



ENGLISH

OWNER'S MANUAL LCD TV

22LD3***

Please read this manual carefully before operating your set and retain it for future reference.



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PREPARATION

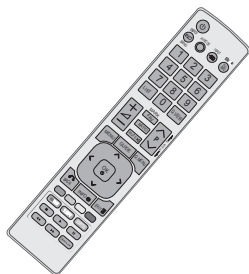
ACCESSORIES

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

- Image shown may differ from your TV.



Owner's Manual



Remote Control

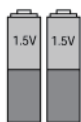
This item is not included for all models.



Polishing Cloth
Polishing cloth for
use on the screen.

* Lightly wipe any stains or
fingerprints on the surface
of the TV with the polish-
ing cloth.

Do not use excessive
force. This may cause
scratching or discoloura-
tion.



Batteries
(AAA)

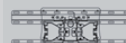


Power Cord

Separate purchase

Wall Mounting Bracket

LSW100B or
LSW100BG



Protection cover



Cable holder

PREPARATION

FRONT PANEL CONTROLS

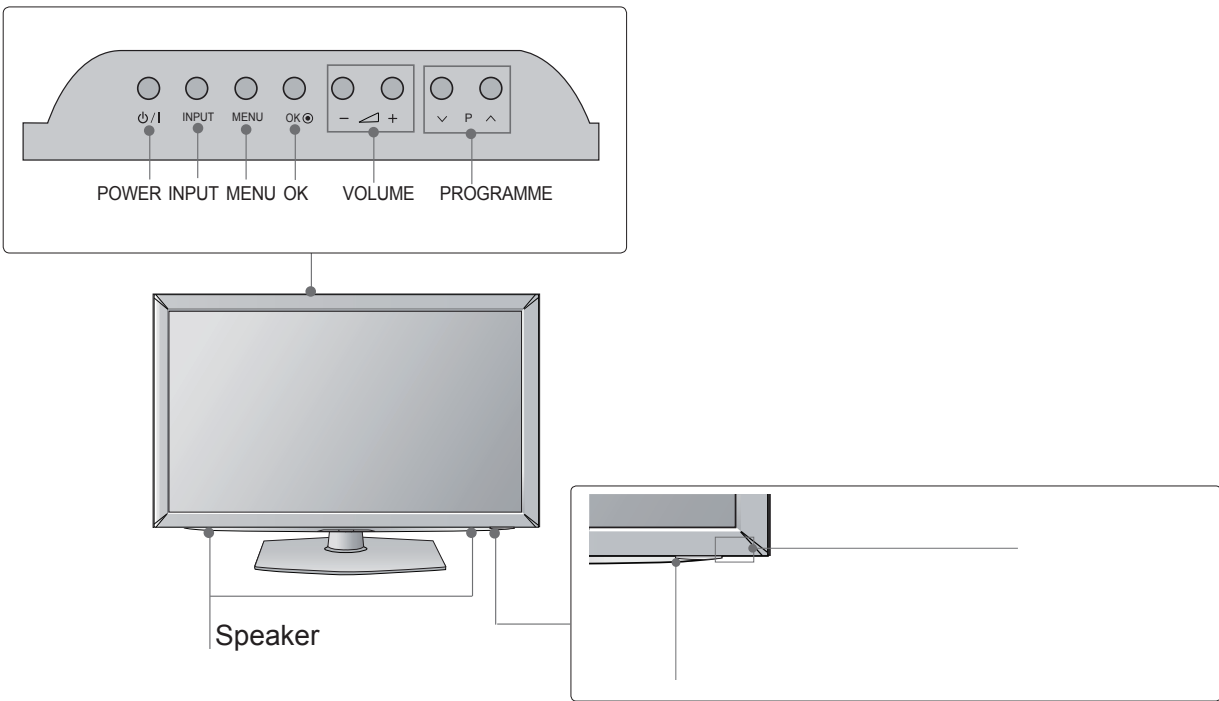
! NOTE

- ▶ TV can be placed in standby mode in order to reduce the power consumption.
- ▶ The energy consumed during use can be significantly reduced if the level of brightness of the picture is reduced, and this will reduce the overall running cost.

! CAUTION

- ▶ Do not drag the TV. The floor or the product may be damaged.

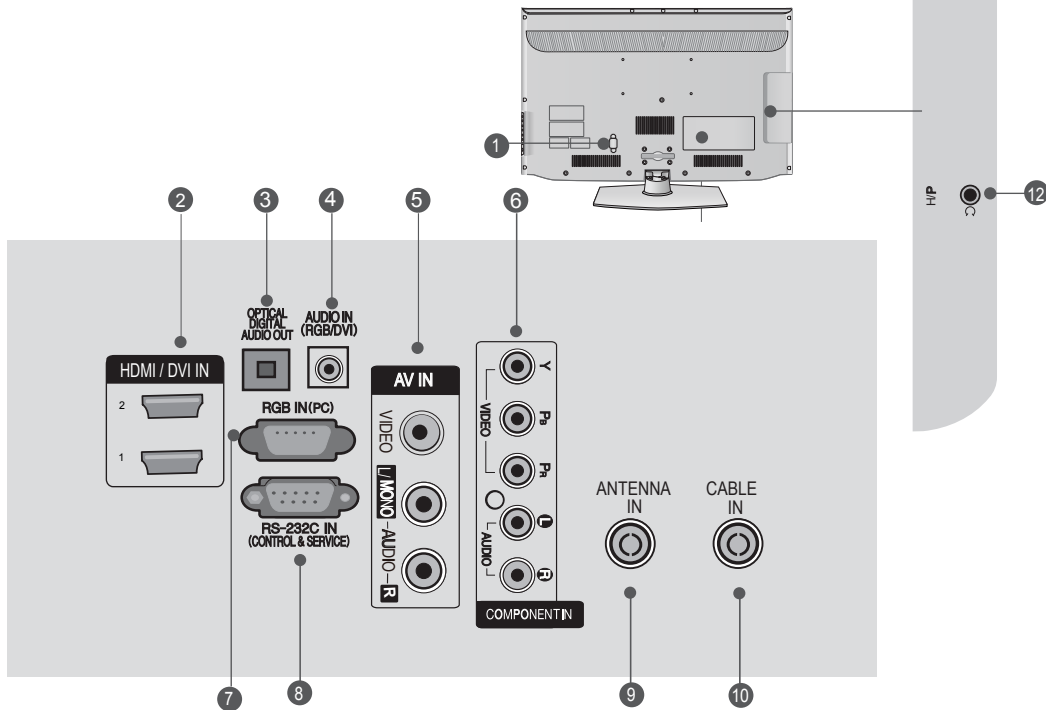
■ Image shown may differ from your TV.



PREPARATION

BACK PANEL INFORMATION

■ Image shown may differ from your TV.



1 Power Cord Socket

This TV operates on an AC power. The voltage is indicated on the Specifications page. (► p. 82) Never attempt to operate the TV on DC power.

2 HDMI/DVI IN Input

Connect an HDMI signal to HDMI IN. Or DVI (VIDEO) signal to HDMI/DVI port with DVI to HDMI cable.

3 OPTICAL DIGITAL AUDIO OUT

Connect digital audio to various types of equipment.
Connect to a Digital Audio Component.
Use an Optical audio cable.

4 RGB/DVI Audio Input

Connect the audio from a PC.

5 Audio/Video Input

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

6 Component Input

Connect a component video/audio device to these jacks.

7 RGB IN Input

Connect the output from a PC.

8 RS-232C IN (CONTROL & SERVICE) PORT

Connect to the RS-232C port on a PC.
This port is used for Service or Hotel mode.

9 Antenna Input

Connect antenna to this jack.

10 Cable Input

Connect cable signals to this jack.

11 USB Input (SERVICE ONLY)

12 Headphone Socket

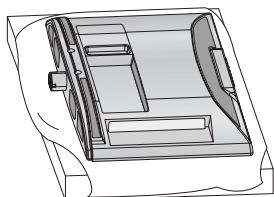
Plug the headphone into the headphone socket.

PREPARATION

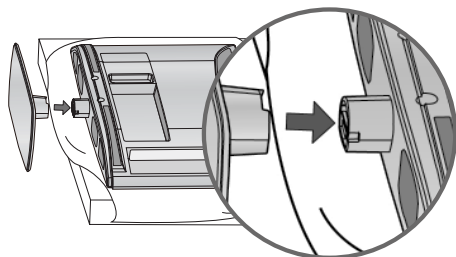
STAND INSTALLATION

- Image shown may differ from your TV

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



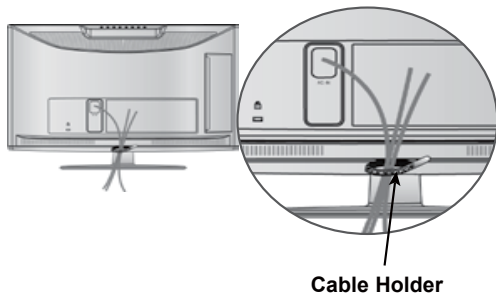
- 2 Insert stand until sound click.



BACK COVER FOR WIRE ARRANGEMENT

- Image shown may differ from your TV.

After connecting the cables as necessary, **Cable Holder** bundle the cables.

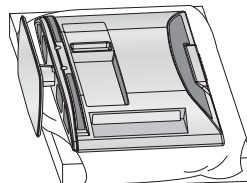


! NOTE

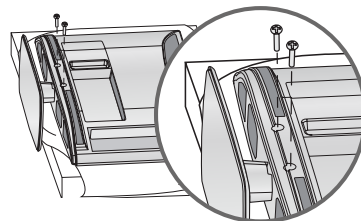
- Do not use the **Cable Holder** to lift the TV.
- If the TV is dropped, you may be injured or the TV may be damaged.

DISCONNECTING THE STAND ASSY

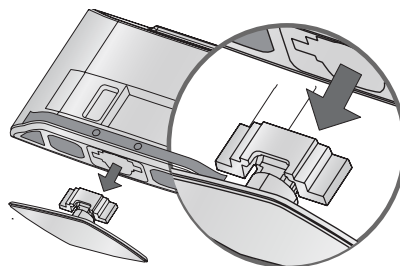
- 1 Carefully place the TV screen side down on a cushioned surface to protect the screen from damage.



- 2 Remove 2ea screw as show.



- 3 Remove the stand assy.

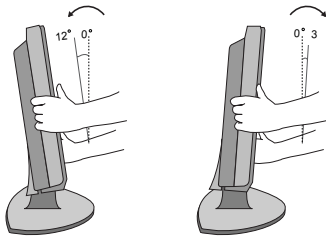


PREPARATION

POSITIONING YOUR TV

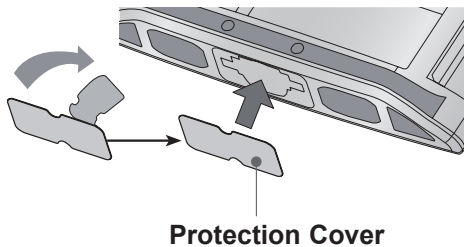
- Image shown may differ from your TV.
- Adjust the position of the panel in various ways for maximum comfort.

Tilt Range



NOT USING THE DESK-TYPE STAND

- Image shown may differ from your TV.
- When you want to use wall mounting bracket, please take the **Protection Cover** to attach the set hole as it is.



KENSINGTON SECURITY SYSTEM

- This feature is not available for all models.
- Image shown may differ from your TV.

The TV is equipped with a Kensington Security System connector on the back panel. Connect the Kensington Security System cable as shown below.

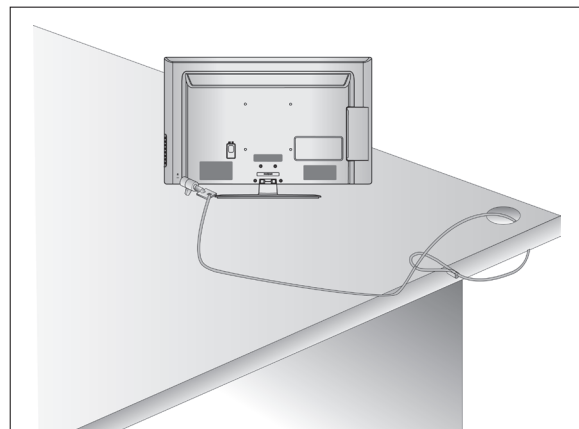
For the detailed installation and use of the Kensington Security System, refer to the user's guide provided with the Kensington Security System.

For further information, contact <http://www.kensington.com>, the internet homepage of the Kensington

company. Kensington sells security systems for expensive electronic equipment such as notebook PCs and LCD projectors.

! NOTE

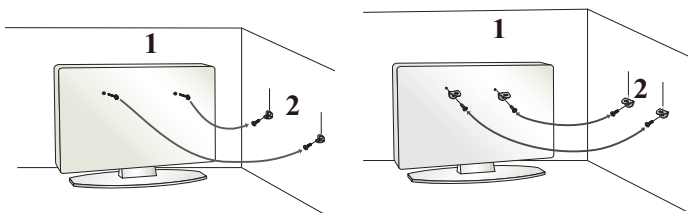
- ▶ The Kensington Security System is an optional accessory.
- ▶ If the TV feels cold to the touch, there may be a small "flicker" when it is turned on. This is normal, there is nothing wrong with TV.
- ▶ Some minute dot defects may be visible on the screen, appearing as tiny red, green, or blue spots. However, they have no adverse effect on the monitor's performance.
- ▶ Avoid touching the LCD screen or holding your finger(s) against it for long periods of time. Doing so may produce some temporary distortion effects on the screen.



PREPARATION

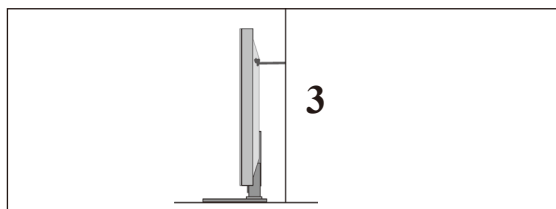
CAREFUL INSTALLATION ADVICE

- You should purchase necessary components to fix the TV safely and securely 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, by fixing 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 product to the wall as shown in the picture. (If your TV has bolts in the eye-bolts, loosen then 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 product for alignment. It is safer to tie the rope so it becomes horizontal between the wall and the product.

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.

- 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.

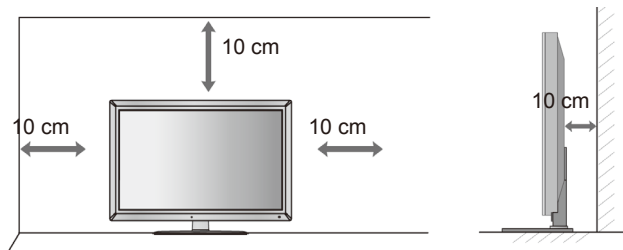
Do not try to earth the TV by connecting it to telephone wires, lightning rods or gas pipes.



DESKTOP PEDESTAL INSTALLATION

- Image shown may differ from your TV.

For adequate ventilation allow a clearance of 10 cm all around the TV.



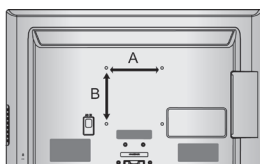
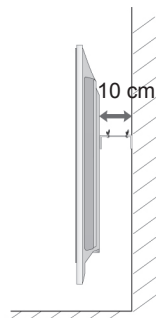
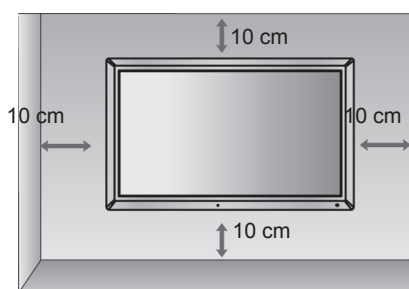
WALL MOUNT: HORIZONTAL INSTALLATION

- We recommend the use of a LG Brand wall mounting bracket when mounting the TV to a wall.
- We recommend that you purchase a wall mounting bracket which supports VESA standard.
- LG recommends that wall mounting be performed by a qualified professional installer.

PREPARATION

! NOTE

- ▶ Should Install wall mount on a solid wall perpendicular to the floor.
- ▶ Should use a special wall mount, if you want to install it to ceiling or slanted wall.
- ▶ The surface that wall mount is to be mounted on should be of sufficient strength to support the weight of TV set; e.g. concrete, natural rock, brick and hollow block.
- ▶ Installing screw type and length depends on the wall mount used. Further information, refer to the instructions included with the mount.
- ▶ LG is not liable for any accidents or damage to property or TV due to incorrect installation:
 - Where a non-compliant VESA wall mount is used.
 - Incorrect fastening of screws to surface which may cause TV to fall and cause personal injury.
 - Not following the recommended Installation method.

