



# OWNER'S MANUAL

# LCD TV / LED LCD TV

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

P/NO : MFL66100447 (1203-REV03)  
Printed in Korea

[www.lg.com](http://www.lg.com)

ENGLISH

# LICENSES

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7,295,673; 7,460,668; 7,515,710; 7,519,274

# TABLE OF CONTENTS

## 3 LICENSES

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## 4 TABLE OF CONTENTS

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## 6 ASSEMBLING AND PREPARING

---

- 6 Unpacking
- 8 Parts and buttons
- 10 Lifting and moving the TV
- 10 Setting up the TV
- 10 - Attaching the stand
- 12 - Not using the Desk Type Stand
- 12 - Mounting on a table
- 13 - Mounting on a wall
- 15 - Tidying cables

## 16 REMOTE CONTROL

---

## 19 WATCHING TV

---

- 19 Connecting an antenna
- 19 Turning the TV on for the first time
- 20 Watching TV
- 21 Managing programmes
- 21 - Automatically setting up programme
- 21 - Manually setting up programme (In digital mode) (Only DTV)
- 22 - Manually setting up programme (In analogue mode)
- 23 - Editing your programme list
- 25 - Selecting the programme list
- 27 EPG (Electronic Program Guide) (In digital mode)
- 27 - Switch on/off EPG
- 27 - Select a programme
- 28 - NOW/NEXT Guide Mode
- 28 - 8 Day Guide Mode
- 28 - Date Change Mode

- 28 - Extended Description Box
- 29 MHEG (Multimedia and Hypermedia Information coding Expert Group) (In digital mode)
- 29 - Teletext Within Digital Service
- 29 - Teletext in Digital Service
- 30 - Switch on/off MHEG
- 30 - Select a programme
- 30 - Programme Listing Mode
- 30 - NOW/NEXT Guide Mode
- 31 Using additional options
- 31 - Adjusting aspect ratio
- 32 - Changing AV modes
- 32 - Using the input list
- 33 - Locking the buttons on the TV (Child Lock)
- 34 Using the quick menu

## 35 ENTERTAINMENT

---

- 35 - Connecting USB storage devices
- 36 - Browsing files
- 37 - Viewing movies
- 40 - Viewing photos
- 42 - Listening to music
- 44 - DivX® VOD Guide

## 45 CUSTOMIZING TV SETTINGS

---

- 45 Accessing main menus
- 46 Customizing settings
- 46 - SETUP settings
- 47 - PICTURE settings
- 53 - AUDIO settings
- 56 - TIME settings
- 57 - LOCK settings
- 58 - OPTION settings

## 60 MAKING CONNECTIONS

---

- 61 Connection overview

- 62 Connecting to a HD receiver, DVD, or VCR player
  - 62 - HDMI connection
  - 62 - DVI to HDMI connection
  - 62 - Component connection
  - 63 - Composite connection
- 63 Connecting to a PC
  - 63 - HDMI connection
  - 63 - DVI to HDMI connection
  - 64 - RGB Connection
- 65 Connecting to an audio system
  - 65 - Digital optical audio connection
  - 65 - Headphone connection
  - 66 - Speaker output Setup
- 66 Connecting to a USB
- 67 SIMPLINK connection
  - 67 - Activating the SIMPLINK feature

## 68 TELETEXT

---

- 68 Switch On/Off
- 68 Simple Text
  - 68 - Page selection
- 68 Top Text
  - 68 - Block / Group / Page Selection
  - 68 - Direct Page Selection
- 69 Fasttext
  - 69 - Page selection
- 69 Special Teletext Function

## 70 MAINTENANCE

---

- 70 Cleaning your TV
  - 70 - Screen and frame
  - 70 - Cabinet and stand
  - 70 - Power cord
- 71 Preventing “Image burn” or “Burn-in” on your TV screen

## 72 TROUBLESHOOTING

---

## 74 SPECIFICATIONS

---

## 79 IR CODES

---

## 80 EXTERNAL CONTROL DEVICE SETUP

---

- 80 RS-232C Setup
- 80 Type of connector;
  - D-Sub 9-Pin Male
- 80 RS-232C Configurations
- 81 Communication Parameters
- 81 Command reference list
- 82 Transmission / Receiving Protocol

## 87 OPEN SOURCE LICENSE

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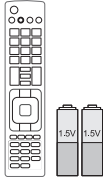


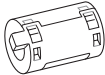

- 87 Open source software notice

# ASSEMBLING AND PREPARING

## Unpacking


Check your product box for the following items. If there are any missing accessories, contact the local dealer where you purchased your product.

The illustrations in this manual may differ from the actual product and item.



		
Remote control and batteries(AAA)	Owner's manual	
		
Polishing cloth <sup>1</sup> (This item is not included for all models.)	Ferrite core (Depending on model) (This item is not included for all models.)	Power Cord(This item is not included for all models.)

1 Gently wipe the spots on the cabinet with the polishing cloth.

Only 26/32LK33\*\*, 32/37/42/47LK45\*\*

		
x 8 (M4 x 20)	(Except for 47LK45**)	
Screw for assembly	Screw for fixing	Protection cover

Only 32/37/42/47/55LV35\*\*

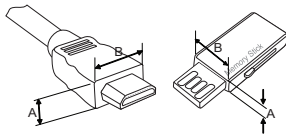
	
x 8 (M4 x 12)	(Only 32/37LV35**)
Screw for assembly	Screw for fixing

**CAUTION**

- Do not use any pirated items to ensure the safety and product life span.
- Any damages or injuries by using pirated items are not covered by the manufacturer's warranty.

**NOTE**

- The items supplied with your product may vary depending on the model.
- Product specifications or contents of this manual may be changed without prior notice due to upgrade of product functions.
- Image shown may differ from your TV.
- For an optimal connection, HDMI cables and USB devices should have bezels less than 10 mm thick and 18 mm width. (Except for 26/32LK33\*\*)



\*A ≦ 10 mm

\*B ≦ 18 mm

## Parts and buttons

 **NOTE**

- TV can be placed in standby mode in order to reduce the power consumption. And TV should be turned off if it will not be watched for some time, as this will reduce energy 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**

