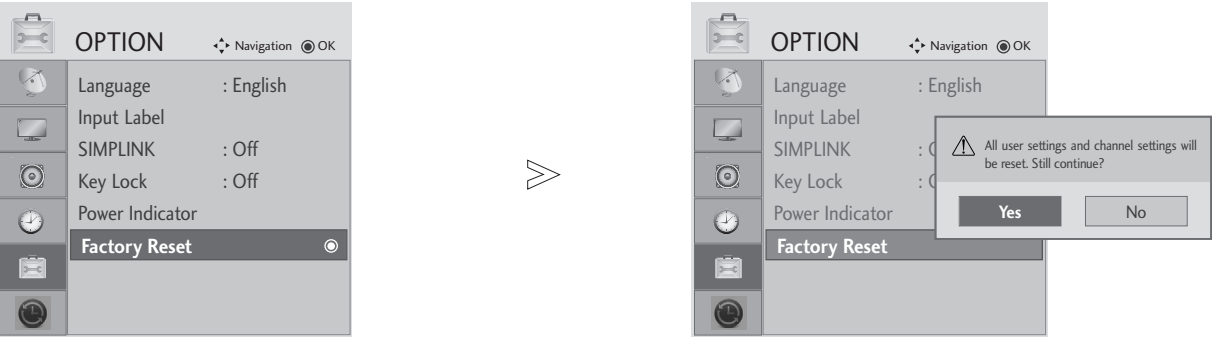
Select **Off, 10, 20, 30, 60, 90, 120, 180 or 240 Minutes**.

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

# APPENDIX

## Initializing (Reset to original factory settings)

This function operates in current mode.  
To initialize the adjusted value.



- 1 菜单 Select TV SETUP.
- 2 确定 Select OPTION.
- 2 确定 Select Factory Reset.
- 3 确定 Select Yes or No.

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

## TROUBLESHOOTING

### The TV does not operate properly.

The remote control does not work

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

Power is suddenly turned off

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

### The video function does not work.

No picture & No sound

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

Picture appears slowly after switching on

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

No or poor colour or poor picture

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

Horizontal/vertical bars or picture shaking

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

Poor reception on some channels

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

Lines or streaks in pictures

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

### The audio function does not work.

Picture OK & No sound	<ul style="list-style-type: none"> <li>■ Press the <b>VOLUME</b> button.</li> <li>■ Sound muted? Press <b>MUTE</b> button.</li> <li>■ Try another channel. The problem may be with the broadcast.</li> <li>■ Are the audio cables installed properly?</li> </ul>
No output from one of the speakers	<ul style="list-style-type: none"> <li>■ Adjust <b>Balance</b> in menu option.</li> </ul>
Unusual sound from inside the TV	<ul style="list-style-type: none"> <li>■ A change in ambient humidity or temperature may result in an unusual noise when the TV is switched on or off and does not indicate a fault with the TV.</li> </ul>

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

The signal is out of range (Invalid format)	<ul style="list-style-type: none"> <li>■ Adjust resolution, horizontal frequency, or vertical frequency.</li> <li>■ Check the input source.</li> </ul>
Vertical bar or stripe on background & Horizontal Noise & Incorrect position	<ul style="list-style-type: none"> <li>■ Adjust size, phase, or H/V position. (Option)</li> </ul>
Screen colour is unstable or single colour	<ul style="list-style-type: none"> <li>■ Check the signal cable.</li> <li>■ Reinstall the PC video card.</li> </ul>

# APPENDIX

## MAINTENANCE

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

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

### Cleaning the Screen

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

### Cleaning the Cabinet

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

### Extended Absence

#### ⚠ CAUTION

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



# PRODUCT SPECIFICATIONS

MODELS		42LG70ED 42LG70ED-CA	47LG70ED 47LG70ED-CA	52LG70ED 52LG70ED-CA
Dimensions (Width x Height x Depth)	with stand	1156.2 x 813.1 x 342.9 mm 45.6 x 32.0 x 13.5 inches	1156.2 x 813.1 x 342.9 mm 45.6 x 32.0 x 13.5 inches	1156.2 x 813.1 x 342.9 mm 45.6 x 32.0 x 13.5 inches
	without stand	1156.2 x 739.2 x 103.0 mm 45.6 x 29.1 x 4.1 inches	1156.2 x 739.2 x 103.0 mm 45.6 x 29.1 x 4.1 inches	1156.2 x 739.2 x 103.0 mm 45.6 x 29.1 x 4.1 inches
Weight	with stand	29.5 kg / 65.1 lbs	29.5 kg / 65.1 lbs	29.5 kg / 65.1 lbs
	without stand	24.9 kg / 54.9 lbs	24.9 kg / 54.9 lbs	24.9 kg / 54.9 lbs
Power requirement		AC100-240V~ 50/60Hz 2.3A	AC100-240V~ 50/60Hz 3.0A	AC100-240V~ 50/60Hz 3.3A
Television System		PAL D/K, PAL I/II, NTSC M		
Programme Coverage		VHF: E2 ~ E12, UHF: E21 ~ E69, CATV: S1 ~ S20, HYPER: S21 ~ S47		
External Antenna Impedance		75 Ω		
Environment condition	Operating Temperature	0 ~ 40°C / 32 ~ 104°F		
	Operating Humidity	Less than 80%		
	Storage Temperature	-20 ~ 60°C / -4 ~ 140°F		
	Storage Humidity	Less than 85%		