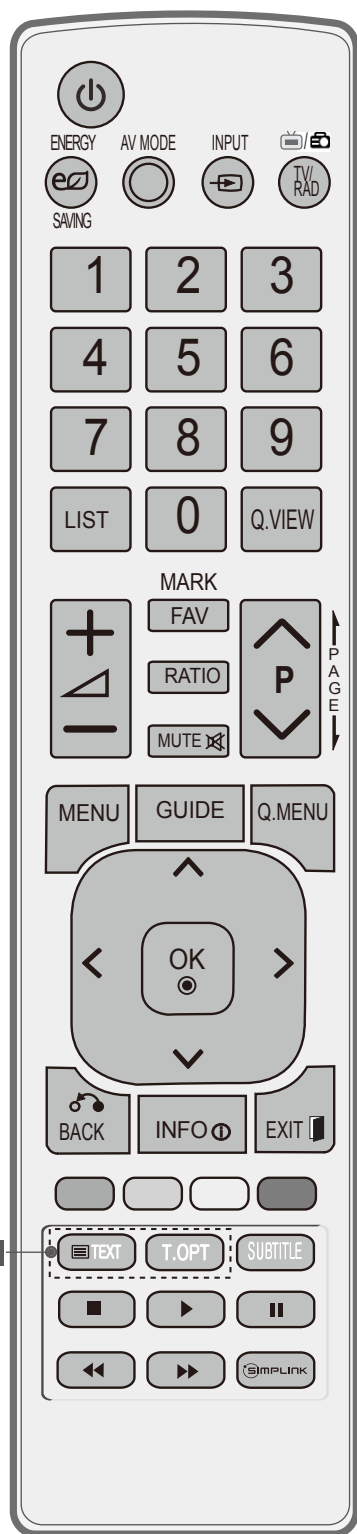


Model	VESA (A * B)	Standard Screw	Quantity
22LD3***	100 * 100	M4	4

PREPARATION

REMOTE CONTROL KEY FUNCTIONS

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



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

ENERGY SAVING Adjust the Energy Saving mode of the TV.(► p.44)

AV MODE It helps you select and set images and sounds.

INPUT External input mode rotate in regular sequence.(► p.29)

TV/RAD Selects Radio, TV and DTV channel.

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

LIST Displays the programme table. (► p.27)

Q.VIEW Returns to the previously viewed programme.

MENU Selects a menu.

GUIDE Shows programme schedule.(► p.36)

Q. MENU Select the desired quick menu source. (Aspect Ratio, Clear Voice II, Picture Mode, Sound Mode, Audio, Sleep Timer, Skip Off/On, Energy saving) (► p.11)

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

EXIT Clears all on-screen displays and returns to TV viewing from any menu.

INFO ⓘ Shows the present screen information.

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

OK Accepts your selection or displays the current mode.

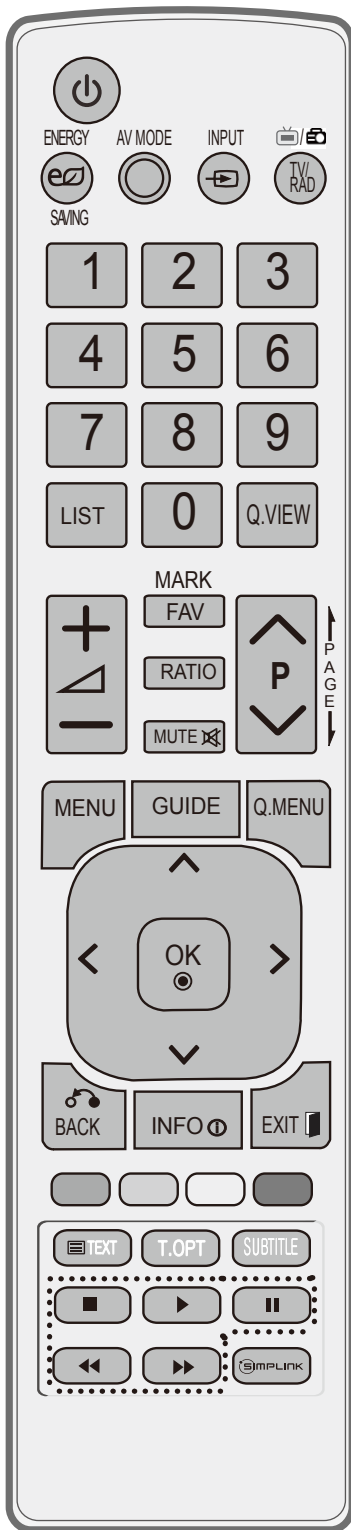
Coloured buttons These buttons are used for teletext (on TELETEXT models only), Programme edit .

1 DIGITAL These buttons are used for digital teletext.

TELETEXT For further details, see the 'Digital Teletext' section.(► p.77)

SUBTITLE Recalls your preferred subtitle in digital mode.

PREPARATION



VOLUME UP /DOWN Adjusts the volume.

FAV Displays the selected favourite programme.

MARK Select the input to apply the Picture Wizard settings.

RATIO Selects your desired Aspect Ratio of picture. (► p.41)

MUTE Switches the sound on or off.

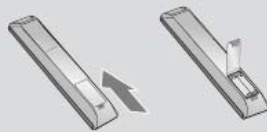
Programme UP/DOWN Selects a programme.

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

MY MEDIA Menu control buttons Controls MY MEDIA menu(Photo List and Music List).

SIMPLINK See a list of AV devices connected to TV. When you toggle this button, the Simplink menu appears at the screen.(► p.31)

Installing Batteries



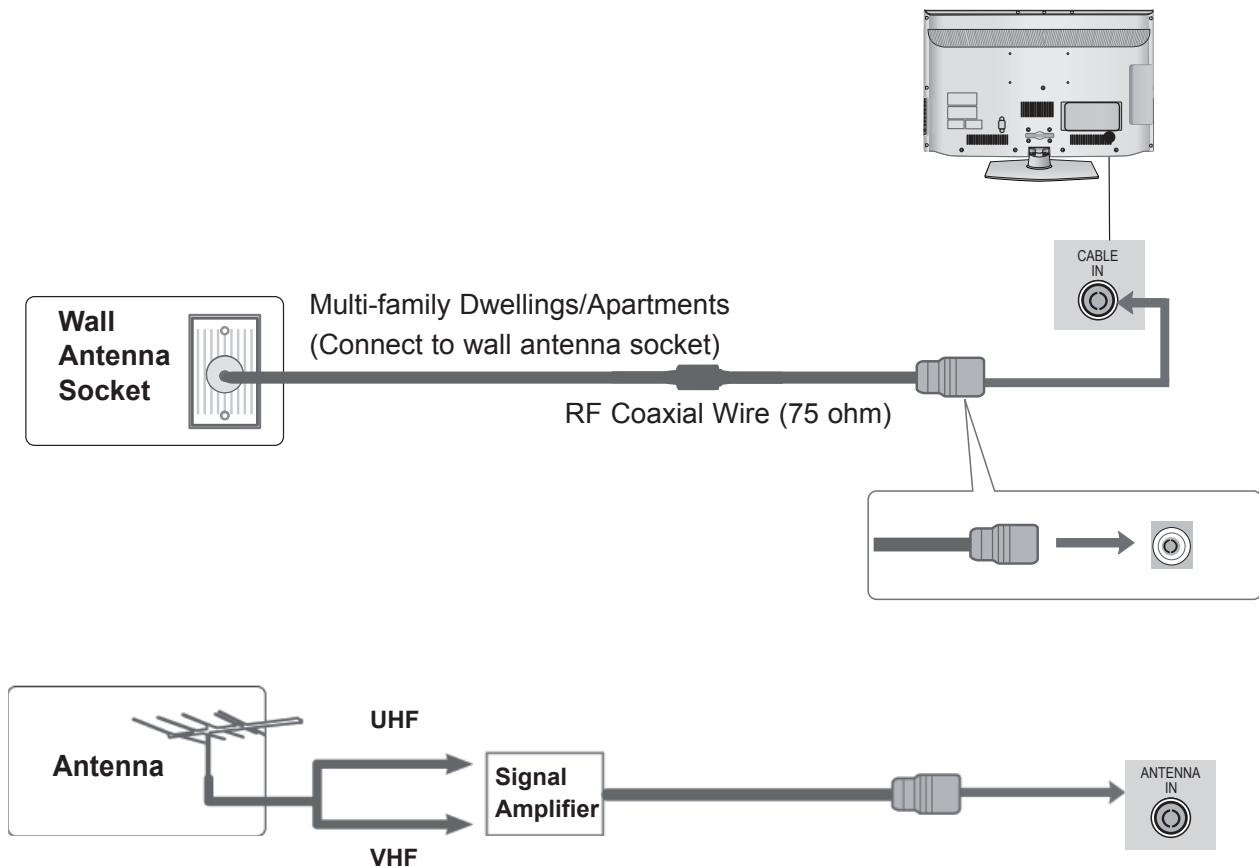
- Open the battery compartment cover on the back and install the batteries matching correct polarity (+with +,-with -).
- Install two 1.5V AAA batteries. Do not mix old or used batteries with new ones.
- Close cover.
- To remove the batteries, perform the installation actions in reverse.

EXTERNAL EQUIPMENT SETUP

- 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.
- The antenna cable and converter are not supplied.

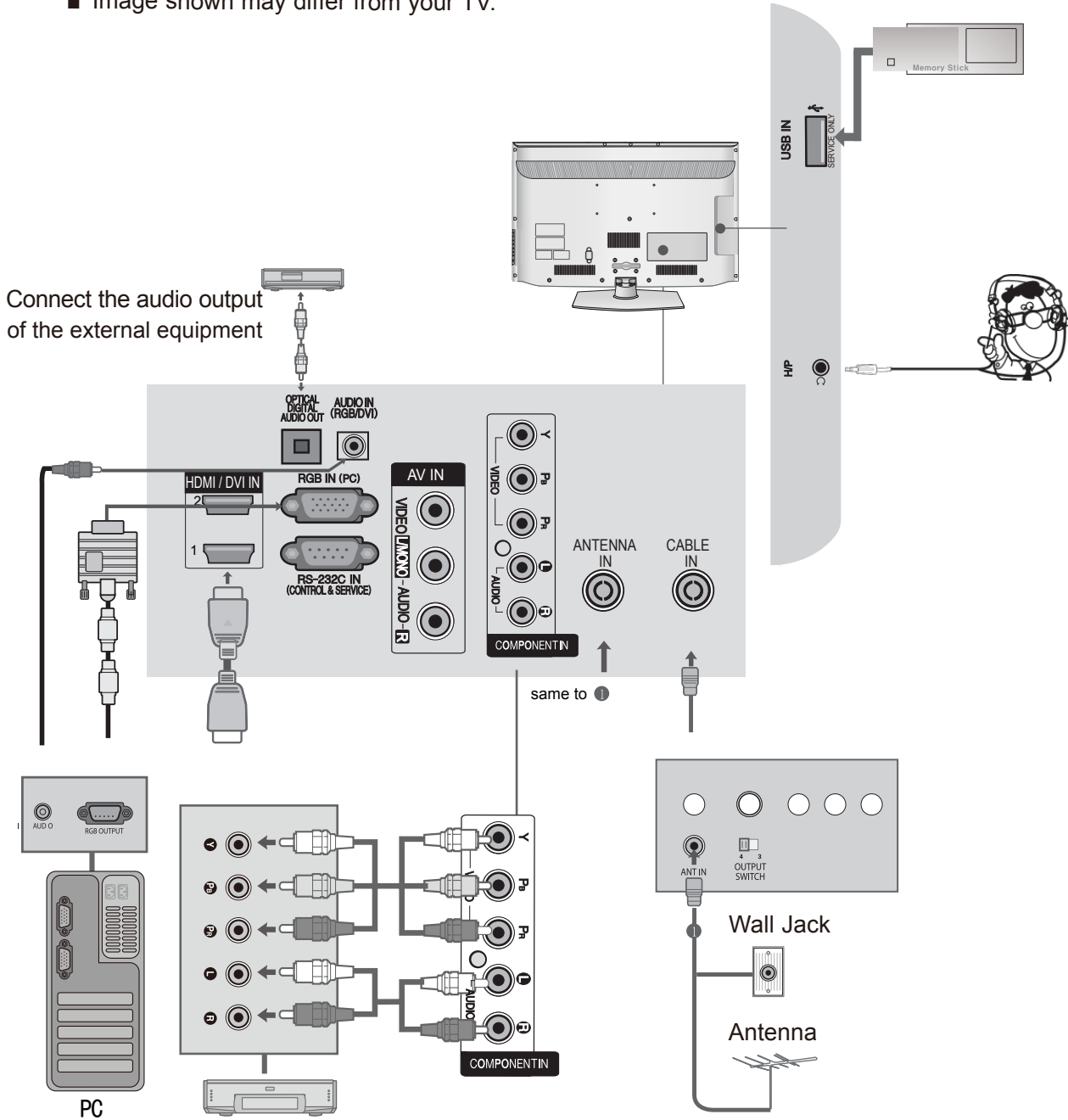


- In poor signal areas, to achieve better picture quality it may be necessary to install a signal amplifier to the antenna as shown above.
- If signal needs to be split for two TVs, use an antenna signal splitter for connection.

EXTERNAL EQUIPMENT SETUP

External Equipment Setup

- To avoid damaging any equipment, you should never plug in any power cord until you have finished connecting all the equipments.
- Image shown may differ from your TV.



Connect the video outputs of the external equipment (digital set-top box, DVD, etc.) to the **COMPONENT IN VIDEO**

EXTERNAL EQUIPMENT SETUP

- HDMI Audio Supported format : Dolby Digital, PCM
DTS Audio format is not supported.

Signal	Component	HDMI
480i/576i	O	X
480p/576p	O	O
720p/1080i	O	O
1080p	O (50/60Hz only)	O (24Hz/30Hz/50Hz/60Hz)

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 _B	P _R
Video output ports on DVD player	Y	P _B	P _R
	Y	B-Y	R-Y
	Y	Cb	Cr
	Y	Pb	Pr

EXTERNAL EQUIPMENT SETUP

NOTE

- ▶ The TV can receive video and audio signals simultaneously when using an HDMI cable.
- ▶ If the DVD does not support Auto HDMI, you must set the output resolution appropriately.
- ▶ Check that your HDMI cable is version 1.3 or higher.
If the HDMI cables don't support HDMI version 1.3, flickering or no screen display can result. Please use the latest cables that support at least HDMI version 1.3.

CAUTION

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

EXTERNAL EQUIPMENT SETUP

SUPPORTED DISPLAY RESOLUTION

RGB-PC, HDMI/DVI-PC mode

720x400	31.468	70.08
640x480	31.469	59.94
800x600	37.879	60.31
1024x768	48.363	60.00
1280x768	47.78	59.87
1360x768	47.72	59.80

HDMI/DVI-DTV mode

720x480	31.469	59.94
	31.5	60
720x576	31.25	50
	37.5	50
1280x720	44.96/45	59.94/60
	33.72/33.75	59.94/60
	28.125	50
	26.97/27	23.97/24
1920x1080	33.716/33.75	29.976/30.00
	56.25	50
	67.43/67.5	59.94/60

! NOTE

- ▶ 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 1360x768, 60 Hz for the PC mode, this 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.
- ▶ 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, set 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 an HDMI to DVI cable.
- ▶ If you use too long an RGB-PC cable that is too long, there may be interference on the screen. We recommend using under 5m of cable. This provides the best picture quality.

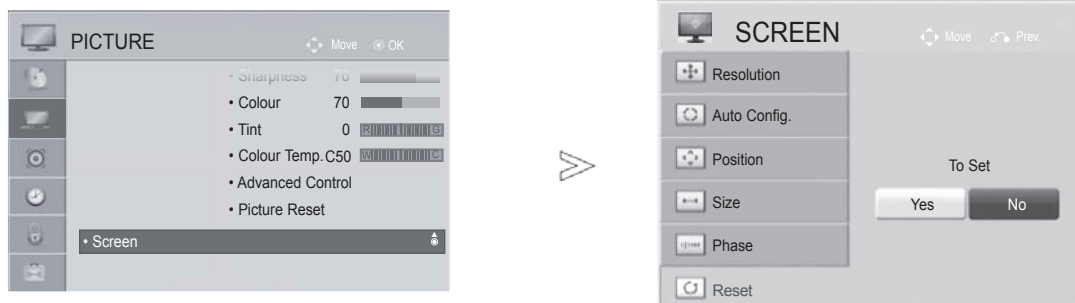
EXTERNAL EQUIPMENT SETUP

SCREEN SETUP FOR PC MODE

Screen Reset

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

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



1. Select **PICTURE**.
2. Select **Screen**.
3. Select **Reset**.
4. Select **Yes**.
5. Run **Reset**.

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

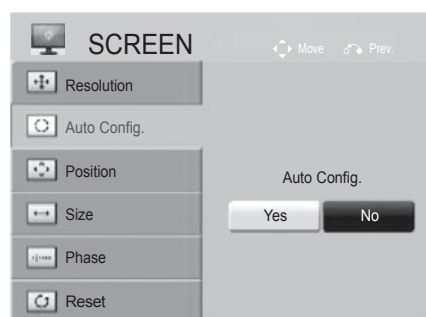
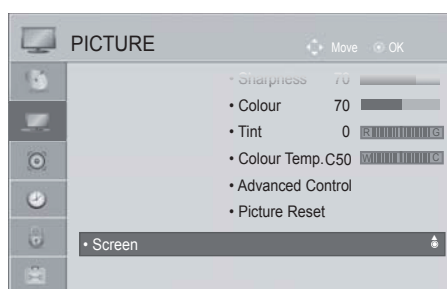
EXTERNAL EQUIPMENT SETUP

Auto Configure (RGB [PC] mode only)

Automatically adjusts the picture position and minimizes image instability. After adjustment, if the image is still not correct, your TV is functioning properly but needs further adjustment.

Auto configure

This function is for automatic adjustment of the screen position, size, and phase. The displayed image will be unstable for a few seconds while the auto configuration is in progress.



1. Select **PICTURE**.
2. Select **Screen**.
3. Select **Auto Config..**
4. Select **Yes**.
5. Run **Auto Config..**

- If the position of the image is still not correct, try Auto adjustment again.
- If picture needs to be adjusted again after Auto adjustment in RGB (PC), you can adjust the **Position**, **Size** or **Phase**.