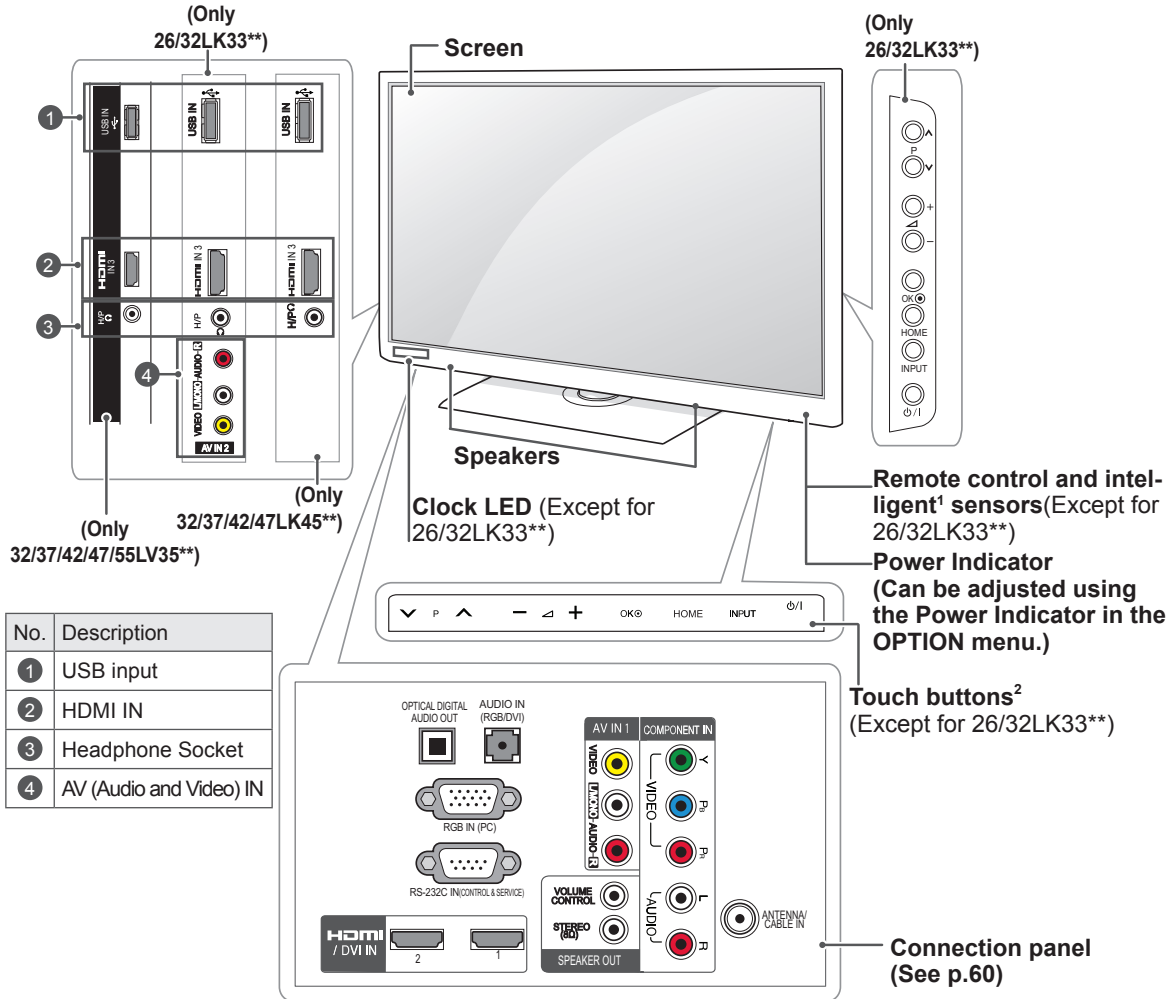
- Do not step on the glass stand or subject it to any impact. It may break, causing possible injury from fragments of glass, or the TV may fall.
- Do not drag the TV. The floor or the product may be damaged.
- In case of some model, the thin film on screen is a part of TV. So don't take it off.



In case of some model, the thin film on screen is a part of TV. So don't take it off.

- Image shown may differ from your TV.

Only 32/37/42/47/55LV35\*\*, 26/32LK33\*\*, 32/37/42/47LK45\*\*



Button	Description
0/I	Turns the power on or off
INPUT	Changes the input source
HOME	Accesses the main menus, or saves your input and exits the menus
OK	Selects the highlighted menu option or confirms an input
- / +	Adjusts the volume level
v P ^	Scrolls through the saved programmes

1 Intelligent sensor - Adjusts the image quality corresponding to the surrounding environment.(Except for 26/32LK33\*\*)

2 Touch Button - You can use the desired button function by touching.(Except for 26/32LK33\*\*)

## Lifting and moving the TV

When moving or lifting the TV, read the following to prevent the TV from being scratched or damaged and for safe transportation regardless of its type and size.

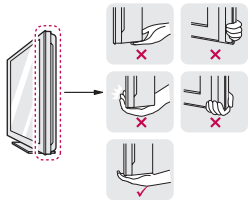
### CAUTION

- Avoid touching the screen at all times, as this may result in damage on the screen or some of the pixels used to create images.

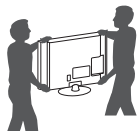
- It is recommended to move the TV in the box or packing material that the TV originally came in.
- Before moving or lifting the TV, disconnect the power cord and all cables.
- When holding the TV, the screen should face away from you to avoid damage.



- Hold the top and bottom of the TV frame firmly. Make sure not to hold the transparent part, speaker, or speaker grill area.



- When transporting a large TV, there should be at least 2 people.
- When transporting the TV by hand, hold the TV as shown in the following illustration.



- When transporting the TV, do not expose the TV to jolts or excessive vibration.
- When transporting the TV, keep the TV upright, never turn the TV on its side or tilt towards the left or right.

## Setting up the TV

- Image shown may differ from your TV.
- Put your TV on a pedestal stand and mount the TV on a table or wall.

### Attaching the stand

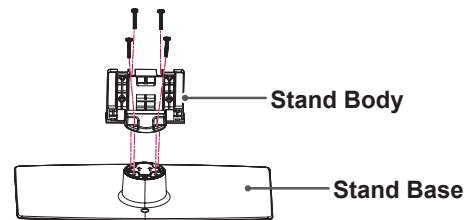
Only 26/32LK33\*\*

- 1 Lay the TV with the screen side down on a flat surface.

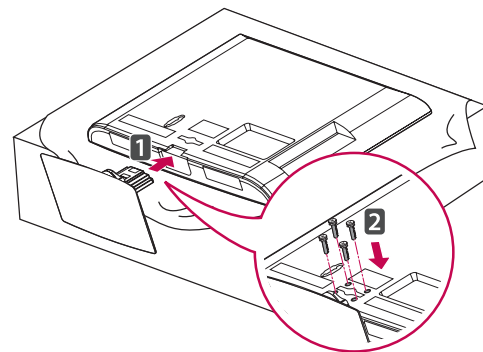
### CAUTION

- Lay a foam mat or soft protective cloth on the surface to protect the screen from damage.

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



- 3 Secure the TV and the stand with the 4 screws.



### CAUTION

- Tighten the screws firmly to prevent the TV from tilting forward. Do not over tighten.

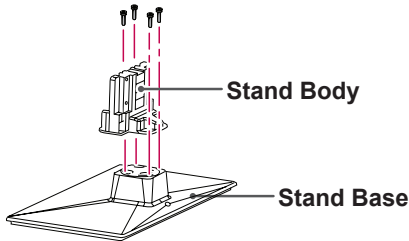
Only 32/37/42/47LK45\*\*

- 1 Lay the TV with the screen side down on a flat surface.

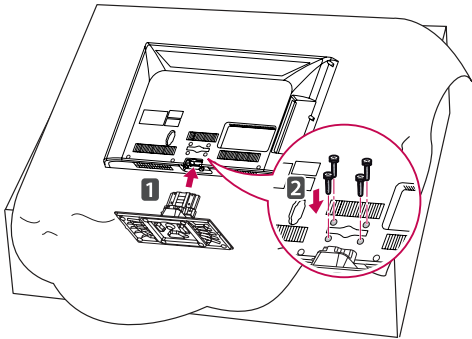
**CAUTION**

- Lay a foam mat or soft protective cloth on the surface to protect the screen from damage.

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



- 3 Secure the TV and the stand with the 4 screws.