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

## PROGRAMMING THE REMOTE CONTROL

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

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

### Programming a code into a remote mode

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

# PROGRAMMING CODE

## HDSTB

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

## 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 KARDON	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		

# APPENDIX

## IR CODES

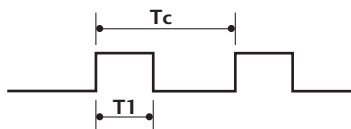
### 1. How to Connect

- 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



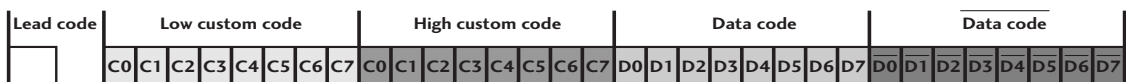
Carrier frequency

$$FCAR = 1/T_C = f_{OSC}/12$$

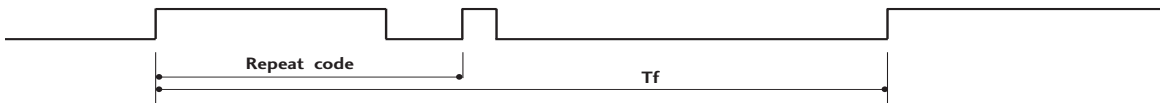
$$\text{Duty ratio} = T_1/T_C = 1/3$$

#### ■ Configuration of frame

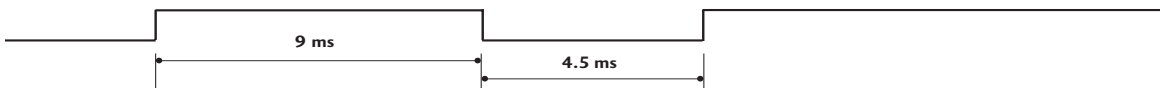
1st frame



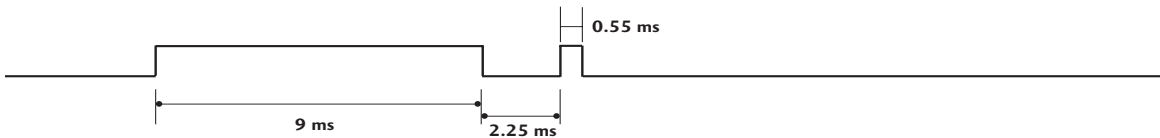
Repeat frame



#### ■ Lead code

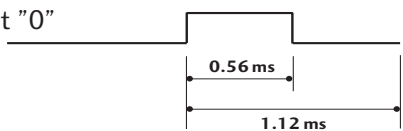


#### ■ Repeat code

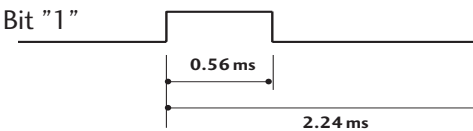


#### ■ Bit description

Bit "0"

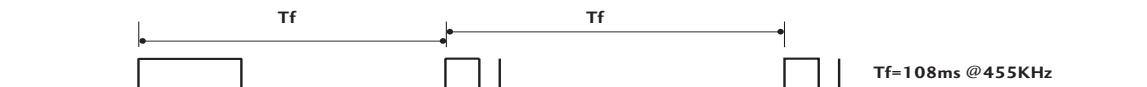


Bit "1"



#### ■ Frame interval: $T_f$

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



$T_f = 108\text{ms}$  @ 455KHz

Code (Hexa)	Function	Note
08	POWER	R/C BUTTON (POWER ON/OFF)
0B	INPUT	R/C BUTTON
AA	INFO (i)	R/C BUTTON
A9	GUIDE	R/C BUTTON
45	Q.MENU	R/C BUTTON
43	MENU	R/C BUTTON
9E	LIVE TV	R/C BUTTON
8F	Rew ◀◀	R/C BUTTON
8E	FF ▶▶	R/C BUTTON
B0	Play ▶	R/C BUTTON
BA	Pause	R/C BUTTON
BD	Record ●	R/C BUTTON
B1	Stop ■	R/C BUTTON
44	OK (⊙)	R/C BUTTON
40, 41, 07, 06	Up, Down, Left, Right	R/C BUTTON
5B	EXIT	R/C BUTTON
02, 03	VOL + -	R/C BUTTON
00, 01	Programme Up, Down	R/C BUTTON
1E	MARK, FAV	R/C BUTTON
09	MUTE	R/C BUTTON
10 ~ 19	Number Key 0~9	R/C BUTTON
53	LIST	R/C BUTTON
1A	Q.VIEW	R/C BUTTON
72	RED	R/C BUTTON
71	GREEN	R/C BUTTON
63	YELLOW	R/C BUTTON
61	BLUE	R/C BUTTON
60	PIP	R/C BUTTON
7E	SIMPLINK	R/C BUTTON
F0	TV/RAD	R/C BUTTON
30	AV MODE	R/C BUTTON
B4	Right Scroll1	R/C BUTTON
B5	Right Scroll2	R/C BUTTON
B7	Right Scroll3	R/C BUTTON
B9	Right Scroll4	R/C BUTTON
BB	Right Scroll5	R/C BUTTON
A0	Left Scroll1	R/C BUTTON
A1	Left Scroll2	R/C BUTTON
A2	Left Scroll3	R/C BUTTON
A3	Left Scroll4	R/C BUTTON
A7	Left Scroll5	R/C BUTTON

**LG Electronics Inc.**