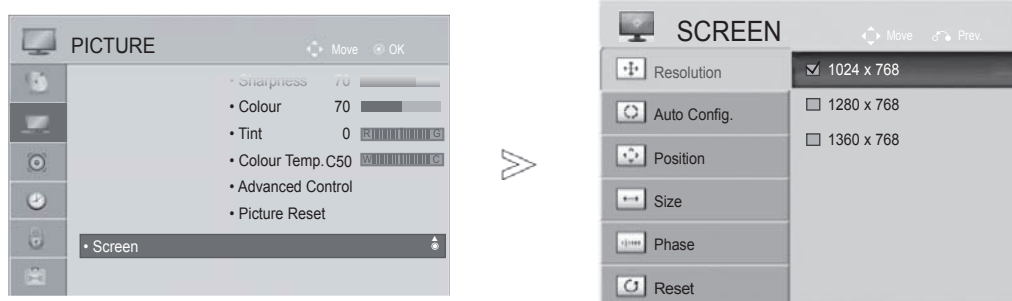
- Press the **MENU/EXIT** button to return to normal TV viewing.
- Press the **BACK** button to move to the previous menu screen.

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]



1.   Select **PICTURE**.
2.   Select **Screen**.
3.   Select **Resolution**.
4.   Select the desired resolution.
5. 

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

EXTERNAL EQUIPMENT SETUP

Adjustment for screen Position, Size, Phase

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

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



- 1   Select **PICTURE**.
- 2   Select **Screen**.
- 3   Select **Position**, **Size** or **Phase**.
- 4    Make appropriate adjustments.
- 5 

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

WATCHING TV / PROGRAMME CONTROL

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  / **I**, **INPUT** or **P** ^ v button on the TV or press the **POWER**, **INPUT**, **P** ^ v or **NUMBER** button on the remote control and the TV will switch on.

INITIALIZING SETUP

- 1 If the OSD (On Screen Display) is displayed on the screen after turning on the TV, you can adjust the **City**, **Mode Setting**, **Auto Tuning**.

Note:
 - a. If you close without completing the initial setting, the Initial Setting menu can be displayed again.
 - b. Press the **BACK** button to change the current OSD to the previous OSD.
 - c. For those countries without confirmed DTV broadcasting standards, some DTV features might not work, depending on the DTV broadcasting environment.
 - d. "Home Use" mode is the optimal setting for home environments, and is the TV's default mode.
 - e. "Store Demo" mode is the optimal setting for store environments. If a user modifies image quality data, "Store Demo" mode initializes the product to the image quality set by us after a certain period of time.
 - f. The mode (Home Use, Store Demo) can be changed by executing Mode Setting in the **OPTION** menu.

PROGRAMME SELECTION

- 1 Press the **P** ^ v or **NUMBER** buttons to select a programme number.

VOLUME ADJUSTMENT

- 1 Press the  + or - button to adjust the volume.
- 2 If you wish to switch the sound off, press the **MUTE** button.

You can cancel this function by pressing the **MUTE**,  + , - or **AV Mode** button.

WATCHING TV / PROGRAMME CONTROL

QUICK MENU

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

Q.Menu (Quick Menu) is a menu of features which users might use frequently.

 **Aspect Ratio**: Select your desired picture format.

For Zoom Setting, select 16:9, Just Scan, Original, Full Wide, 4:3, 14:9, Zoom and Cinema Zoom in Ratio Menu. After completing Zoom Setting, the display goes back to Q.Menu.

 **Clear Voice II** : By differentiating the human sound range from others, it helps users listen to human voices better.

 **Picture Mode** : Select your desired Picture Mode.

 **Sound Mode** : It is a feature to automatically set the sound combination which it deems the best for the images being watched. Selects your desired Sound Mode.

 **Audio** : Select the sound output.

 **Sleep Timer** : Set the sleep timer.

 **Skip Off/On** : Select the Skip Off/On.

 It reduces the TV's power consumption.



1   Display each menu.

2  Select your desired Source.

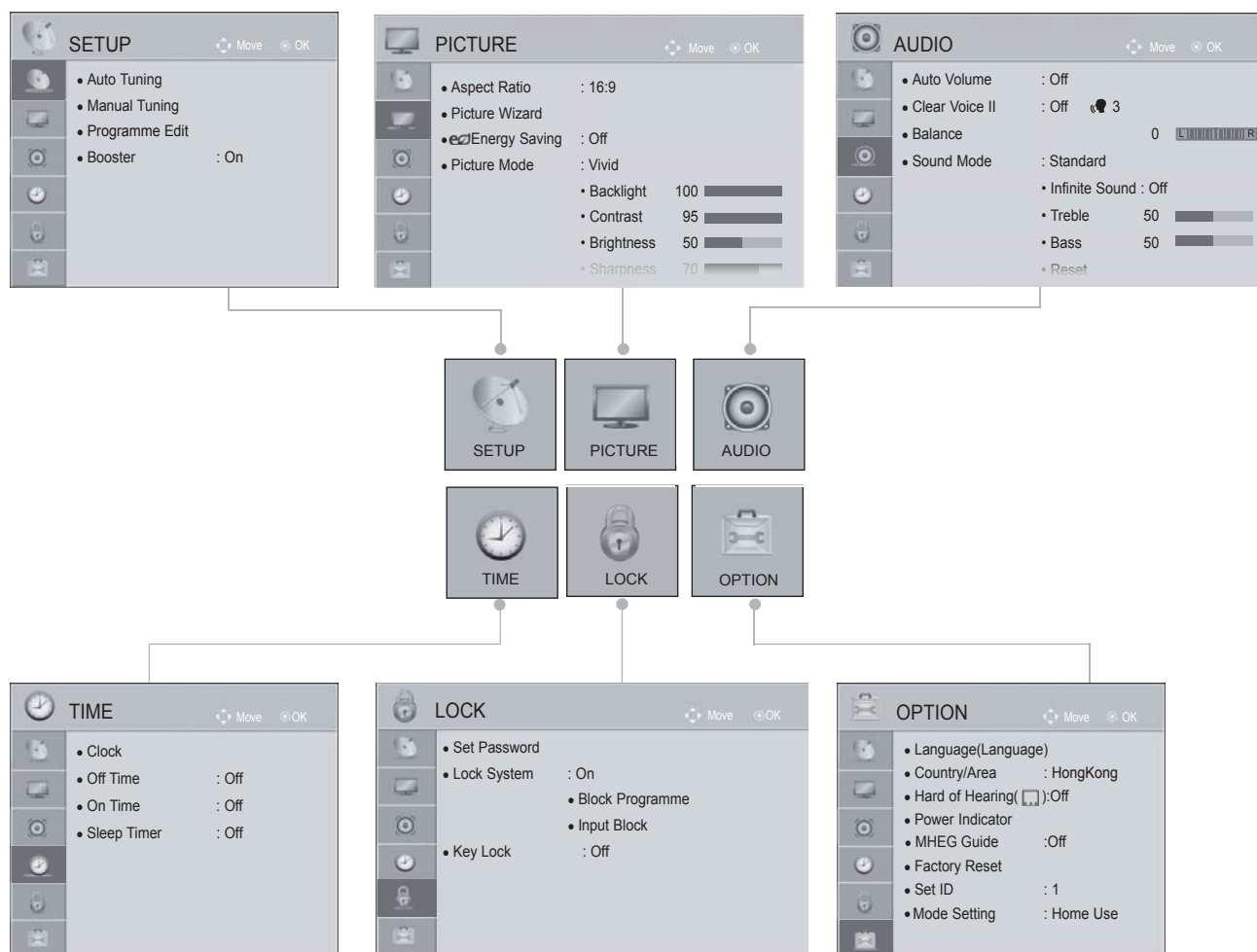
3  

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

WATCHING TV / PROGRAMME CONTROL

ON SCREEN MENUS SELECTION AND ADJUSTMENT

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



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

- Press the **RED** button, you can check the **Customer Support** menu.
- Press the **GREEN** button, you can check the **Simple Manual** menu.
- Press the **MENU/EXIT** button to return to normal TV viewing.
- Press the **BACK** button to move to the previous menu screen.

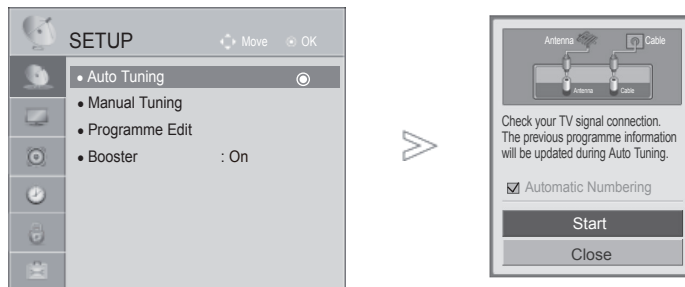
WATCHING TV / PROGRAMME CONTROL

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.

The maximum number of programmes that can be stored is 500. But the number may be different which depends on broadcasting signals.



- 1   Select **SETUP**.
- 2   Select **Auto Tuning**.
- 3   Select **Start**.
- 4  Run **Auto tuning**.

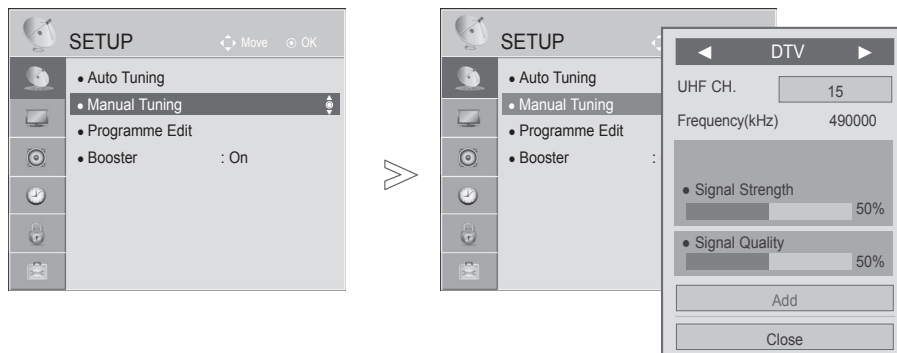
- Use **NUMBER** buttons to input a 4-digit password in **Lock System 'On'**.
- If you wish to keep on auto tuning select **Start** using the **^** **∨** button. Then, press the **OK** button. Otherwise select **Close**.
- **Automatic Numbering** : Scramble Channel is skipped in **Auto Tuning** and **Manual Tuning**.

- Press the **MENU/EXIT** button to return to normal TV viewing.
- Press the **BACK** 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.



- 1   Select **SETUP**.
- 2   Select **Manual Tuning**.
- 3   Select **DTV**.
- 4   Select the desired channel number.
- 5   Select update or add if signal present.

• Use **NUMBER** buttons to input a 4-digit password in **Lock System 'On'**.

When manually tuning, you use the figures that are set up at Auto Tuning for each of necessary item.
When the change is needed, please first perform Auto Tuning.

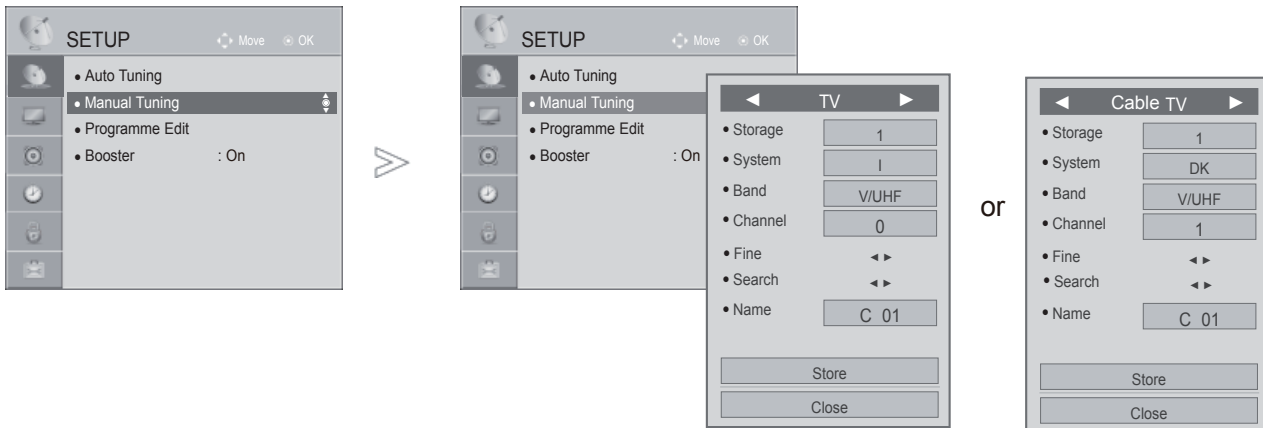
- Press the **MENU/EXIT** button to return to normal TV viewing.
- Press the **BACK** button to move to the previous menu screen.

WATCHING TV / PROGRAMME CONTROL

MANUAL PROGRAMME TUNING

(IN ANALOGUE MODE)

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

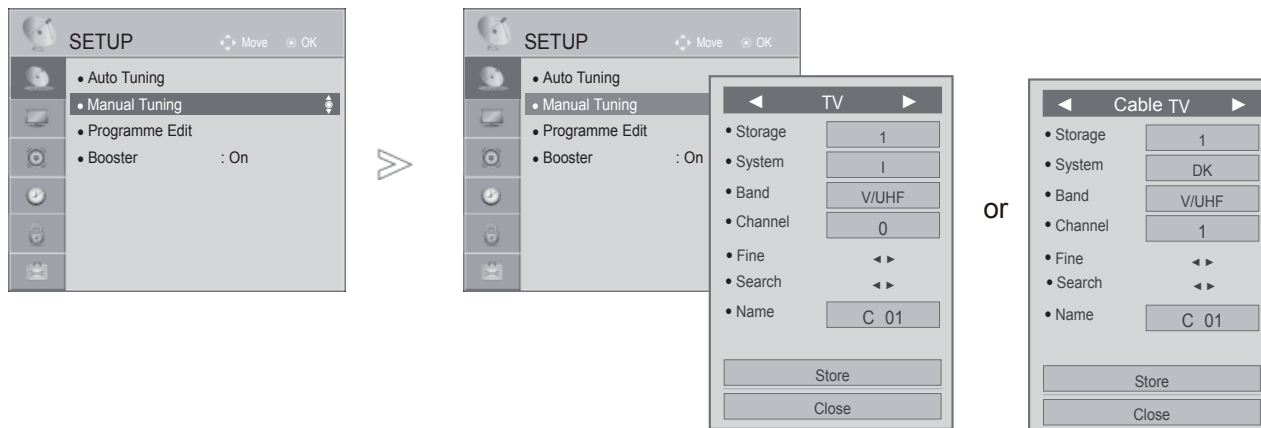


1. Select **SETUP**.
2. Select **Manual Tuning**.
3. Select **TV** or **Cable TV**.
4. or Select the desired programme number on.
5. Select a TV system.
6. Select **V/UHF** or **Cable**.
7. or Select the desired channel number.
8. Commence searching.
9. Select **Store**.

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

- Use **NUMBER** buttons to input a 4-digit password in **Lock System 'On'**.
- **I** : PAL I/II (U.K. / Ireland / Hong Kong / South Africa)
- **DK** : PAL D/K (East Europe / China / Africa / CIS)
- **NTSC M** : USA / Korea / Philippines
- To store another channel, repeat steps 4 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 **SETUP**.
- 2 Select **Manual Tuning**.
- 3 Select **TV** or **Cable TV**.
- 4 Select **Name**.

- Select the position and make your choice of the second character, and so on. You can use an the alphabet **A** to **Z**, the number **0** to **9**, +/ -, and blank.
- 5 Select the position and make your choice of the second character, and so on.
 - 6 Select **Close**.
 - 7 Select **Store**.

WATCHING TV / PROGRAMME CONTROL

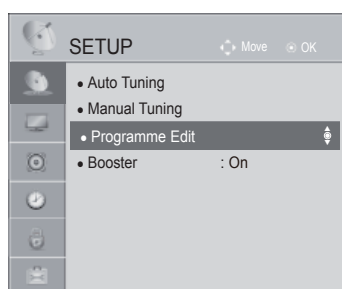
PROGRAMME EDIT

When a programme number is skipped, it means that you will be unable to select it using P $\vee$ $\wedge$ 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.

You can change the programme number using “Move” function, if “Automatic Numbering” is unchecked when you start Auto Tuning.



Select **SETUP**.



Select **Programme Edit**.



Enter the **Programme Edit**.



Select a programme to be stored or skipped.

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

WATCHING TV / PROGRAMME CONTROL

IN DTV/RADIO MODE

■ Skipping a programme number

- 1  Select a programme number to be skipped.
- 2  Turn the programme number to blue.
- 3  Release.

- When programmes are to be skipped, the skipped programme shows in blue and these programmes will not be selected by the **P**   buttons during 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.

■ Locking a programme number

- 1  Select a programme number to be locked.
- 2  Turn the programme number to yellow.
- 3  Release.

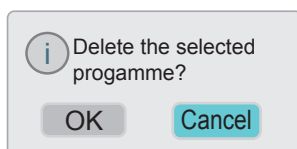
- It can be registered as Lock programme even when Lock System is turned Off.

IN TV/Cable TV MODE

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

■ Deleting a programme

- 1  Select a programme number to be deleted.
- 2  Appear



- 3  Delete.  Release.

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

■ Moving a programme

- 1  Select a programme number to be moved.
- 2   Turn the programme number to green.
- 3  Release.

WATCHING TV / PROGRAMME CONTROL

■ Selecting favourite programme

Favourite programmes are a convenient feature that lets you quickly scan up to programmes of your choice without having to wait for the TV to scan through all the in-between programmes.