**CAUTION**

- Tighten the screws firmly to prevent the TV from tilting forward. Do not over tighten.

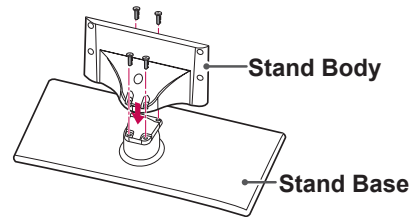
Only 32/37/42/47/55LV35\*\*

- 1 Lay the TV with the screen side down on a flat surface.

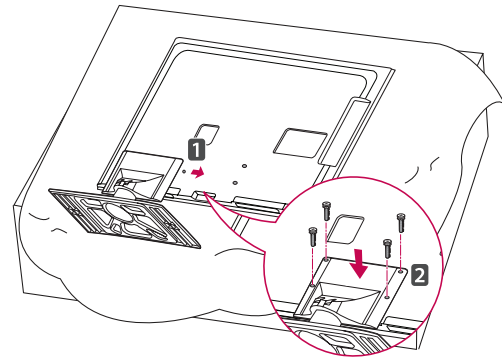
**CAUTION**

- Lay a foam mat or soft protective cloth on the surface to protect the screen from damage.

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



- 3 Secure the TV and the stand with the 4 screws.



**CAUTION**

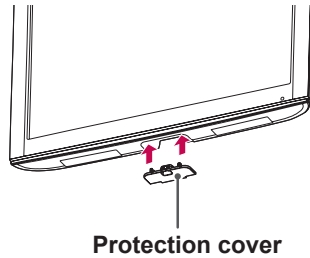
- Tighten the screws firmly to prevent the TV from tilting forward. Do not over tighten.

### Not using the Desk Type Stand

- Image shown may differ from your TV.

Only 26/32LK33\*\*, 32/37/42/47LK45\*\*

- 1 Push the supplied protection cover into the opening at the bottom of the TV until clicking sound.

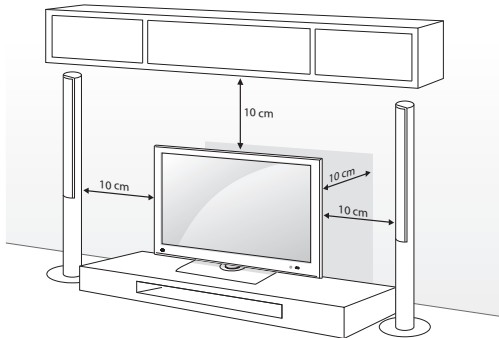


### Mounting on a table

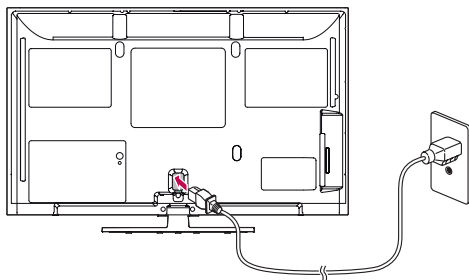
- Image shown may differ from your TV.

- 1 Lift and tilt the TV into its upright position on a table.

- Leave a 10 cm (minimum) space from the wall for proper ventilation.



- 2 Connect the power cord to a wall outlet.

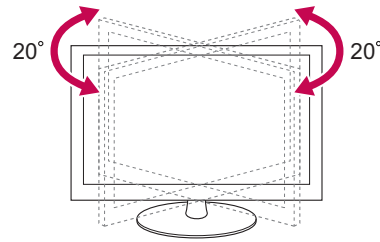


#### ! CAUTION

- Do not place the TV near or on sources of heat, as this may result in fire or other damage.

### Adjusting the angle of the TV to suit view

Swivel 20 degrees to the left or right and adjust the angle of the TV to suit your view.



#### ! CAUTION

- When adjusting the angle of the product, watch out for your fingers.

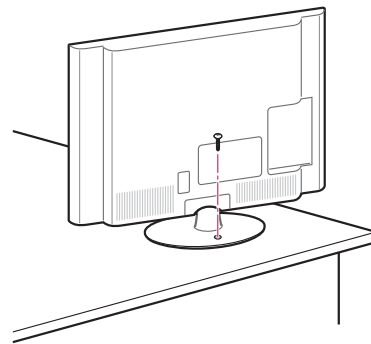
### Securing the TV to a table

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

Only 26/32LK33\*\*, 32/37/42LK45\*\*, 32/37LV35\*\*

Fix the TV to a table to prevent from tilting forward, damage, and potential injury.

Mount the TV on a table, and then insert and tighten the supplied screw on the rear of the stand.

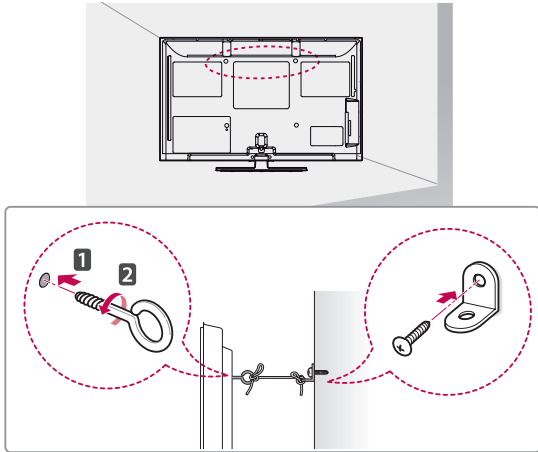


#### ! WARNING

- To prevent TV from falling over, the TV should be securely attached to the floor/wall per installation instructions. Tipping, shaking, or rocking the TV may cause injury.

**Securing the TV to a wall**

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



- 1 Insert and tighten the eye-bolts, or TV brackets and bolts on the back of the TV.  
- If there are bolts inserted at the eye-bolts position, remove the bolts first.
- 2 Mount the wall brackets with the bolts to the wall.  
Match the location of the wall bracket and the eye-bolts on the rear of the TV.
- 3 Connect the eye-bolts and wall brackets tightly with a sturdy rope.  
Make sure to keep the rope horizontal with the flat surface.

**CAUTION**

- Make sure that children do not climb on or hang on the TV.

**NOTE**

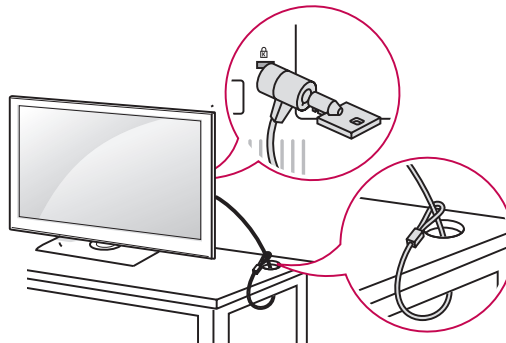
- Use a platform or cabinet that is strong and large enough to support the TV securely.

**Using the Kensington security system**

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

The Kensington security system connector is located at the rear of the TV. For more information of installation and using, refer to the manual provided with the Kensington security system or visit <http://www.kensington.com>.