- 1  Select your desired programme.
- 2  Add corresponding programme to Favourite list of current Favourite group.
- 3  Release.

■ Selecting favourite programme group

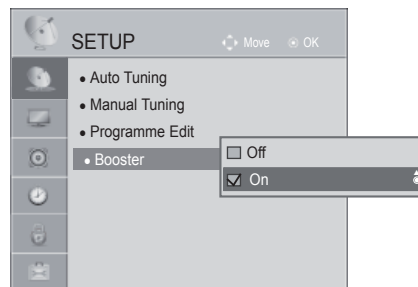
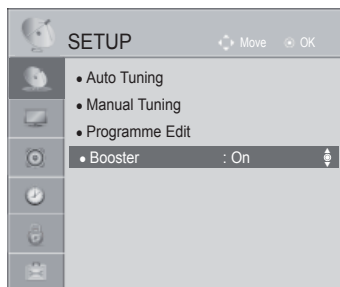
- 1  Select your desired programme.
- 2  Display a pop-up window where Favourite group can be changed.
- 3   Select a Favourite group.

WATCHING TV / PROGRAMME CONTROL

BOOSTER(IN AIR DIGITAL MODE)

If reception is poor select Booster to On.

When the signal is strong, select "Off".



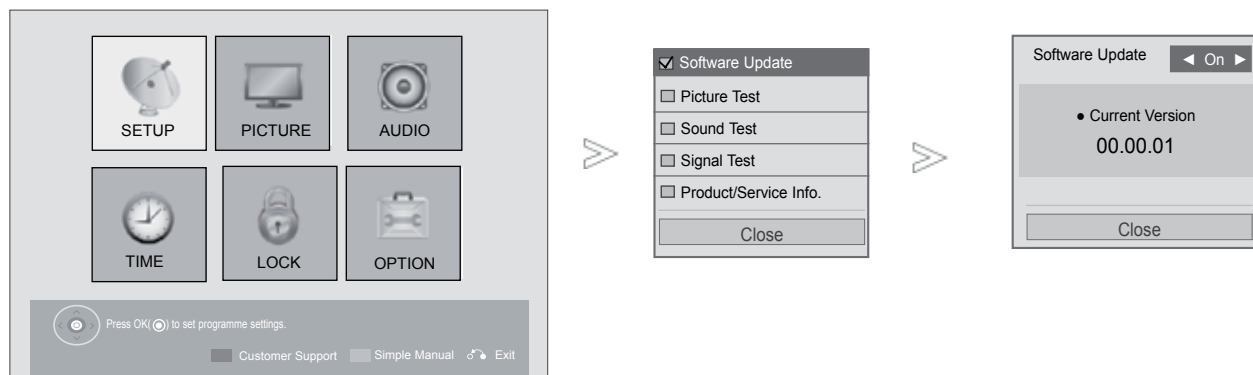
- 1   Select **SETUP**.
- 2   Select **Booster**.
- 3   Select **On** or **Off**.
- 4  Save.

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

WATCHING TV / PROGRAMME CONTROL

SOFTWARE UPDATE

Software Update means software can be downloaded through the digital terrestrial broadcasting system. But the actual situation is depending on the broadcasting signals of different area or different broadcasting service.



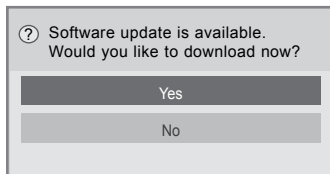
1. **RED** Select **Customer Support**.
2. Select **Software Update**.
3. Select **On** or **Off**.
 - If you select **On**, a user confirm message box will be displayed to notify that new software is found.
4. Save.

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

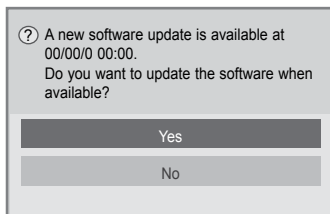
WATCHING TV / PROGRAMME CONTROL

■ When setting "Software Update"

Occasionally, a transmission of updated digital software information will result in the following menu on the TV screen.



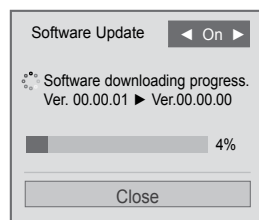
Simple Update : for current update stream



Schedule Update : for scheduled update stream
When the Software Update menu is "Off", the message to change it to "On" appears.

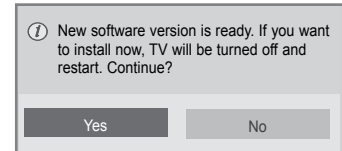
Download starts when "Yes" is selected. At this time, progressing pop-up window does not display.

Download progress status can be checked from Software Update menu.



A window as display below appears when download completes.

TV is restarted when "Yes" is selected.

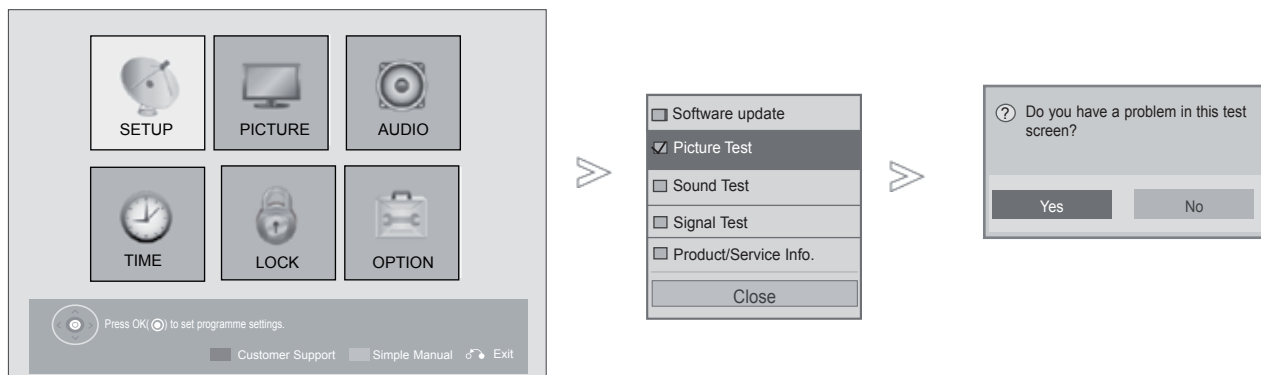


- During Progress of a Software Update, please note the following:
- Power to the TV must not be interrupted.
- The antenna must not be disconnected.
- After Software Update, you can confirm the updated software version in Software Update menu.
- It may take hours to download the software, so make sure that the power stays on during the download.
- The software is downloaded only in Standby mode or in MUX with Software Update Service, and stops when the power cord is unplugged or when viewing MUX without Software Update Service.
- When you return to Standby mode or MUX with Software Update Service, the software download will resume from where it stopped.

WATCHING TV / PROGRAMME CONTROL

PICTURE/SOUND TEST

This function is a customer support function that can execute picture and sound tests.



-  **RED** Select **Customer Support**.
-  Select **Picture Test** or **Sound Test**.
-   Select **Yes** or **No**.

WATCHING TV / PROGRAMME CONTROL

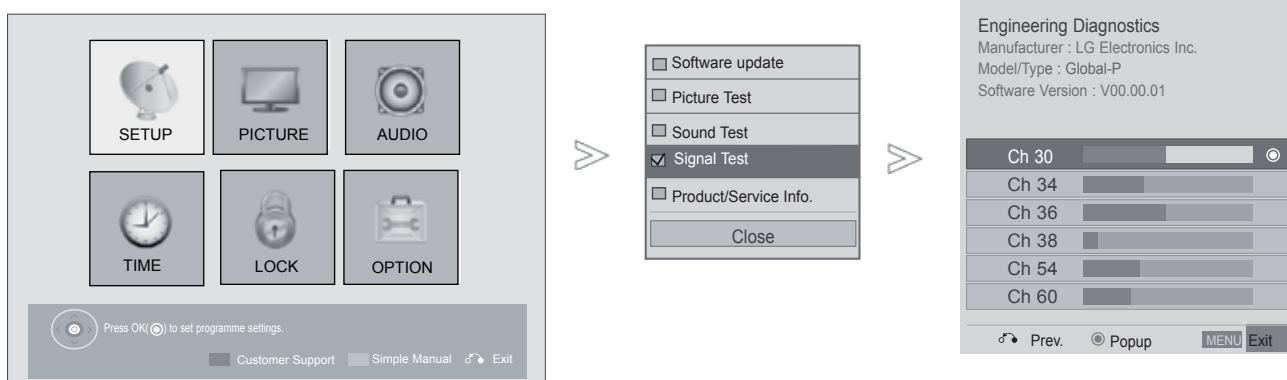
SIGNAL TEST

This function enables you to view information on the Manufacturer, Model/Type, and Software Version.

This displays the information and signal strength of the tuned *MUX.

This displays the signal information and service name of the selected MUX.

(*MUX: A higher directory of channels in digital broadcasting (a single MUX contains multiple channels.))



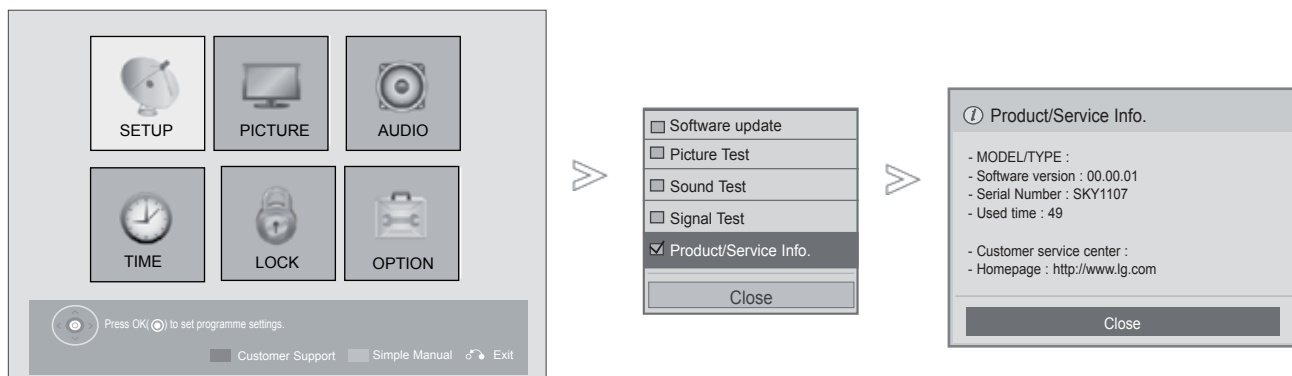
1. **RED** Select **Customer Support**.
2. Select **Signal Test**.
3. Display Manufacturer, Model/Type and Software Version.
4. Display the information of Channel.

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

WATCHING TV / PROGRAMME CONTROL

PRODUCT/SERVICE INFORMATION

This function is a customer support function that can see product/service information and customer service center information.

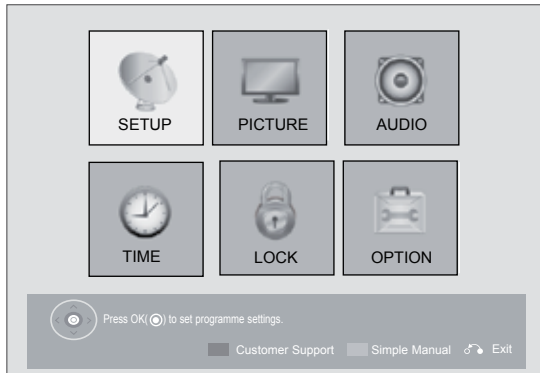


1.  **RED** Select **Customer Support**.
2.  Select **Product/Service Info..**
3.  Display MODEL/TYPE, Software version, Serial Number, Used time, Customer service center and Homepage.

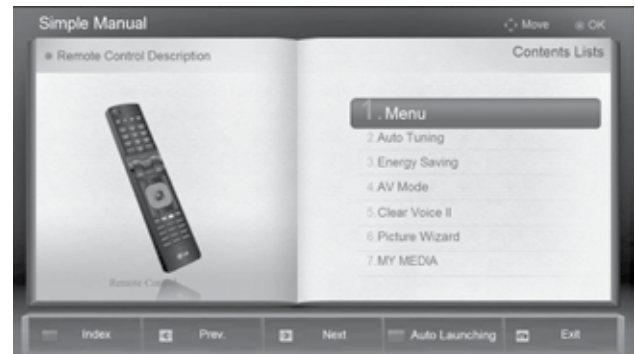
WATCHING TV / PROGRAMME CONTROL

SIMPLE MANUAL

You can easily and effectively access the TV information by viewing a simple manual on the TV. During the Simple Manual operation, audio will be muted.



■ Image shown may differ from your TV.



GREEN Select **Simple Manual**.



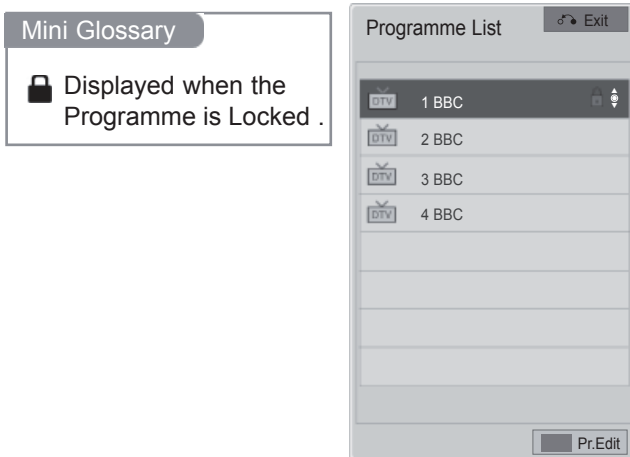
Select the part of the manual you want to see.

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

WATCHING TV / PROGRAMME CONTROL

SELECTING THE PROGRAMME LIST

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



■ Displaying programme LIST



Display the **Programme List**.

- You may find some blue programmes. These have been set up to be skipped in the programme edit mode.
- Some programmes with the channel number shown in the programme LIST indicate there is no station name assigned.

BLUE Turn the programme edit.

■ Selecting a programme in the programme list



Select a programme.



Switch to the chosen programme number.



The mode will be switched between DTV, RADIO, TV, Cable TV, from the program you are currently watching.

WATCHING TV / PROGRAMME CONTROL

■ Paging through a programme list



Turn the pages.



Return to normal TV viewing.

■ Displaying the favourite programme list



Display the Favourite Programme List.

BLUE

Turn the programme edit.

YELLOW

Current channel is registered/
cancelled as preferred channel on
currently selected Group.

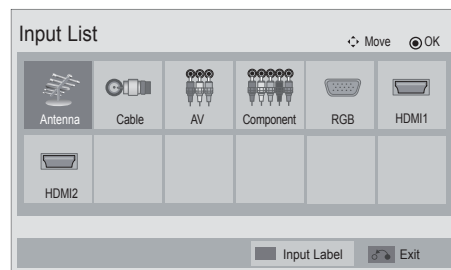


Favourite group is changed.

WATCHING TV / PROGRAMME CONTROL

INPUT LIST

By using **TV/RAD** button, you can move from External Input to RF Input and to the last watched programme in DTV/RADIO/TV mode.



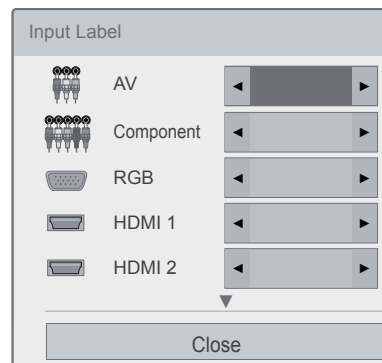
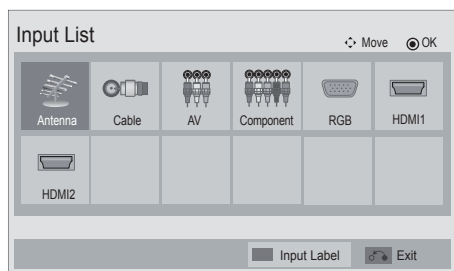
Select the input source.

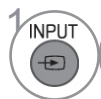
- **Antenna** : Select it when watching the DTV/TV.
- **Cable** : Select it when watching the Cable TV.
- **AV** : Select it when watching the VCR or external equipment.
- **Component** : Select it when using the DVD or the Digital set-top box depends on connector.
- **RGB** : Select it when using PC depends on connector.
- **HDMI** : Select it when using DVD, PC or Digital set-top box depends on connector.

WATCHING TV / PROGRAMME CONTROL

INPUT LABEL

Select a label for each input source.



- 1  **BLUE** Select **Input Label**.
- 2  Select the source.
- 3  Select the label.

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

WATCHING TV / PROGRAMME CONTROL

SIMPLINK

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

This TV might not function properly when using it with other products with HDMI-CEC function.
This allows you to control and play other AV devices connected to the display through HDMI cable without additional cables and settings.

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



- 1  Display the **SIMPLINK**.
- 2  Select **On** or **Off**.
- 3  Save.