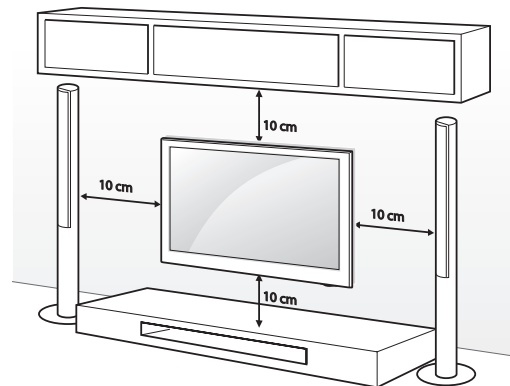
Connect the Kensington security system cable between the TV and a table.



**Mounting on a wall**

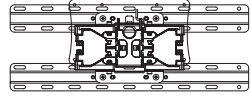
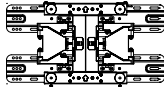
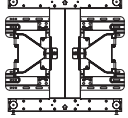
Attach a wall mount bracket at the rear of the TV carefully and install the wall mount bracket on a solid wall perpendicular to the floor. When you attach the TV to other building materials, please contact qualified personnel.

LG recommends that wall mounting be performed by a qualified professional installer.



Separate purchase(Wall Mounting Bracket)

Make sure to use screws and wall mount bracket that meet the VESA standard. Standard dimensions for the wall mount kits are described in the following table.

<b>Model</b>	26/32LK33** 32LK45** 32LV35**	
<b>VESA (A x B)</b>	200 x 100	
<b>Standard screw</b>	M4	
<b>Number of screws</b>	4	
<b>Wall mount bracket</b>	LSW100B, LSW100BG 	
<b>Model</b>	37/42/47LK45** 37LV35**	42/47/55LV35**
<b>VESA (A x B)</b>	200 x 200	400 x 400
<b>Standard screw</b>	M6	M6
<b>Number of screws</b>	4	4
<b>Wall mount bracket</b>	LSW200B, LSW200BG 	LSW400B, LSW400BG 



**CAUTION**

- Disconnect the power first, and then move or install the TV. Otherwise electric shock may occur.
- If you install the TV on a ceiling or slanted wall, it may fall and result in severe injury. Use an authorized LG wall mount bracket and contact the local dealer or qualified personnel.
- Do not over tighten the screws as this may cause damage to the TV and void your warranty.
- Use the screws and wall mount bracket that meet the VESA standard. Any damages or injuries by misuse or using an improper accessory are not covered by the manufacturer's warranty.



**NOTE**

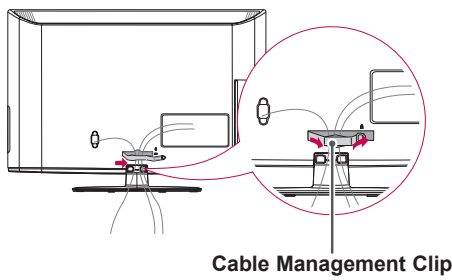
- Use the screws that are listed on the VESA standard screw specifications.
- The wall mount kit includes an installation manual and necessary parts.
- The length of screws may differ depending on the wall mount. Make sure to use the proper length.
- For more information, refer to the manual supplied with the wall mount bracket.

## Tidying cables

- Image shown may differ from your TV.

Only 26/32LK33\*\*, 32/37/42/47LK45\*\*

- 1 Gather and bind the cables with the cable management clip.
- 2 Fix the cable management clip firmly to the TV.

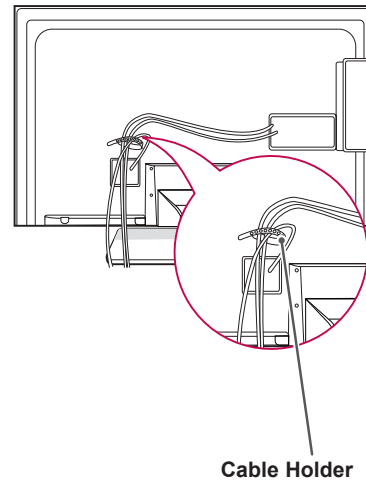


**!** NOTE

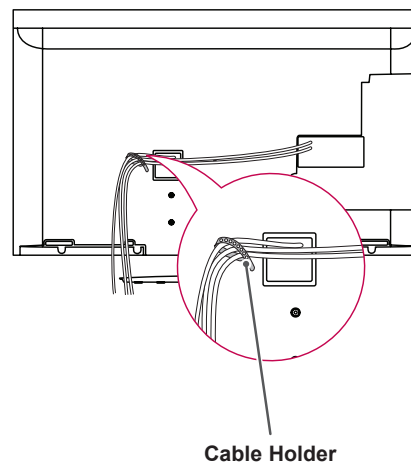
- Do not move the TV by holding the cable management clip, as the cable management clip may break, and injuries and damage to the TV may occur.

Only 32/37/42/47/55LV35\*\*

- 1 Gather and bind the cables with the **Cable Holder** on the TV back cover.



or

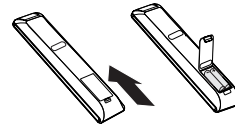


# REMOTE CONTROL

The descriptions in this manual are based on the buttons on the remote control. Please read this manual carefully and use the TV correctly.

To replace batteries, open the battery cover, replace batteries (1.5 V AAA) matching ⊕ and ⊖ ends to the label inside the compartment, and close the battery cover. Be sure to point the remote control toward the remote control sensor on the TV.

To remove the batteries, perform the installation actions in reverse.

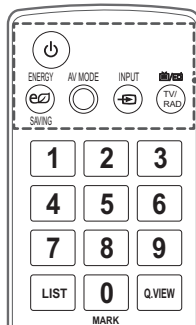


## CAUTION

- Do not mix old and new batteries, as this may damage the remote control.

- Image shown may differ from your TV.
- In Analogue TV and in some countries, some remote control keys may not work.

ENGLISH



### ⏻ (POWER)

Turns the TV on or off.

### ENERGY SAVING (See p.47)

Adjusts the brightness of the screen to reduce energy consumption

### AV MODE (See p.32)

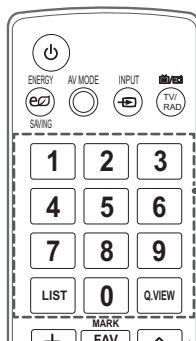
Selects an AV mode

### INPUT (See p.32)

Changes the input source; Turns the TV on.

### TV/RAD

Selects Radio, TV and DTV programme.



### Number buttons

Enters numbers.

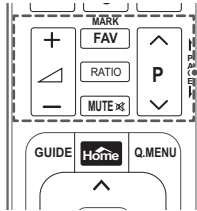
### LIST (See p.25)

Accesses the saved programme list.

### Q.VIEW

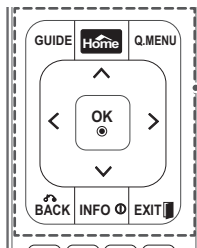
Returns to the previously viewed programme.





- ▲+ -**  
Adjusts the volume level.
- MARK**  
Selects a menu or option.
- FAV** (See p.26)  
Accesses your favourite programme list
- RATIO** (See p.31)  
Resizes an image
- MUTE**  
Mutes all sounds.
- P ^ v**  
Scrolls through the saved programmes.
- PAGE**  
Moves to the previous or next screen.

ENGLISH

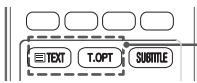


- GUIDE**  
Shows programme guide.
- Home**  
Accesses the main menus, or saves your input and exit the menus.
- Q. MENU** (See p.34)  
Accesses the quick menu
- Navigation buttons** (up/down/left/right)  
Scrolls through menus or options.
- OK**  
Selects menus or options and confirms your input.
- BACK**  
Returns to the previous level.
- INFO** (See p.27)  
Views the information of the current programme and screen.
- EXIT**  
Clears all on-screen displays and return to TV viewing.



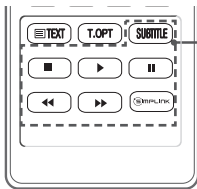
**Coloured buttons**

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



**TELETEXT BUTTONS** (See p.68)

These buttons are used for teletext. For further details, see the 'Teletext' section.



**SUBTITLE**

Recalls your preferred subtitle in digital mode.

**Control buttons** (MUTE, PLAY, PAUSE, RECALL, SKIP)

Controls the MY MEDIA menus, or the SIMPLINK compatible devices (USB, SIMPLINK).

**SIMPLINK** (See p.67)

Accesses the AV devices connected to the TV; Opens the SIMPLINK menu.

## WATCHING TV

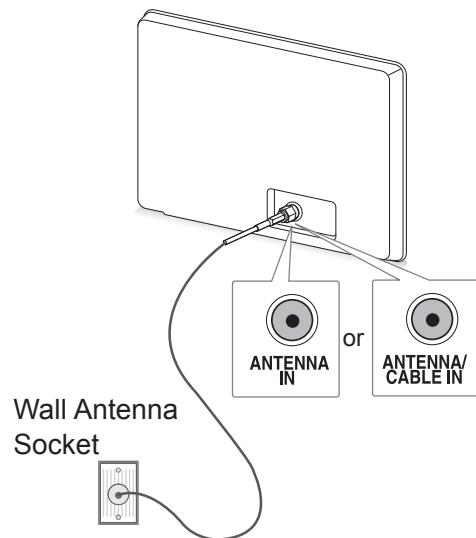
### Connecting an antenna

Connect an antenna to watch TV while referring to the following.

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

Connect the TV to a wall antenna socket with an RF cable (75 Ω).

- Image shown may differ from your TV.



#### ! NOTE

- Use a signal splitter to use more than 2 TVs.
- If the image quality is poor, install a signal amplifier properly to improve the image quality.
- If the image quality is poor with an antenna connected, aim the antenna to the correct direction.
- An antenna cable and converter are not supplied.

### Turning the TV on for the first time

When you turn the TV on for the first time, the Initial setting screen appears. Select a language and customize the basic settings.

- 1 Connect the power cord to a power outlet.
- 2 In Standby mode, press **⏻ (POWER)** to turn the TV on.

The Initial setting screen appears if you turn the TV on for the first time.

#### ! NOTE

- You can also access **Factory Reset** by accessing **OPTION** in the main menus.

- 3 Follow the on-screen instructions to customize your TV settings according to your preferences.

<b>Language</b>	Selects a language to display. (Except for Australia, New Zealand, Singapore, South Africa)
↓	
<b>Country</b>	Selects a country to display. (Only Australia, New Zealand)
↓	
<b>Time Zone</b>	Selects a Time Zone to display. (Only Australia)
↓	
<b>Auto Tuning</b>	Scans and saves available channels automatically.

#### ! NOTE

- DTV mode control buttons may not function based on country broadcasting circumstances. (Only DTV)
- In country that Digital broadcasting regulation isn't fixed, some DTV function may not work depending on digital broadcasting circumstances. (Only DTV)

- 4 When the basic settings are complete, press **OK**.

 **NOTE**

- If you do not complete the Initial setting, it will appear whenever the TV turns on.
- Disconnect the power cord from the power outlet when you do not use the TV for a long period of time.

- 5 To turn the TV off, press **⏻ (POWER)** .

## Watching TV

- 1 In Standby mode, press **⏻ (POWER)** to turn the TV on.
- 2 Press **INPUT** and select **Antenna**.
- 3 To turn the TV off, press **⏻ (POWER)** . The TV switches to Standby mode.

## Managing programmes

### Automatically setting up programme

Use this to automatically find and store all available programmes.

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

- 1 Press **Home** to access the main menus.
- 2 Press the Navigation buttons to scroll to **SETUP** and press **OK**.
- 3 Press the Navigation buttons to scroll to **Auto Tuning** and press **OK**.
- 4 Select **Start** to start automatic tuning.  
The TV scans and saves available programmes automatically.
- 5 When you are finished, press **EXIT**.  
When you return to the previous menu, press **BACK**.

#### NOTE

- If the TV scans a blocked programme, you will be prompted to enter your password to keep the programme scanned.
- If you wish to keep on auto tuning select **Start** using the Navigation buttons. Then, press the **OK** button. Otherwise select **Close**.
- **Automatic Numbering:** Decide whether to use the programme numbers as sent by broadcasting stations for tuning. (Only DTV)

### Manually setting up programme (In digital mode) (Only DTV)

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

- 1 Press **Home** to access the Main menus.
- 2 Press the Navigation buttons to scroll to **SETUP** and press **OK**.
- 3 Press the Navigation buttons to scroll to **Manual Tuning** and press **OK**.
- 4 Press the Navigation buttons to scroll to **DTV** and press **OK**.
- 5 Scroll through the programme types, and then add or delete programmes.
- 6 When you are finished, press **EXIT**.  
When you return to the previous menu, press **BACK**.

#### NOTE

- If the TV scans a blocked programme, you will be prompted to enter your password to keep the programme scanned.

## Manually setting up programme (In analogue mode)

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

- 1 Press **Home** to access the main menus.
- 2 Press the Navigation buttons to scroll to **SETUP** and press **OK**.
- 3 Press the Navigation buttons to scroll to **Manual Tuning** and press **OK**.
- 4 Press the Navigation buttons to scroll to **TV** and press **OK**. (Only DTV)
- 5 Press the Navigation buttons or Number buttons to scroll to the desired programme Storage.
- 6 Press the Navigation buttons to scroll to TV System. (Except for Australia)
- 7 Press the Navigation buttons to scroll to **V/UHF** or **Cable**.
- 8 Press the Navigation buttons or Number buttons to scroll to the desired channel number.
- 9 Press the Navigation buttons to scroll and start searching.
- 10 Press the Navigation buttons to scroll to **Store** and press **OK**.
- 11 When you are finished, press **EXIT**.  
When you return to the previous menu, press **BACK**.

### ! NOTE

- If the TV scans a blocked programme, you will be prompted to enter your password to keep the programme scanned.
- **BG** : PAL B/G (New Zealand / South Africa / Singapore / Indonesia / Israel / Malaysia / Vietnam / Asia)  
**DK** : PAL D/K (New Zealand / South Africa / Singapore / Indonesia / Israel / Malaysia / Vietnam / Asia)  
**I** : PAL I/II (New Zealand / South Africa / Singapore / Indonesia / Israel / Malaysia / Vietnam / Asia)  
**B/B** : Australia  
**M** : NTSC-M (South Africa / Indonesia / Israel / Malaysia / Vietnam / Asia)
- To store another channel, repeat steps 6 to 10.