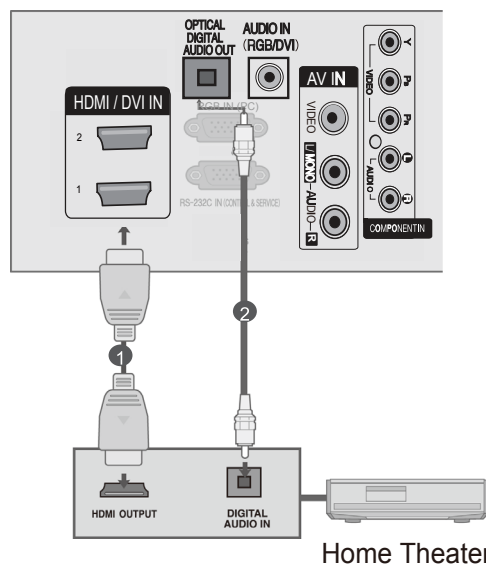
- Press the **EXIT** button to return to normal TV viewing.
- Press the **BACK** button to move to the previous menu screen.

WATCHING TV / PROGRAMME CONTROL

Connecting to Home Theater with the SIMPLINK logo.

- 1 Connect the **HDMI/DVI IN 1** or **HDMI IN 2** terminal on the back of the TV and the HDMI output terminal of the Home Theater using HDMI cables.
- 2 Connect the Digital Audio output terminal on the back of the TV and the Digital Audio input terminal of the Home Theater using optical cables.
- 3 Select Home Theater in the Speaker menu by pushing the **SIMPLINK** button.

- ▶ When you select or operate a media device with home theater function, the speaker automatically switches to home theater speaker (HT speaker).



! NOTE

- ▶ Connect the HDMI/DVI IN or HDMI IN terminal of the TV to the terminal (HDMI terminal) of the SIMPLINK device with the HDMI cable.
- ▶ 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.

WATCHING TV / PROGRAMME CONTROL

SIMPLINK Functions

Disc playback

Control connected AV devices by pressing the $\wedge \vee < >$, OK, $\blacktriangleright$, $\blacksquare$, II, $\blacktriangleleft \blacktriangleleft$ and $\blacktriangleright \blacktriangleright$ buttons.

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 the equipment with Simplink function connected HDMI terminal starts to play, the TV will change automatically to turn on mode.

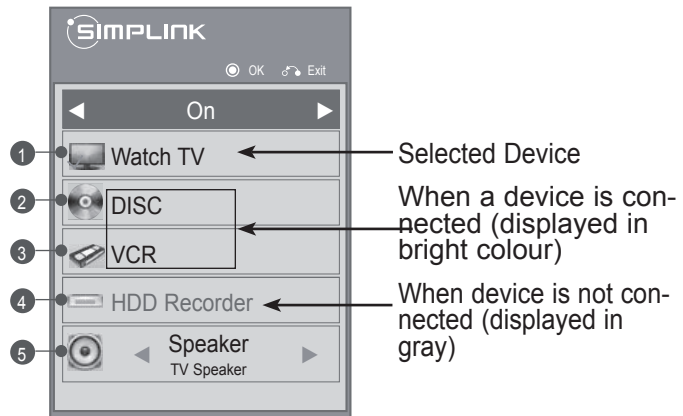
* A device, which is connected to the TV through an HDMI cable but does not support SIMPLINK, does not provide this function.

Note: To operate SIMPLINK, an HDMI cable over Version 1.3 with *CEC function should be used. (*CEC: Consumer Electronics Control).

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.

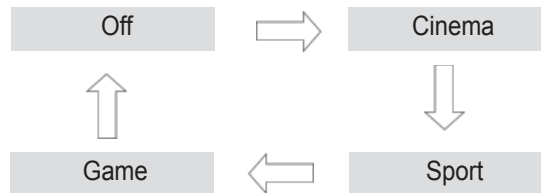


WATCHING TV / PROGRAMME CONTROL

AV MODE

You can select the optimal images and sounds.

Off	Disables the AV MODE.
Cinema	Optimizes video and audio for watching movies.
Sport	Optimizes video and audio for watching sports events.
Game	Optimizes video and audio for playing games.



Press the **AV MODE** button repeatedly to select the desired source.



- If you select **Cinema** in AV mode, **Cinema** 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.

WATCHING TV / PROGRAMME CONTROL

INITIALIZING(RESET TO ORIGINAL FACTORY SETTINGS)

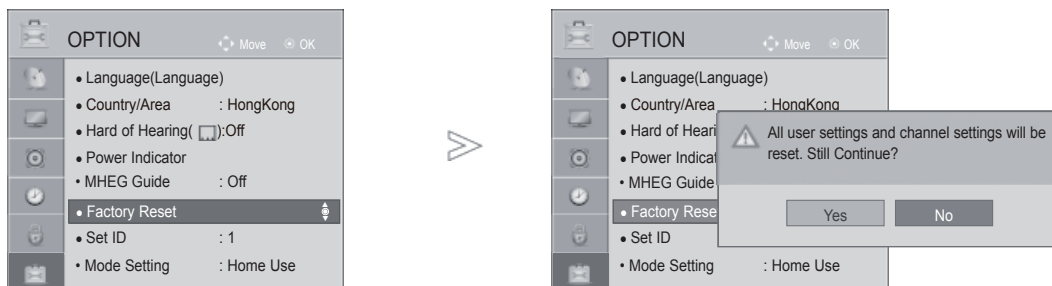
This function initializes all settings.

But the settings of **Day** and **Night** of the **Picture Mode** cannot be initialized.

It is useful to initialize the product or when you move to other city or country.

When the Factory Reset is completed, you must restart the Initializing setup.

When the **Lock System** menu is "On", the message to enter the password appears.



- 1   Select **OPTION**.
- 2   Select **Factory Reset**.
- 3   Select **Yes**.
- 4  Start Factory Reset.

• In **Lock System "On"**, if you forget your password, press '0', '3', '2', '5' on the remote control handset.

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

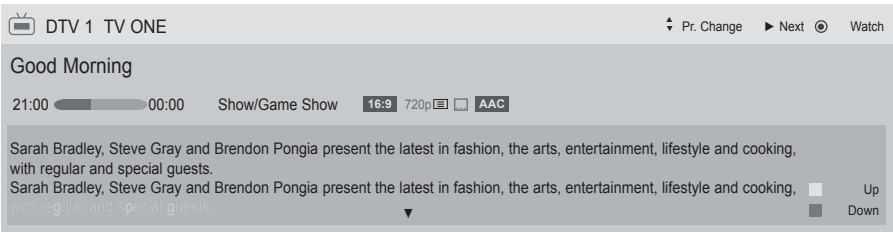
EPG(ELECTRONIC PROGRAMME GUIDE) (IN DIGITAL SIGNAL)

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 broadcast by broadcasting companies

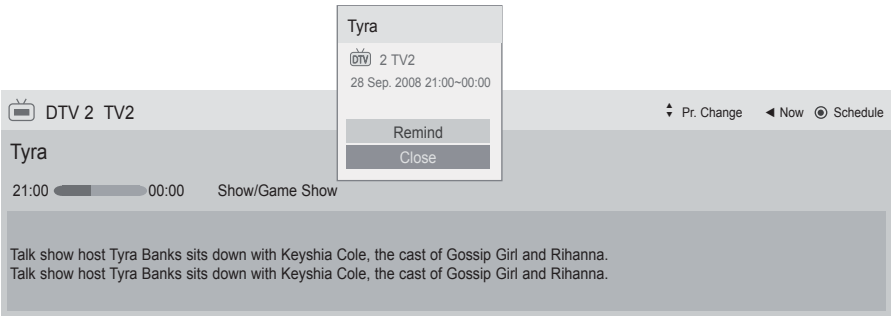
The EPG displays the programme details for the next 8 days.



Show current programme information

	Displayed with a TV or DTV Programme.		Displayed with a Teletext Programme.	
	Displayed with a Radio Programme.		Displayed with a Subtitle Programme.	
	Displayed with a MHEG Programme.		Displayed with a Scramble Programme.	
	Displayed with a HE-AAC Programme.		Displayed with a Dolby Digital Programme.	
	Aspect ratio of broadcasting programme.		Displayed with a Dolby Digital PLUS Programme.	
	Aspect ratio of broadcasting programme.	576i/p, 720p, 1080i/p : Resolution of broadcasting programme		
	Broadcasted programme with the icon may not be displayed in Monitor Out depending on the information of the programme.			

Show next programme information.



A pop-up window for remind settings appears.

Select Timer Remind setting mode.

EPG (ELECTRONIC PROGRAMME GUIDE)

Switch on/off EPG

1

 Switch on or off EPG.

Select a programme

1

 or  Select desired programme.

2

 The EPG will disappear after moving to a selected program.

Button Function in NOW/NEXT Guide Mode

You can view a program being broadcasted and one scheduled to follow.

 Change EPG mode.

 Enter Manual Timer mode.

 Enter Schedule List mode.

 When 'Now' is selected, it is moved to selected program and EPG disappears
When 'Next' is selected, a reservation pop-up window appears.

 Select NOW or NEXT Programme.

 Select the Broadcast Programme.

 Page Up/Down.

Programme Guide

That '70s show

Nov. 25, 2008 10:05

1 YLE TV1 25 Nov. 2008 09:45~10:15

ALL	NOW	NEXT
DTV 1 YLE TV1	That '70s show	Keno
DTV 2 YLE TV2	Your World Today	World Business
DTV 4 TV..	Legenen om Den....	Fantomen
DTV 5 YLE FST	Naturtimmen	Kritiskt
DTV 6 CNN	Lyssna	ABC
DTV 8 YLE24	Glamour	Tänään otsikoissa

FAV

Favourite

INFO

Information

Watch/Schedule

TV/RAD

RADIO

Mode

Manual Timer

Schedule List

 or  or  Switch off EPG.

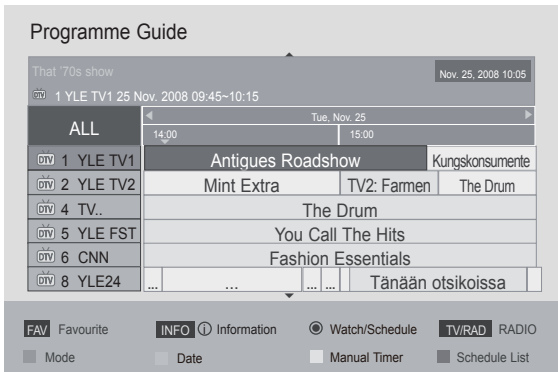
 Select TV or RADIO Programme.

 Detail information on or off

EPG (ELECTRONIC PROGRAMME GUIDE)

Button Function in 8 Day Guide Mode

- RED** Change EPG mode.
- GREEN** Enter Date setting mode.
- YELLOW** Enter Manual Timer mode.
- BLUE** Enter Schedule List mode.
- When 'Now' is selected, it move to selected program and EPG disappears
- When 'Next' is selected, a reservation pop-up window appears.
- Select a Programme.
- Select the Broadcast Programme.



- Page Up/Down.
- GUIDE or BACK or EXIT Switch off EPG.
- TV/RAD Select TV or RADIO Programme.
- INFO Detail information on or off

EPG (ELECTRONIC PROGRAMME GUIDE)(IN DIGITAL MODE)

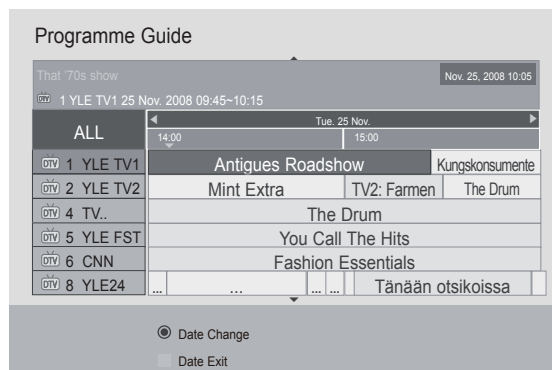
 GREEN Switch off Date setting mode.

 OK Change to the selected date.

 < > Select a date.

 ▼ Switch off Date setting mode.

 GUIDE or **BACK** or **EXIT** Switch off EPG.



 Text Up/Down.

 Select Timer Remind setting mode.

 or The detail information on or off.

 or Switch off EPG.



EPG (ELECTRONIC PROGRAMME GUIDE)

Button Function in Remind Setting Mode

Sets only a start time for the reminder with the end time grayed out.



Switch off Manual Timer mode.



Select Start Time, End time or Programme.



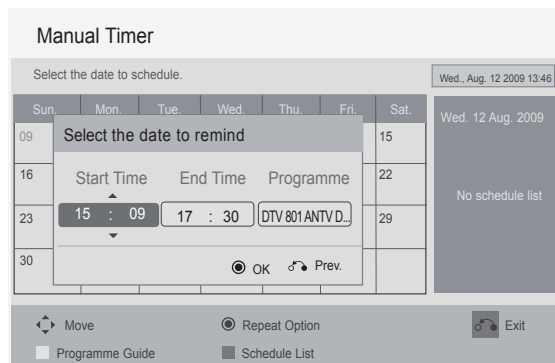
Change to Guide mode.



Change to Schedule List mode.



Save Timer Remind.



Button Function in Schedule List Mode

If you've created a schedule list, a scheduled program is displayed at the scheduled time even when you are watching a different program at the time.

Only the Up/Down/OK/Back keys will work when a popup window is open.



Change to Manual Timer mode.



or



Change to Guide mode.



Switch off **Schedule List**.



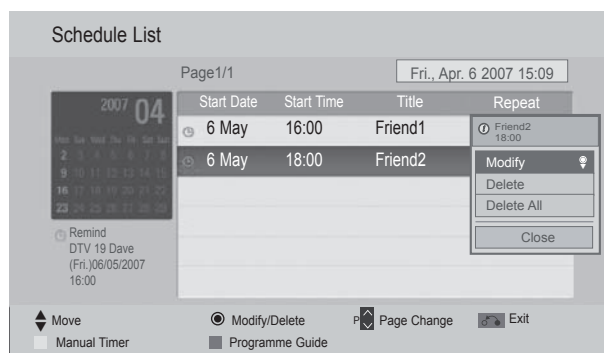
Select your desired Option (Modify/Delete/Delete All).



Select **Schedule List**.



Page Up/Down.



PICTURE CONTROL

PICTURE SIZE (ASPECT RATIO) CONTROL

You can watch the screen in various picture formats; 16:9, Just Scan, Original, Full Wide, 4:3, 14:9, Zoom and Cinema Zoom.

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** menu.
- For Zoom Setting, select **14:9**, **Zoom** and **Cinema Zoom** in Ratio Menu. After completing Zoom Setting, the display goes back to Q.Menu.

• 16:9

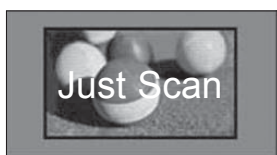
The following selection will allow you to adjust the picture horizontally, in linear proportion, to fill the entire screen(useful for viewing 4:3 formatted DVDs).



• Just Scan

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

Note : If there is noise in original Picture, You can see the noise at the edge.



• Original

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



• Full Wide

When TV receives the wide screen signal,it will lead you to adjust the picture horizontally or vertically, in a linear proportion,to fill the entire screen fully.



PICTURE CONTROL

• 4:3

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



• 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 moved to the up and down.



• Zoom

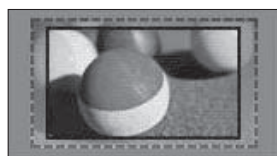
The following selection will allow you to view the picture without any alteration, while filling the entire screen. However, the top and bottom of the picture will be cropped.



• Cinema Zoom

Choose Cinema Zoom when you want to enlarge the picture in correct proportion.

Note: When enlarging or reducing the picture, the image may become distorted.



◀ or ▶ button: Adjust enlarge proportion of Cinema Zoom. The adjustment range is 1~16.

▼ or ▲ button: Move the screen.

! NOTE

- ▶ You can only select **4:3**, **16:9** (Wide), **14:9**, **Zoom/Cinema Zoom1** in Component mode.
- ▶ You can only select **4:3**, Original, **16:9** (Wide), **14:9**, **Zoom/Cinema Zoom1** in HDMI mode.
- ▶ In DTV/HDMI/Component (over 720p) mode, **Just Scan** is available.
- ▶ You can only select **4:3**, **16:9** (Wide) in RGB-PC, HDMI-PC mode only.

PICTURE CONTROL

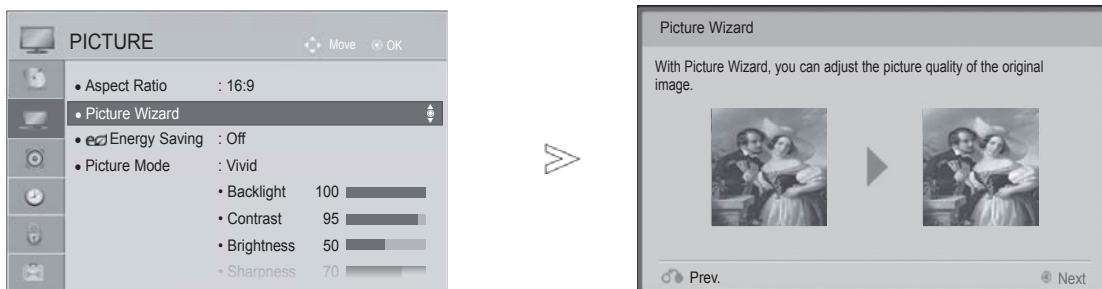
PICTURE WIZARD

This feature lets you adjust the picture quality of the original image.

Use this to calibrate the screen quality by adjusting the Black and White Level etc. General users can calibrate the screen quality by easily following each stage.

When you adjust the image to Low, Recommended or High, you can see the changed result as an example.

In RGB-PC/HDMI-PC/DVI-PC mode, the changed Colour, Tint and H/V Sharpness values are not applied.



1. Select **PICTURE**.
2. Select **Picture Wizard**.
3. Adjust **Brightness, Contrast, Tint, Colour, Horizontal Sharpness, Vertical Sharpness, Backlight**.
4. Select input source to apply the settings.
- 5.