### Assigning a station name

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

- 1 Press **Home** to access the main menus.
- 2 Press the Navigation buttons to scroll to **SETUP** and press **OK**.
- 3 Press the Navigation buttons to scroll to **Manual Tuning** and press **OK**.
- 4 Press the Navigation buttons to scroll to **TV**. (Only DTV)
- 5 Press the Navigation buttons to scroll to **Name** and press **OK**.
- 6 Press the Navigation buttons to scroll 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 and press **OK**.
- 7 Press the Navigation buttons to scroll to **Close** and press **OK**.
- 8 Press the Navigation buttons to scroll to **Store** and press **OK**
- 9 When you are finished, press **EXIT**.  
When you return to the previous menu, press **BACK**.

### Fine Tuning

Normally fine tuning is only necessary if reception is poor.

- 1 Press **Home** to access the main menus.
- 2 Press the Navigation buttons to scroll to **SETUP** and press **OK**.
- 3 Press the Navigation buttons to scroll to **Manual Tuning** and press **OK**.
- 4 Press the Navigation buttons to scroll to **TV**. (Only DTV)
- 5 Press the Navigation buttons to scroll to **Fine**.
- 6 Fine tune for the best picture and sound.
- 7 Press the Navigation buttons to scroll to **Store** and press **OK**
- 8 When you are finished, press **EXIT**.  
When you return to the previous menu, press **BACK**.

### Editing your programme list

When a programme number is skipped, it means that you will be unable to select it using **P ▲ ▼** 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 (Only DTV).

- 1 Press **Home** to access the main menus.
- 2 Press the Navigation buttons to scroll to **SETUP** and press **OK**.
- 3 Press the Navigation buttons to scroll to **Programme Edit** and press **OK**.
- 4 Press the Navigation buttons to select a programme to be stored or skipped.
- 5 When you are finished, press **EXIT**.  
When you return to the previous menu, press **BACK**.

## In DTV/RADIO mode

**Skipping a programme number**

- 1 Press the Navigation buttons to scroll to select a programme number to be skipped.
- 2 Press Blue button to turn the programme number.
- 3 Press Blue button to release.

**NOTE**

- 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 Press the Navigation buttons to scroll to select a programme number to be locked.
- 2 Press Yellow button to turn the programme number.
- 3 Press Yellow button to release.

**NOTE**

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

## In TV mode

**Deleting a programme**

- 1 Press the Navigation buttons to scroll to select a programme number to be deleted.
- 2 Press Red button to turn the programme number.

**NOTE**

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

**Moving a programme**

- 1 Press the Navigation buttons to scroll to select a programme number to be moved.
- 2 Press the Green button to turn the programme number and press the Navigation buttons.
- 3 Press Green button to release.

**Skipping a programme number**

- 1 Press the Navigation buttons to scroll to select a programme number to be skipped.
- 2 Press Blue button to turn the programme number.
- 3 Press Blue button to release.

**NOTE**

- 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.



### Locking a programme number

- 1 Press the Navigation buttons to scroll to select a programme number to be locked.
- 2 Press Yellow button to turn the programme number.
- 3 Press Yellow button to release.

#### ! NOTE

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

### Selecting favourite programme

- 1 Press the Navigation buttons to scroll to select your desired programme.
- 2 Press the **FAV** to add corresponding programme to Favourite list of current Favourite group.
- 3 Press **FAV** to release.

### Selecting favourite programme group

- 1 Press the Navigation buttons to scroll to select your desired programme.
- 2 Press the **Q.MENU** to display a pop-up window where Favourite group can be changed.
- 3 Press the Navigation buttons to scroll to select a Favourite group and press **OK**.

## Selecting the programme list

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

#### Displaying programme LIST

- 1 Press **LIST** to access the Programme List.
- 2 Press Blue button to turn the programme edit.

#### ! NOTE

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

#### Selecting a programme in the programme list

- 1 Press the Navigation buttons to select programme.
- 2 Press **OK** to switch to the chosen programme number.

#### ! NOTE

- Press **TV/RAD** in Digital TV. (The mode will be switched between TV, DTV, and Radio from the programme you are currently watching.)

Paging through a programme list

- 1 Press the **P ▲ ▼** buttons to turn the pages.
- 2 Press **LIST** to return normal TV viewing.

Displaying the favourite programme list

- 1 Press **FAV** to access the Favourite Programme List.
- 2 When you are finished, press **EXIT**.

Button	Description
Blue button	Turn the programme edit.
Yellow button	Current channel is registered/ cancelled as preferred channel on currently selected Group.
<b>OK</b>	Selects a programme to view
<b>&lt; &gt;</b>	Favourite group is changed.

## EPG (Electronic Program Guide) (In digital mode)

**This feature is disabled in New Zealand.**

- Image shown may differ from your TV.

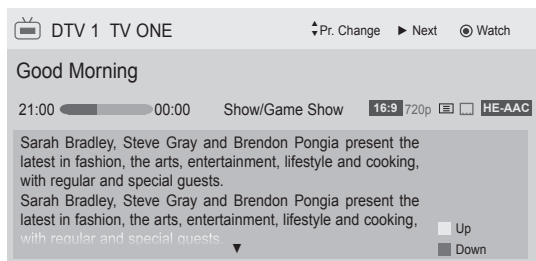
This system has an Electronic Programme Guide (EPG) to help your navigation through all the possible viewing options.

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 next 8 days.

You must set the Clock in the **Time** menu, before using EPG function.



- Press **INFO** to show current programme information.

	Displayed with a TV or DTV Programme.
	Displayed with a Radio Programme.
	Displayed with a MHEG Programme.
	Displayed with a HE-AAC Programme.
	Aspect ratio of broadcasting programme.
	Aspect ratio of broadcasting programme.
	Displayed with a Teletext Programme.
	Displayed with a Subtitle Programme.
	Displayed with a Scramble Programme.
	Displayed with a Dolby Digital Programme.
	Displayed with a Dolby Digital PLUS Programme.
576i/p, 720p, 1080i/p : Resolution of broadcasting programme	

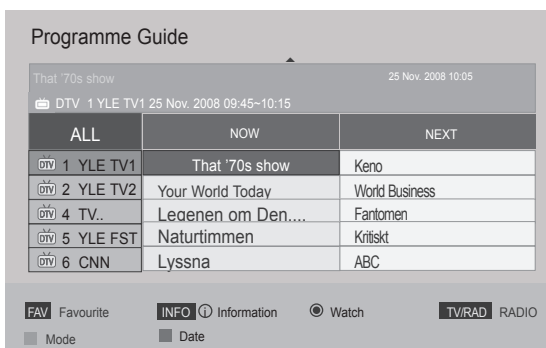
>	Shows next programme information.
^ v	Shows other programme information.

## Switch on/off EPG

- 1 Press **GUIDE** to switch on or off EPG.

## Select a programme

- 1 Press Navigation buttons or P ^ v to select desired programme.



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## NOW/NEXT Guide Mode

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

Button	Description
Red button	Change EPG mode.
<b>OK</b>	When 'Now' is selected, it is moved to selected programme and EPG disappears When 'Next' is selected, a reservation pop-up window appears.
< >	Select NOW or NEXT Programme.
^ v	Select the Broadcast Programme.
P ^ v	Page Up/Down.
<b>GUIDE</b>	Switch off EPG.
<b>BACK</b>	
<b>EXIT</b>	
<b>TV/RAD</b>	Select DTV or RADIO Programme.
<b>INFO</b>	Detail information on or off.