- If you stop the setting before the final stage, the changes will not be applied
- The adjustment value is saved to Expert1.
- Once the Picture Wizard sets the image quality, the Energy Saving is changed into Off.

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

PICTURE CONTROL

ENERGY SAVING

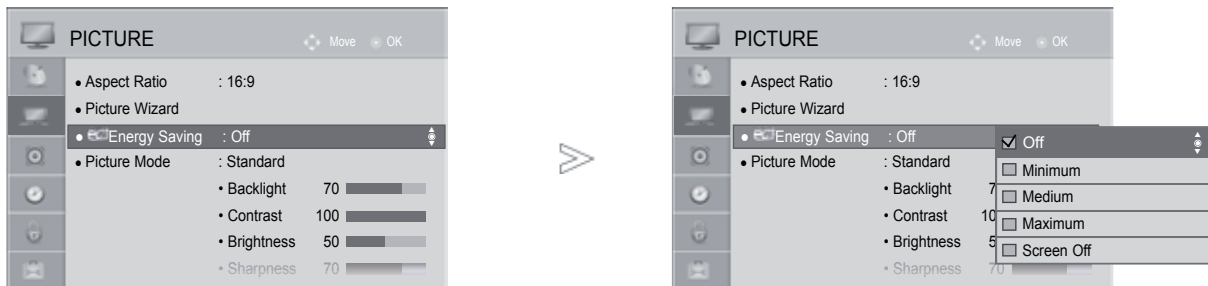
It reduces the TV's power consumption.

The default factory setting complies with the **Energy Star** requirements and is adjusted to the comfortable level to be viewed at home.

You can increase the brightness of your screen by adjusting the **Energy Saving level** or by setting the **Picture Mode**.

When adjusting Energy Saving in MHEG mode, the Energy Saving setting is applied after MHEG is finished.

Selecting '**Screen Off**' while tuned to a radio station channel will reduce power consumption.



- 1   Select **PICTURE**.
- 2   Select  **Energy Saving**.
- 3   Select **Off, Minimum, Medium, Maximum or Screen Off**.

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

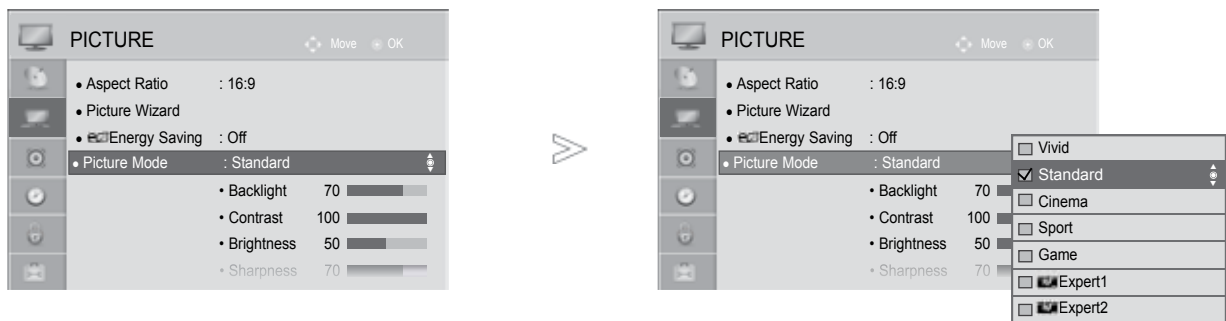
- When you select Screen Off, the screen will be turned off in 3 seconds and Screen Off will start. If you do not press any button for 2 hours, the power of the TV will automatically be turned off.
- If you adjust "**Energy Saving-Minimum, Medium, Maximum**", **Backlight** feature will not work.
- You can also adjust this feature by selecting **Energy Saving** button on the remote control.

PICTURE CONTROL

PRESET PICTURE SETTINGS

Picture Mode-Preset

- Vivid** Strengthen the contrast, brightness, colour and sharpness for vivid picture.
- Standard** The most general screen display status.
- Cinema** Optimizes video for watching movies.
- Sport** Optimizes video for watching sports events.
- Game** Optimizes video for playing games.



- 1   Select **PICTURE**.
- 2   Select **Picture Mode**.
- 3   Select **Vivid, Standard, Cinema, Sport or Game**.

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

- **Picture Mode** adjusts the TV for the best picture appearance. Select the preset value in the **Picture Mode** menu based on the programme category.
- You can also adjust **Picture Mode** in the **Q. Menu**.

PICTURE CONTROL

MANUAL PICTURE ADJUSTMENT

Picture Mode-User option

Backlight

To control the brightness of the screen, adjust the brightness of LCD panel.
Adjusting the backlight when setting the brightness of the set is recommended.

Contrast

Adjusts the signal level between black and white in the picture. You may use Contrast when the bright part of the picture is saturated.

Brightness

Adjusts the base level of the signal in the picture.

Sharpness

Adjusts the level of crispness in the edges between the light and dark areas of the picture.
The lower the level, the softer the image.

Colour

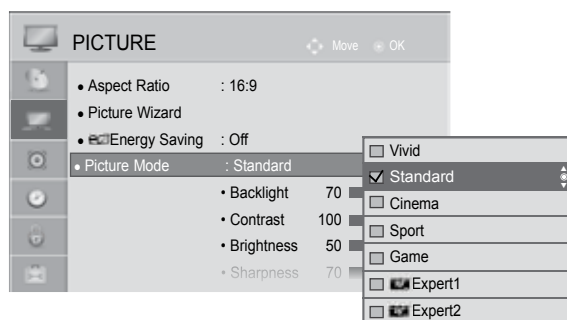
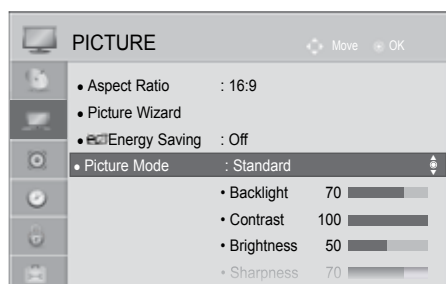
Adjusts intensity of all colours.

Tint

Adjusts the balance between red and green levels.

Colour Temp.

Adjust to left direction to make a picture reddish or adjust to right direction to make a picture bluish.



- 1 Select **PICTURE**.
- 2 Select **Picture Mode**.
- 3 Select **Vivid, Standard, Cinema, Sport or Game**.
- 4 Select **Backlight, Contrast, Brightness, Sharpness, Colour, Tint or Colour Temp.**
- 5 Make appropriate adjustments.

• Benefits of using Backlight

- The electricity consumption is reduced by up to 60 %.
- The black brightness is reduced. (As the black has greater depth, you can enjoy a better quality definition.)
- You can adjust brightness with maintaining original signal resolution.

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

! NOTE

- ▶ You cannot adjust colour, sharpness and tint in the RGB-PC/HDMI-PC mode.
- ▶ When the **Expert 1/2** is selected, you can select **Backlight, Contrast, Brightness, H Sharpness, V Sharpness, Colour or Tint**.

PICTURE CONTROL

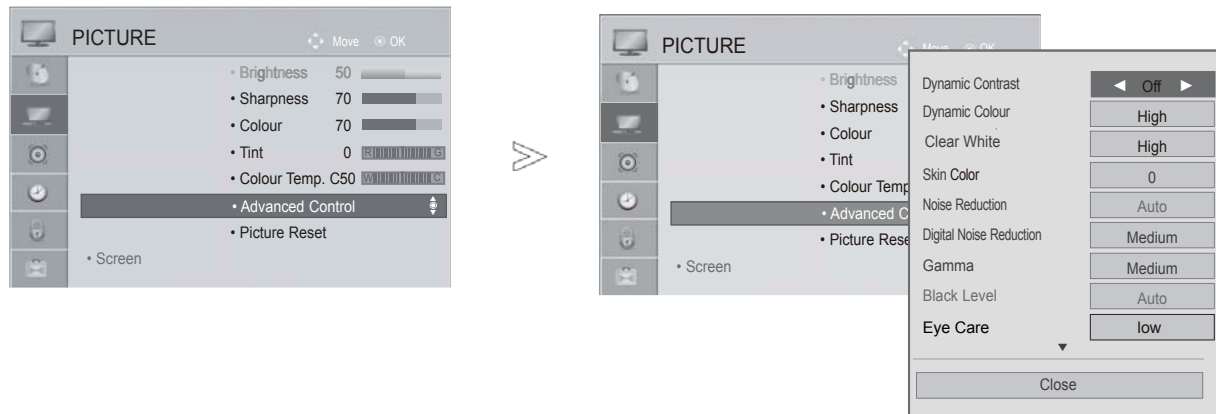
PICTURE IMPROVEMENT TECHNOLOGY

You can calibrate the screen for each Picture Mode or set the video value according to the special video screen.

You can set the video value differently for each input.

To reset to the factory default screen after making adjustments to each video mode, execute the "Picture Reset" function for each Picture Mode.

Image shown may differ from your TV.



Select **PICTURE**.



Select **Advanced Control**.



Select your desired Source.:

Dynamic Contrast, Dynamic Colour, Clear White, Skin Colour, Noise Reduction, Digital Noise Reduction, Gamma, Black Level, Eye Care, Real Cinema, Colour Gamut or xvYCC.



Make appropriate adjustments.

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

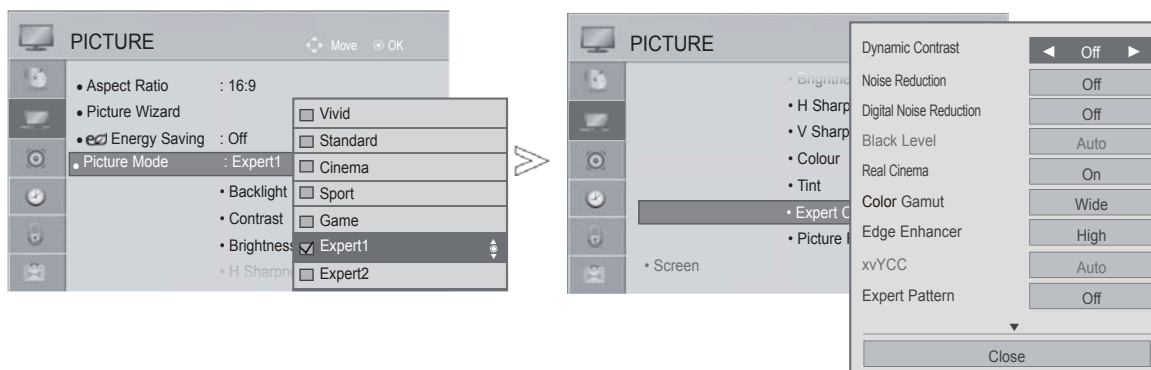
PICTURE CONTROL

EXPERT PICTURE 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.

This may also be used to help a professional optimize the TV performance using specific videos.

Image shown may differ from your TV.



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

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

PICTURE CONTROL

*This feature is not available for all models.

Dynamic Contrast (Off/Low/Medium/High)	■ Adjusts the contrast to keep it at the best level according to the brightness of the screen. The picture is improved by making bright parts brighter and dark parts darker.
Dynamic Colour (Off/Low/High)	■ Adjusts screen colours so that they look livelier, richer and clearer. This feature enhances hue, saturation and luminance so that red, blue, green and white look more vivid.
Skin Colour (-5 to 5)	■ Expresses natural skin by detecting skin area of the video.
Noise Reduction (Off/Low/Medium/High/ Auto(In Analogue Mode Only))	■ Reduces screen noise without compromising video quality.
Digital Noise Reduction (Low/Medium/High/Off)	■ Removes noise regarding MPEG compressed video.
Gamma (Advanced Control: Low/Medium/High Expert Control: 1.9/2.2/2.4)	■ You can adjust brightness of dark area and middle gray level area of the picture. • Low/1.9 : Make dark and middle gray level area of the picture brighter. • Medium/2.2 : Express original picture levels. • High/2.4: Make dark and middle gray level area of the picture darker.
Black Level (Low/High/Auto)	• Low : The picture of the screen gets darker. • High : The picture of the screen gets brighter. • Auto : Realizing the black level of the screen and set it to High or Low automatically. ■ Set black level of the screen to proper level. ■ This function enables to select 'Low' or 'High' in the following mode: AV(NTSC-M), HDMI or Component. Otherwise, 'Black level' is set to 'Auto'.
Clear White (Off/Low/High)	■ Make brighter and clear the white area of screen.
Eye Care (Low/High/Off)	*This feature is not available for all models. ■ Adjust the brightness of the screen to prevent the screen from being too bright. Dims extremely bright pictures. ■ This feature is disable in “Picture Mode-Vivid, Cinema, Expert1, Expert2”.
Real Cinema (On/Off)	■ You can watch a cinema-like video by eliminating judder effect. ■ Use this function when you watch film-originated movie contents.

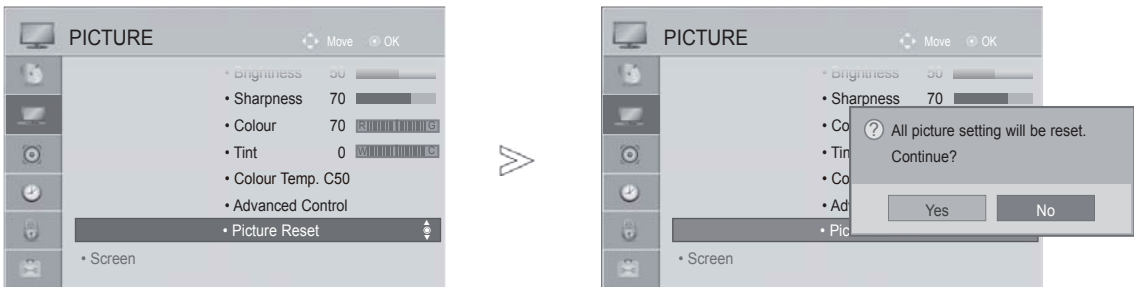
PICTURE CONTROL

Colour Gamut (Advanced Control: Wide/Standard)	• Standard : Mode to reproduce original colour according to the standard of input signal independent of the display characteristics. • Wide: Mode to use and set the rich colour area of the display. ■ Maximize the utilization for colour area that can be expressed.
Colour Gamut (Expert Control: EBU/ SMPTE/BT709/Wide)	■ Displays color domain of signal in Expert Control.
Edge Enhancer (Off/Low/High)	■ Shows clearer and distinctive yet natural corners of the video. ■ This function is enabled in "Picture Mode- Expert."
xvYCC (Auto/off/on)	*This feature is not available for all models. ■ This is the function to express richer colour. ■ This function is enabled in "Picture mode - Cinema, Expert" when xvYCC signal is inputted through HDMI
Expert Pattern (Off/Pattern1/Pattern2)	■ This is the pattern necessary for expert adjustment. ■ This function is enabled in "Picture Mode - Expert" when you watch DTV.
Colour Filter (Off/Red/Green/Blue)	■ This is the function to filter the specific colours of the video. - You can use the RGB filter to set colour saturation and hue accurately.
Colour Temperature (Medium/Warm/Cool)	This is the function to adjust the overall colour of the screen to the feeling you want. a. • Method : 2 Points • Pattern: Inner, Outer • Red/Green/Blue Contrast, Red/Green/Blue Brightness: The adjustment range is -50 ~ +50. b. • Method : 10 point IRE • Pattern: Inner / Outer • IRE (Institute of Radio Engineers) is the unit to display the size of the video signal and can be set among 10, 20, 30 - 100. You can adjust Red, Green or Blue according to each setting. • Luminance: This function displays calculated luminance value for 2.2 gamma. You can input luminance value you want at 100 IRE, than the target luminance value for 2.2 gamma is displayed at every 10 steps from 10 IRE to 90 IRE. • Red/Green/Blue: The adjustment range is -50 ~ +50.
Colour Management System	■ As the tool used by the experts to make adjustments by using the test patterns, this does not affect other colours but can be used to selectively adjust the 6 colour areas (Red/Green/Blue/Cyan/Magenta/Yellow). Colour difference may not be distinctive even when you make the adjustments for the general video. ■ Adjusts Red/Green/Blue/Yellow/Cyan/Magenta. • Red/Green/Blue/Yellow/Cyan, Magenta Colour : The adjustment range is -30 ~ +30. • Red/Green/Blue/Yellow/Cyan/Magenta Tint : The adjustment range is -30 ~ +30. ■ This feature is disable in RGB-PC and HDMI (PC) mode.

PICTURE CONTROL

PICTURE RESET

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



- 1   Select **PICTURE**.
- 2   Select **Picture Reset**.
- 3   Select **Yes** or **No**.
- 4  Initialize the adjusted value.

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

PICTURE CONTROL

POWER INDICATOR

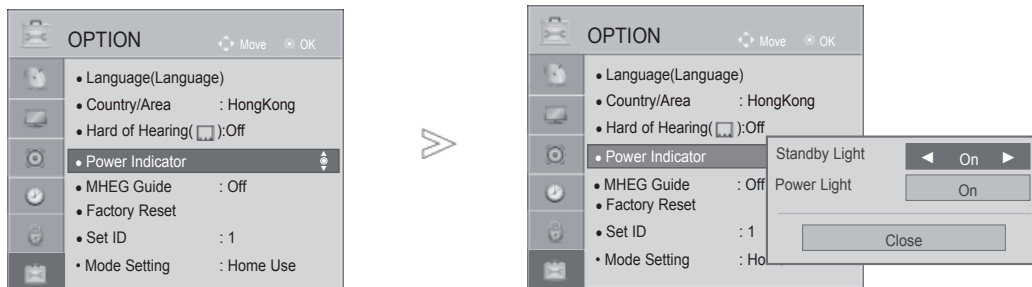
It helps you adjust the brightness of moving LED when power is turned on.

Standby Light

Determines whether to set the indicator light on the front of the TV to **On** or **Off** in standby mode.

Power Light

Determines whether to set the indicator light on the front of the TV to **On** or **Off** when the power turns on.



1.   Select **OPTION**.
2.   Select **Power Indicator**.
3.   Select **Standby Light** or **Power Light**.
4.  Select your desired Source.

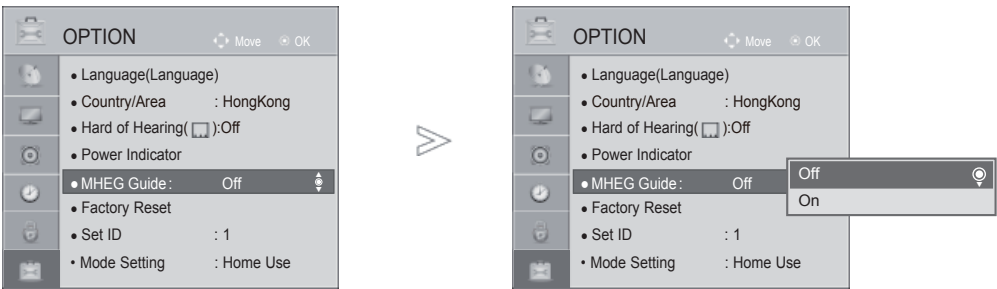
- Press the **MENU/EXIT** button to return to normal TV viewing.
- Press the **BACK** button to move to the previous menu screen.

PICTURE CONTROL

MHEG GUIDE

This menu determines whether to show the UI guide or the guide provided by MHEG when a user hits the 'GUIDE' key.

If you set the 'MHEG Guide' menu to On, the 'Digital Teletext' sent by broadcasters will be used. Note that 'Digital Teletext' is not always present.



1 Select OPTION.

2 Select MHEG Guide.

3 Select On or Off.

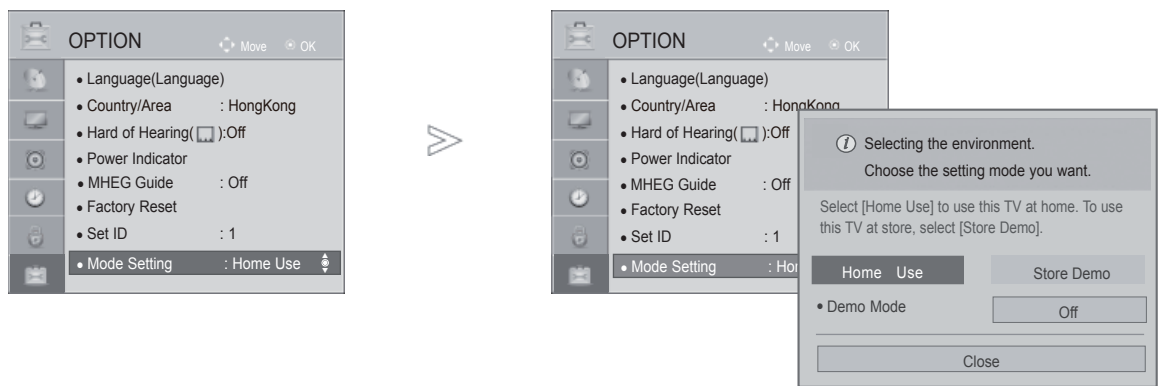
4 Save.

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

PICTURE CONTROL

MODE SETTING

We recommend setting the TV to “**Home Use**” mode for the best picture in your home environment. “**Store Demo**” mode is an optimal setting for displaying at stores.



1.   Select **OPTION**.
2.   Select **Mode Setting**.
3.   Select **Store Demo** or **Home Use**.
4.  Save.

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

PICTURE CONTROL

DEMO MODE

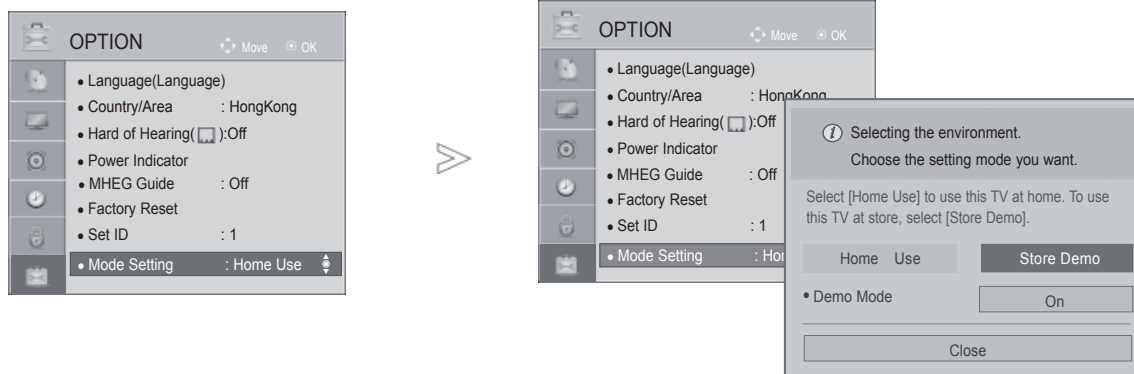
Display the slide show to explain the various logo of this TV.

It is not possible to use **Demo Mode** in **Home Use** mode.

In **Store Demo**, **Demo Mode** is automatically set to **On**.

Once **Demo Mode** is set to **Off** in **Store Demo**, **Demo Mode** does not run and only the screen is reset.

The screen is reset automatically after 5 minutes in **Demo Mode**.



- 1 Select **OPTION**.
- 2 Select **Mode Setting**.
- 3 Select **Store Demo**.
- 4 Select **On** to show the various logo of TV.
- 5 Return to TV viewing.
If you want to stop the demo, press any button. (except for MUTE, + , - button)

- Press the **MENU/EXIT** button to return to normal TV viewing.
- Press the **BACK** 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.

Because each broadcasting station has its own signal conditions, volume adjustment may be needed every time when the channel is changed. This feature allows users to enjoy stable volume levels by making automatic adjustments for each program.

If sound quality or volume is not at the level you want, it is recommended to use a separate home theater system or amp to cope with different user environments.

AUDIO is disabled when connecting a headset.



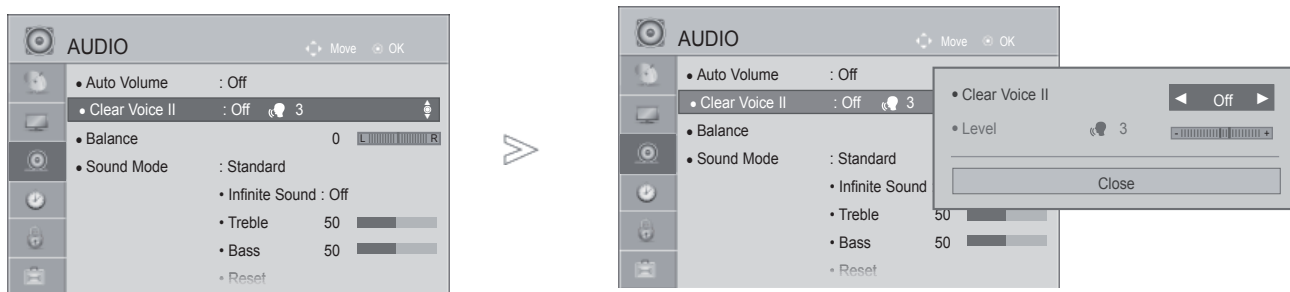
- 1   Select **AUDIO**.
- 2   Select **Auto Volume**.
- 3   Select **On** or **Off**.

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

SOUND & LANGUAGE CONTROL

CLEAR VOICE II

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



- 1   Select **AUDIO**.
- 2   Select **Clear Voice II**.
- 3   Select **On** or **Off**.

- If you select “**On**” for **Clear Voice II**, **Infinite Sound** feature will not work.
- Select levels from ‘-6’ to ‘+6’.

Adjustment for Clear Voice Level With selecting On

- 4  Select **Level**.
- 5   Make desired adjustment.

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

SOUND & LANGUAGE CONTROL

PRESET SOUND SETTINGS-SOUND MODE

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

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.

- Standard** Offers standard-quality sound.
- Music** Optimizes sound for listening to music.
- Cinema** Optimizes sound for watching movies.
- Sport** Optimizes sound for watching sports events.
- Game** Optimizes sound for playing games.



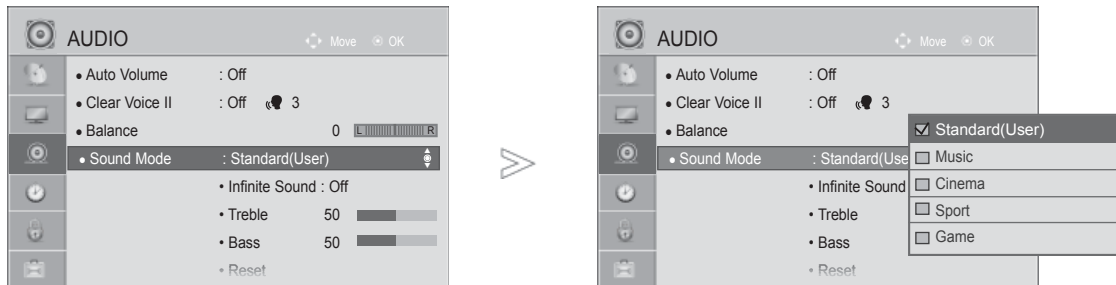
1.   Select **AUDIO**.
2.   Select **Sound Mode**.
3.   Select **Standard, Music, Cinema, Sport or Game**.

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

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

SOUND & LANGUAGE CONTROL

SOUND SETTING ADJUSTMENT -USER MODE



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

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

INFINITE SOUND

Select this option to sound realistic.

- 1 Select **AUDIO**.
- 2 Select **Infinite Sound**.
- 3 Select **On** or **Off**.

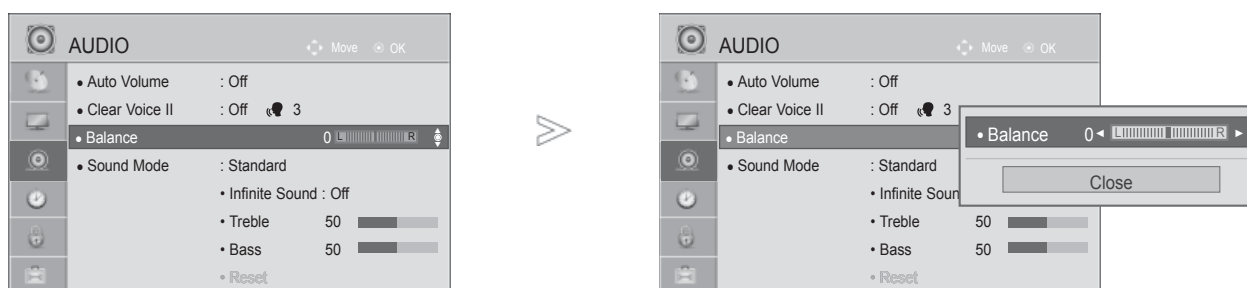
Infinite Sound : Infinite Sound is a patented LG proprietary sound processing technology that strives immersive 5.1 surround sound impression with front two loudspeakers.

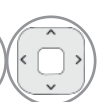
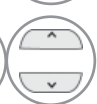
- Press the **MENU/EXIT** button to return to normal TV viewing.
- Press the **BACK** button to move to the previous menu screen.

SOUND & LANGUAGE CONTROL

BALANCE

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



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

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

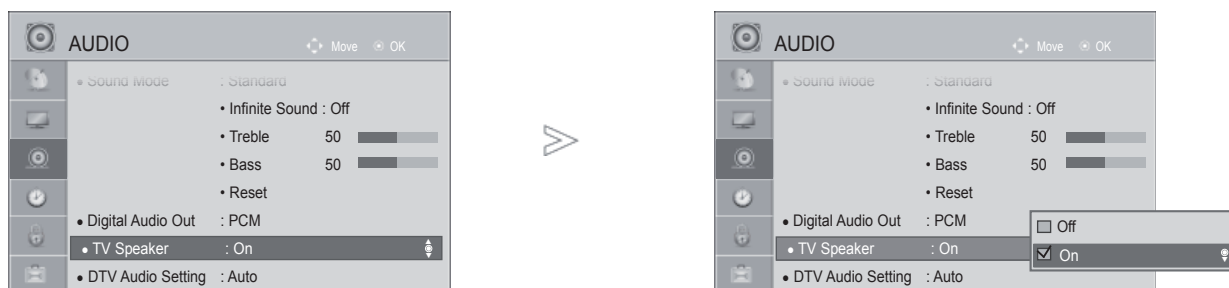
SOUND & LANGUAGE CONTROL

TV SPEAKERS ON/ OFF SETUP

You can adjust the TV internal speaker status.

In **AV**, **COMPONENT**, **RGB** and **HDMI1/2/3** 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's internal speakers.



- 1   Select **AUDIO**.
- 2   Select **TV Speaker**.
- 3   Select **On** or **Off**.

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

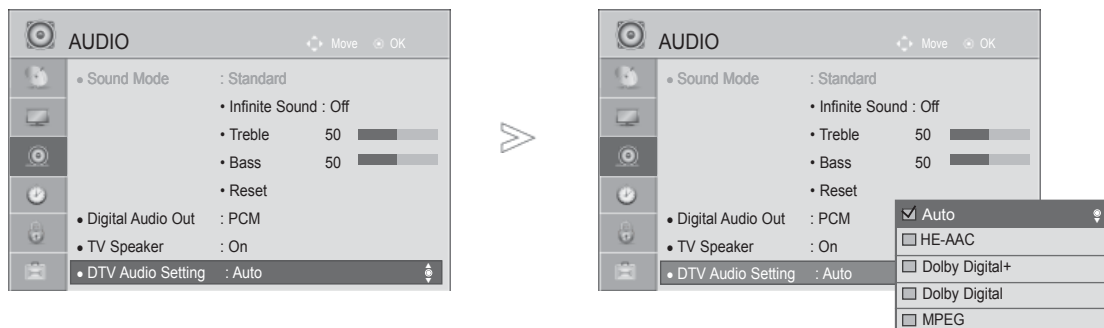
NOTE

- ▶ When the TV speaker is turned off while the Simplink home theater is operating, the sound output automatically switches to the Home theater speaker, but when the TV speaker is turned on, the sound output the TV speaker.
- ▶ Some menus in **AUDIO** are disabled when TV Speaker is set to Off.

SOUND & LANGUAGE CONTROL

DTV AUDIO SETTING (IN DIGITAL MODE ONLY)

When different audio types exist in an input signal, this function allows you to select the audio type you want.



1. Select **AUDIO**.
2. Select **DTV Audio Setting**.
3. Select **Auto, HE-AAC, Dolby Digital +, Dolby Digital or MPEG**.

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

- **Auto**: Automatically outputs in the order **HE-AAC > Dolby Digital+ > Dolby Digital > MPEG**.
- **HE-AAC, Dolby Digital +, Dolby Digital, MPEG**: Allows users to select the audio type they want.
ex) If **MPEG** is selected, **MPEG** is always outputted.
If MPEG is not supported, another audio type is set in that order.

SOUND & LANGUAGE CONTROL

SELECTING DIGITAL AUDIO OUT

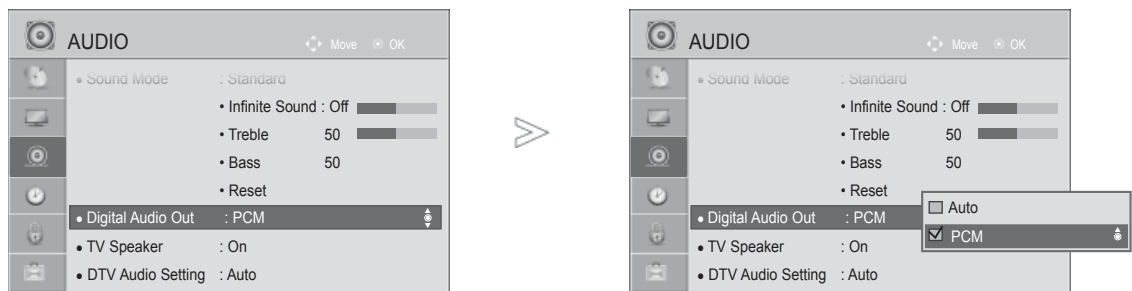
This function allows you to select your preferred Digital Audio Output.

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

When Dolby digital is available, selecting Auto in the Digital Audio Out menu will set SPDIF(Sony Philips Digital InterFace) output to Dolby Digital.

If Auto is selected in the digital audio out menu when dolby digital is not available, SPDIF output will be PCM(Pulse-code modulation).

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 **AUDIO**.
2. Select **Digital Audio Out**.
3. Select **Auto** or **PCM**.