## Date Change Mode

Button	Description
Green button	Switch off Date setting mode.
v	
<b>BACK</b>	Change to the selected date.
<b>OK</b>	
< >	Select a date.
<b>GUIDE</b>	Switch off EPG.
<b>EXIT</b>	

## Extended Description Box

Button	Description
<b>INFO</b>	The detail information on or off.
^ v	Text Up/Down.
<b>GUIDE</b>	Switch off EPG.
<b>EXIT</b>	

## 8 Day Guide Mode

Button	Description
Red button	Change EPG mode.
Green button	Enter Date setting mode.
<b>OK</b>	When 'Currently broadcasting programme is selected, it is moved to selected programme and EPG disappears When 'Future broadcasting programme is selected, a reservation pop-up window appears.
< >	Select Programme.
^ v	Select the Broadcast Programme.
P ^ v	Page Up/Down.
<b>GUIDE</b>	Switch off EPG.
<b>BACK</b>	
<b>EXIT</b>	
<b>TV/RAD</b>	Select DTV or RADIO Programme.
<b>INFO</b>	Detail information on or off.

## MHEG (Multimedia and Hypermedia Information coding Expert Group) (In digital mode)

**This feature is not available for all country.**

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.

### Teletext Within Digital Service

- 1 Press the numeric or **P** ^ **v** button to select a digital service which broadcasts digital teletext.
- 2 Follow the indications on digital teletext and move onto the next step by pressing **TEXT**, **OK**, Navigation buttons, **RED**, **GREEN**, **YELLOW**, **BLUE** or **NUMBER** buttons and etc.
- 3 To change digital teletext service, select a different service by the numeric or **P** ^ **v** button.



### Teletext in Digital Service

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

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

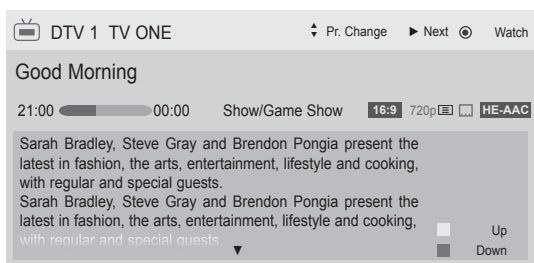


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### This feature is enabled only in New Zealand.

- In New Zealand, pressing the Guide key will display MHEG EPG provided by New Zealand on the screen.

This system has an MHEG(Multimedia and hypermedia information coding expert group) to help your navigation through all the possible viewing options.



### Select a programme

- 1 Press Navigation buttons to preview the Broadcast Programme Information.
- 2 Press Navigation buttons to change to desired channel.
- 3 Press **OK** to remove MHEG after moving to a selected channel.



### Programme Listing Mode

Button	Description
^ v	Select the Broadcast Programme Information.
< >	Select Channel.
Yellow button	Change to Next Week or Previous Day.
Blue button	Change to Next Day or Today.
<b>OK</b>	The MHEG will disappear after moving to a selected channel.
<b>GUIDE</b>	Change to Now/Next mode.
<b>BACK</b>	Switch off MHEG.
<b>INFO</b>	Detail information on or off.

### NOW/NEXT Guide Mode

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

Button	Description
^ v	Select desired channel.
<b>OK</b>	The MHEG will disappear after moving to a selected channel.
<b>GUIDE</b>	Change to Listing mode.
<b>BACK</b>	Switch off MHEG.
<b>INFO</b>	Detail information on or off.

### Switch on/off MHEG

- 1 Press **GUIDE** to switch on or off MHEG.

## Using additional options

### Adjusting aspect ratio

Resize an image to view at its optimal size by pressing **RATIO** while you are watching TV.

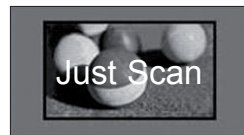
#### ! NOTE

- You can also change the image size by pressing **Q. MENU** or accessing **Aspect Ratio** in the Picture menus.
- For **Zoom Setting**, select **14:9, Zoom** and **Cinema Zoom** in Ratio Menu. After completing **Zoom Setting**, the display goes back to **Q.Menu**.
- You can only select 4:3, 16:9 (Wide), 14:9, Zoom/Cinema Zoom in Component mode.
- You can only select 4:3, Original, 16:9 (Wide), 14:9, Zoom/Cinema Zoom in HDMI mode.
- You can only select 4:3, 16:9 (Wide) in RGB-PC, HDMI-PC mode only.
- In DTV/HDMI/Component (over 720p) mode, **Just Scan** is available.
- In DTV 576p mode, **Just Scan** is available in Australia/New Zealand only.

- **16:9**: Resizes images to fit the screen width.



- **Just Scan**: Displays video images in the original size without removing parts of the edge of the image.



#### ! NOTE

- If you select **Just Scan**, you may see image noises at the edge of the original signal.

- **Original**: When your TV receives a wide screen signal it will automatically change to the picture format broadcasted.



- **Full Wide(Only DTV)**: When TV receives the wide screen signal, it will let you adjust the picture horizontally or vertically, in a linear proportion, to fill the entire screen fully.

4:3 and 14:9 video is supported in full screen without any video distortion through DTV input.



- **4:3**: Resizes images at the standard 4:3 without distortion.



- **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**: Enlarges an image to fit the screen width. The top and bottom of the image may not appear.

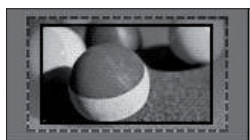


#### ! NOTE

- If you access, **Aspect Ratio** in the quick menus,
  - Press the Navigation buttons to stretch an image vertically.
  - Press the Navigation buttons to move the zoom focus up or down.

ENGLISH

- **Cinema Zoom** : Enlarges an image in the cinemascope ratio, 2.35:1.
- To change the ratio of the cinema zoom, press the Navigation buttons and its range is from 1 to 16.
- To move the zoom focus up or down, press the Navigation buttons.



#### ! NOTE

- If you enlarge or reduce an image, the image may be distorted.

## Changing AV modes

Each AV mode has the optimized image and sound settings.

Press **AV MODE** repeatedly to select an appropriate mode.

Mode	Description
<b>Off</b>	Changes to the previously customized settings
<b>Cinema</b> or <b>THX Cinema</b>	Use the optimized image and sound setting for the cinematic look
<b>Sport</b>	Use the optimized image and sound setting for dynamic action sports
<b>Game</b>	Use the optimized image and sound setting for fast gaming When playing a video game using PlayStation or Xbox, it is recommended to use the <b>Game</b> mode. When in <b>Game</b> mode, functions related to picture quality will be optimized for playing games.

#### ! NOTE

- If you select **Off** in AV mode, the picture and image which you initially set will be selected.

## Using the input list

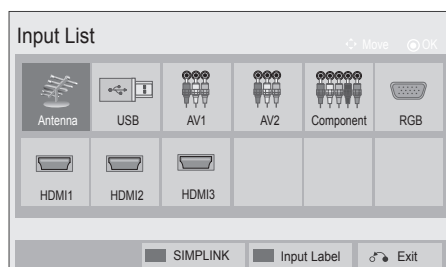
### Selecting an input source

- 1 Press **INPUT** to access the input sources.
  - The connected device displays on each input source.

#### ! NOTE

- You can also access the input source list by selecting **INPUT** in the main menus.

- 2 Press Navigation buttons to scroll to one of the input sources and press **OK**.
  - Image shown may differ from your TV.