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

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

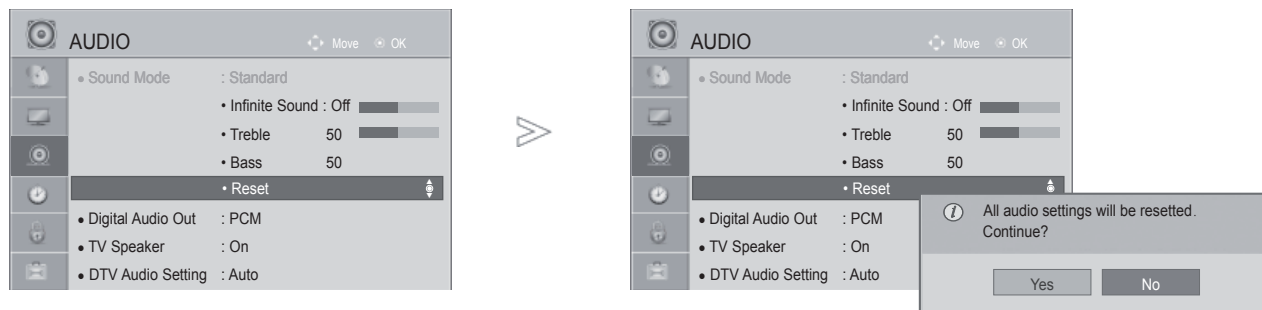
Item	Audio Input	Digital Audio output
Auto(Speaker On)	MPEG DD DD+ HE-AAC	PCM DD DD PCM
Auto(Speaker Off)	MPEG DD DD+ HE-AAC	PCM DD DD DD
PCM	PCM	PCM

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

SOUND & LANGUAGE CONTROL

AUDIO RESET

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



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

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

SOUND & LANGUAGE CONTROL

STEREO/DUAL RECEPTION (IN ANALOGUE MODE ONLY)

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

- 1  Select **Audio**.
- 2  Select the sound output.

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

■ Mono sound selection

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

■ Language selection for dual language broadcast

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

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

SOUND & LANGUAGE CONTROL

NICAM RECEPTION (IN ANALOGUE MODE ONLY)

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

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

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

SPEAKER SOUND OUTPUT SELECTION

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

Select the sound output.

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

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

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

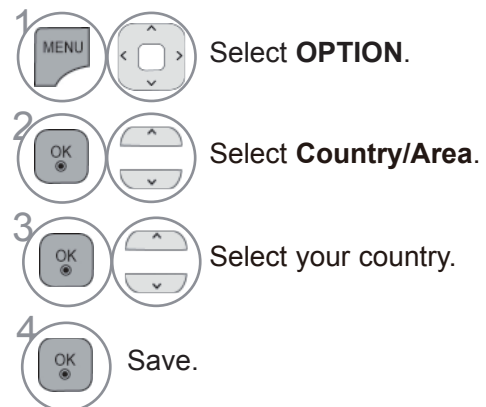
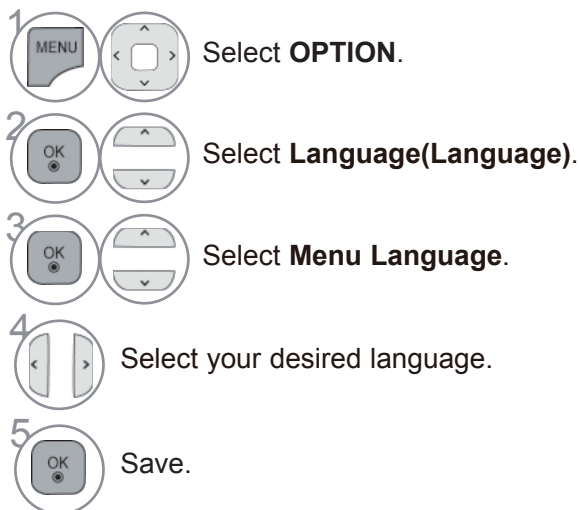
SOUND & LANGUAGE CONTROL

ON-SCREEN MENU LANGUAGE/COUNTRY/AREA SELECTION

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



* If you want to change Language/Area or Country selection



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

! NOTE

- ▶ If you do not finish the set-up **Installation Guide** by pressing **BACK** 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.
- ▶ DTV mode control buttons may not function based on country broadcasting circumstances.
- ▶ In country that Digital broadcasting regulation isn't fixed, some DTV function may not work depending on digital broadcasting circumstances.

SOUND & LANGUAGE CONTROL

LANGUAGE SELECTION (IN DIGITAL MODE ONLY)

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

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

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

- 1   Select **OPTION**.
- 2   Select **Language(Language)**.
- 3   Select **Menu Language, Audio Language or Subtitle Language**.
- 4  Select your desired language.
- 5  Save.

- 1   Select **OPTION**.
- 2   Select Hard of Hearing( .)
- 3   Select **On or Off**.

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

SOUND & LANGUAGE CONTROL

< 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.

Audio Language OSD Information	
Display	Status
N.A	Not Available
	MPEG Audio
	Dolby Digital Audio
	Audio for "Visual Impaired"
	Audio for "Hearing Impaired"
	Dolby Digital Plus Audio
	AAC Audio

< Subtitle Language Selection >

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

Subtitle Language OSD Information	
Display	Status
N.A	Not Available
	Subtitle for "Hard of Hearing"

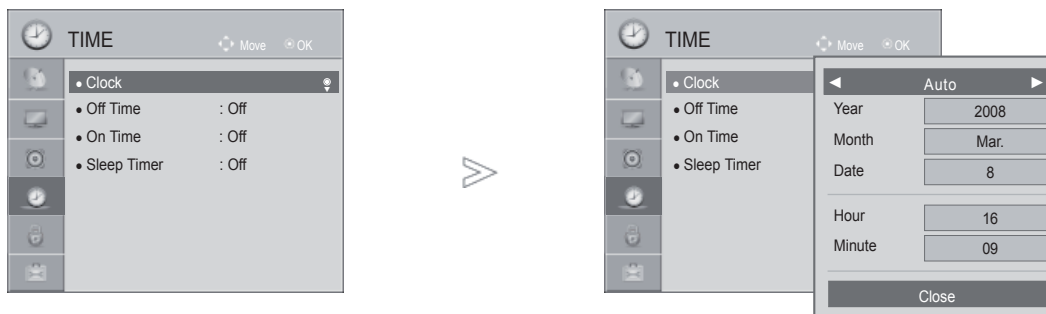
- The audio/subtitles can be displayed in a simpler form with 1 to 3 characters broadcast by the service provider.
- When you select supplementary Audio (Audio for "Visual/Hearing Impaired") the TV may output a part of the Main audio.

TIME SETTING

CLOCK SETUP

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

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



1. Select **TIME**.
2. Select **Clock**.
3. Select **Auto** or **Manual**.
4. Select either the year, month, date, hour or Minute.
4. Set the year, month, date, hour or Minute.

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

TIME SETTING

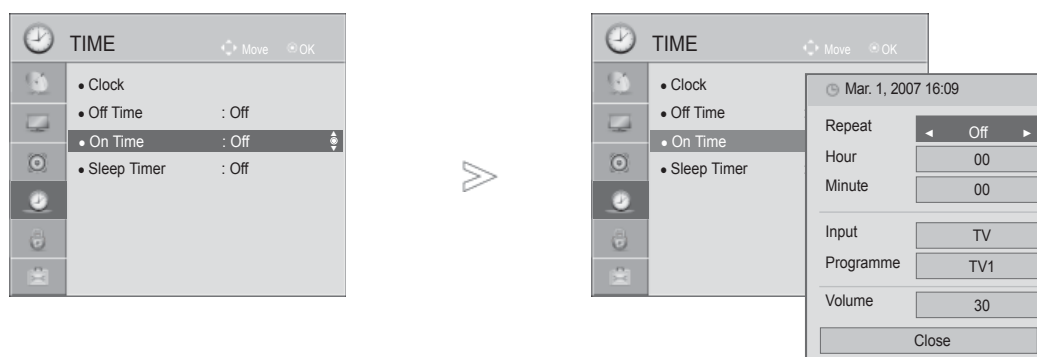
AUTO ON/OFF TIME SETTING

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

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

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

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



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

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

- 1 Select **Input**.
- 2 Select the input source.
- 3 Set the programme.
- 4 Adjust volume level at switch-on.

- Press the **MENU/EXIT** button to return to normal TV viewing.
- Press the **BACK** 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.

1   Select **Sleep Timer**.

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

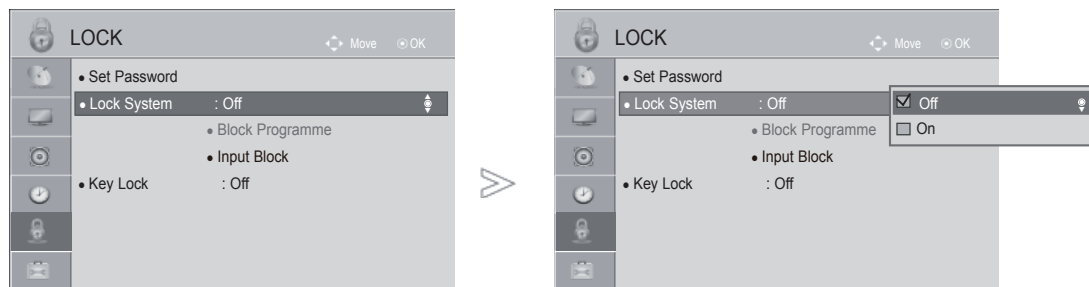
- When you switch the TV off, the preset sleep timer is cancelled.
- You can also adjust **Sleep Timer** in the **TIME** menu.

PARENTAL CONTROL / RATINGS

SET PASSWORD & LOCK SYSTEM

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

If a channel is locked, enter the password to unlock it temporarily.



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

• If you forget your password, press '0', '3', '2', '5' on the remote control handset.

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

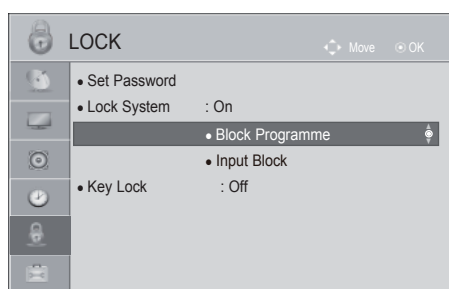
PARENTAL CONTROL / RATINGS

BLOCK PROGRAMME

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

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

Enter a password to watch a blocked programme.



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

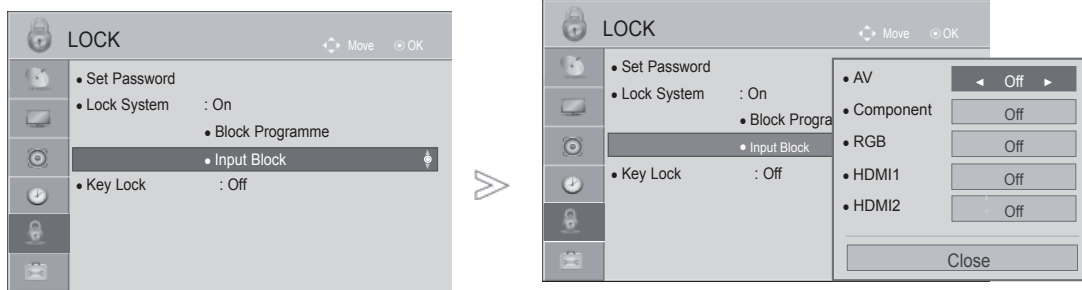
- Press the **MENU/EXIT** button to return to normal TV viewing.
- Press the **BACK** button to move to the previous menu screen.

PARENTAL CONTROL / RATINGS

EXTERNAL INPUT BLOCKING

Enables you to block an input.

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



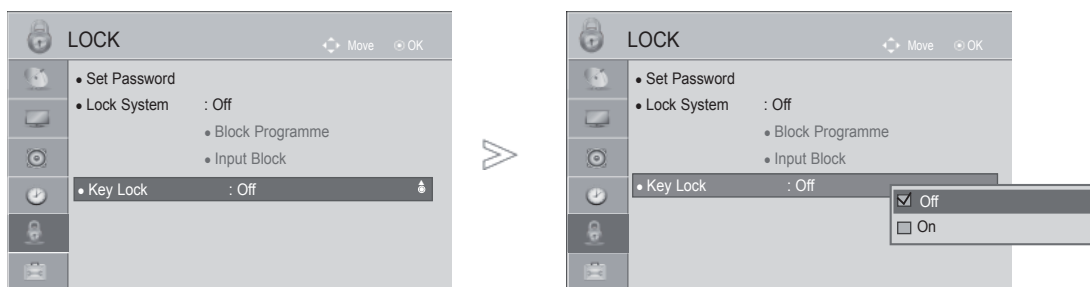
- 1   Select **LOCK**.
- 2   Select **Lock System**.
- 3   Select **Input Block**.
- 4   Select input source.
- 5   Select **On** or **Off**.
- 6  Save.

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

PARENTAL CONTROL / RATINGS

KEY LOCK

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



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

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

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

DIGITAL TELETEXT

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

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

- Image shown may differ from your TV.

But the actual situation is depending on the broadcasting signals of different area or different broadcasting service.

TELETEXT WITHIN DIGITAL SERVICE

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



DIGITAL TELETEXT

TELETEXT IN DIGITAL SERVICE

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

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



APPENDIX

TROUBLESHOOTING

The TV does not operate properly.

The remote control does not work

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

Power is suddenly turned off

- Is the sleep timer set?
- Check the power control settings. Has the Power supply been interrupted.
- If the TV is switched on and there is no input signal, it will switch off automatically after 15 minutes.

The videofunction does not work.

No picture & No sound

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

Picture appears slowly after switching on

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

No or poor colour or poor picture

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

Horizontal/vertical bars or picture shaking

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

Poor reception on some channels

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

Lines or streaks in pictures

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

No picture when connecting HDMI

- Check that your HDMI cable is version 1.3 or higher.
If the HDMI cables don't support HDMI version 1.3, flickering or no screen display can result. Please use the latest cables that support at least HDMI version 1.3.

APPENDIX

The audio function does not work.

Picture OK & No sound

- Press the  + or - button.
- Sound muted? Press MUTE button.
- Try another channel. The problem may be with the broadcast.
- Are the audio cables installed properly?

No output from one of the speakers

- Adjust **Balance** in menu option.

Unusual sound from inside the TV

- A change in ambient humidity or temperature may result in an unusual noise when the TV is switched on or off and does not indicate a fault with the TV.

No sound when connecting HDMI

- Check HDMI cable over version 1.3.

*This feature is not available for all models.

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

The signal is out of range
(Invalid format)

- Adjust resolution, horizontal frequency, or vertical frequency.
- Check the input source.

Vertical bar or stripe on background &
Horizontal Noise &
Incorrect position

- Use Auto configure or adjust clock, phase, or H/V position. (Option)

Screen colour is unstable
or single colour

- Check the signal cable.
- Reinstall the PC video card.

There is a problem with PICTURE settings.

When the user changes the picture settings, the TV automatically converts back to the initial settings after a certain period of time.

- It means that the TV is currently set to **Store Demo** mode.
To switch to **Home use** mode you should do the followings:
From the TV Menu, choose **OPTION** -> Choose **Mode Setting** -> Choose **Home use**. Now, you have completed switching to the **Home use** mode.

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

- ^A To remove dirt or dust, wipe the cabinet with a soft, dry, lint-free cloth,
- ^A 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,

APPENDIX

PRODUCT SPECIFICATIONS

MODELS		22LD3***
		22LD350-CB
Dimensions (Width x Height x Depth)	with stand	526 x 377 x 165 mm 20.71x 14.84 x 6.49 inches
	without stand	526 x 331 x 65mm 20.71x 13.03x 2.54 inches
Weight	with stand	4.3 kg / 9.55 lbs
	without stand	4.0 kg / 8.88 lbs
Power requirement		AC 100-240V~ 50/60Hz
Television System		DTMB, PAL D/K, PAL I, NTSC M
Programme Coverage		DTV: 21~69
		PAL D/K: VHF/UHF 1~62, CATV 1~41
		PAL I: VHF/UHF 1~69, CATV 1~47
		NTSC M: VHF/UHF 2~83, CATV 1~71
External Antenna Impedance		75 Ω
Environment condition	Operating Temperature	0 ~ 40°C / 32 ~ 104°F
	Operating Humidity	Less than 80%
	Storage Temperature	-20 ~ 60°C / -4 ~ 140°F
	Storage Humidity	Less than 85%

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

APPENDIX

Open source software notice

The following GPL executables and LGPL/MPL libraries used in this product are subject to the GPL2.0/LGPL2.1/MPL1.1 License Agreements:

GPL EXECUTABLES:

- Linux kernel 2.6
- busybox
- lzo

LGPL LIBRARIES:

- uClibc

MPL LIBRARIES:

- Nanox

LG Electronics offers to provide source code to you on CD-ROM for a charge covering the cost of performing such distribution, such as the cost of media, shipping and handling upon e-mail request to LG Electronics at:
opensource@lge.com

This offer is valid for a period of three(3) years from the date of the distribution of this product by LG Electronics.

You can obtain a copy of the GPL, LGPL, MPL licenses from <http://www.gnu.org/licenses/old-licenses/gpl-2.0.html>, <http://www.gnu.org/licenses/old-licenses/lgpl-2.1.html>, <http://www.mozilla.org/MPL/MPL-1.1.html>.

Also you can obtain the translation of GPL, LGPL licenses from <http://www.gnu.org/licenses/old-licenses/gpl-2.0-translations.html>, <http://www.gnu.org/licenses/old-licenses/lgpl-2.1-translations.html>.

This software is based in part on the work of the Independent JPEG Group copyright © 1991 – 1998, Thomas G. Lane.

This product includes

- libpng library : copyright © 2004 Glenn Randers-Pehrson
- Zlib compression library: Copyright © 1995-2002 Jean-loup Gailly and Mark Adler.
- Tinyxml library : copyright (c) 2000-2006 Lee Thomason



Record the 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 any service.

Model : _____

Serial No. : _____