Input source	Description
<b>Antenna</b>	Select it when watching the TV. (Only DTV : Select it when watching the DTV/TV/RADIO.)
<b>USB</b>	Select it when using USB depends on connector.
<b>AV</b>	Select it when watching the VCR or external equipment.
<b>Component</b>	Select it when using the DVD or the Digital set-top box depends on connector.
<b>RGB</b>	Select it when using PC depends on connector.
<b>HDMI</b>	Select it when using DVD, PC or Digital set-top box depend on connector.

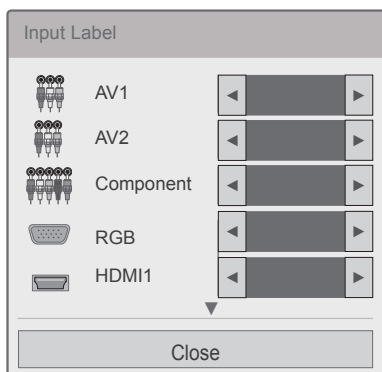
The connected input sources display in black and the disconnected input sources in grey.

- To add an input label, press the Blue button. You can easily identify a device connected to each input source.
- To access the SIMPLINK, press the Red button. If you select “**SIMPLINK and On**”, the pop-up window for the HDMI input will not display.

#### Adding an Input label

Add a label to an input source so that you can easily identify a device connected to each input source.

- Image shown may differ from your TV.



- 1 Press **INPUT** to access the input sources.
- 2 Press the **Blue** button.
- 3 Press the Navigation buttons to scroll to one of the input sources.
- 4 Press the Navigation buttons to scroll to one of the input labels and press **OK**.
- 5 When you are finished, press **Close**. When you return to the previous menu, press **BACK**.

## Locking the buttons on the TV (Child Lock)

Lock the buttons on the TV to prevent any unwanted operations or accidents by children.

- 1 Press **Home** to access the main menus.
- 2 Press the Navigation buttons to scroll to **LOCK** and press **OK**.
- 3 Press Navigation buttons to scroll to **Key Lock** and press **OK**.
- 4 Select **On** to activate the Key lock feature.
  - To deactivate the Key lock feature, select **Off**.
- 5 When you are finished, press **EXIT**. When you return to the previous menu, press **BACK**.

#### NOTE

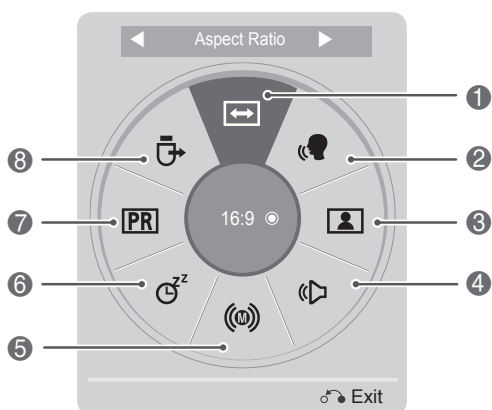
- The TV is programmed to remember the last setting after you turn the TV off.
- If you turn the TV off with the **Key Lock** feature activated, press the **o**, **INPUT**, **P ▲ v** or Number buttons on the remote control.
- If you press any button on the TV with the Key lock feature activated, **Key Lock** appears on the screen.

## Using the quick menu

Customize the frequently using menus.

- 1 Press **Q. MENU** to access the quick menus.
- 2 Press Navigation buttons to scroll through the following menus and press **OK**.

- Image shown may differ from your TV.



### NOTE

- The available menus and options may differ from the input source that you are using.
- 3 Press Navigation buttons to scroll to the option you want.
  - 4 When you are finished, press **Q. MENU**.

ENGLISH

Menu	Description
① <b>Aspect Ratio</b>	Changes the image size ( <b>16:9, Just Scan, Original, Full Wide, 4:3, 14:9, Zoom, Cinema Zoom</b> )
② <b>Clear Voice II</b>	By differentiating the human frequency range from others, it helps users listen to human voices better.
③ <b>Picture Mode (Depending on model)</b>	Changes the image mode ( <b>Intelligent sensor, Vivid, Standard, Cinema, Sport, Game, Expert1, Expert2</b> )
④ <b>Sound Mode</b>	Changes the sound mode ( <b>Standard, Music, Cinema, Sport, Game</b> )
⑤ <b>Audio or Audio Language</b>	Changes the sound output.
⑥ <b>Sleep Timer</b>	Sets the length of time until the TV to turns off
⑦ <b>Skip Off/On</b>	Sets the Skip Off/On.
⑧ <b>USB Device</b>	Ejects a USB device when a USB device is connected

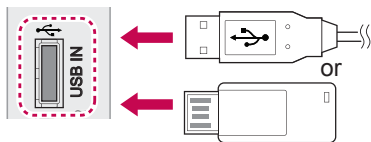
## ENTERTAINMENT

- Image shown may differ from your TV.

### Connecting USB storage devices

Connect USB storage devices such as a USB flash memory, external hard drive to the TV and use multimedia features (See "Browsing files" on p.36).

Connect a USB flash memory or USB memory card reader to the TV as shown on the following illustration. The My media screen appears, "POP UP MENU" will not be displayed while the OSD including Menu, EPG or Schedule list is activated.



To disconnect a USB storage device, make sure to end the connection properly to prevent damages to the TV or files.

- 1 Press **Q.MENU** to access the quick menus.
- 2 Press the Navigation buttons to scroll to **USB Device** and press **OK**.
- 3 Press the Navigation buttons to scroll to **Eject** and press **OK**.
- 4 Disconnect the USB storage device only when the message says that it is safe to remove.



#### CAUTION

- Do not turn the TV off or remove a USB storage device while the USB storage device is connected to the TV, as this could result in loss of files or damage to the USB storage device.
- Back up your files saved on a USB storage device frequently, as you may lose or damage the files and this may be not covered by the manufacturer's warranty.

#### Tips for using USB storage devices

- Only a USB storage device is recognizable.
- If the USB storage device is connected through a USB hub, the device is not recognizable.
- A USB storage device using an automatic recognition programme may not be recognized.
- A USB storage device which uses its own driver may not be recognized.
- The recognition speed of a USB storage device may depend on each device.
- Please do not turn off the TV or unplug the USB device when the connected USB storage device is working. When such device is suddenly separated or unplugged, the stored files or the USB storage device may be damaged.
- Please do not connect the USB storage device which was artificially manoeuvred on the PC. The device may cause the product to malfunction or fail to be played. Never forget to use only a USB storage device which has normal music files, image files or movie files.
- Please use only a USB storage device which was formatted as a FAT32 file system, NTFS file system provided with the Windows operating system. In case of a storage device formatted as a different utility programme which is not supported by Windows, it may not be recognized.
- Please connect power to a USB storage device(over 0.5 A) which requires an external power supply. If not, the device may not be recognized.
- Please connect a USB storage device with the cable offered by the device maker.
- Some USB storage devices may not be supported or operated smoothly.
- File alignment method of USB storage device is similar to Window XP and filename can recognize up to 100 English characters.
- Be sure to back up important files since data stored in a USB memory device may be damaged. We will not be responsible for any data loss.
- If the USB HDD does not have an external power source, the USB device may not be detected. So be sure to connect the external power source.
  - Please use a power adaptor for an external

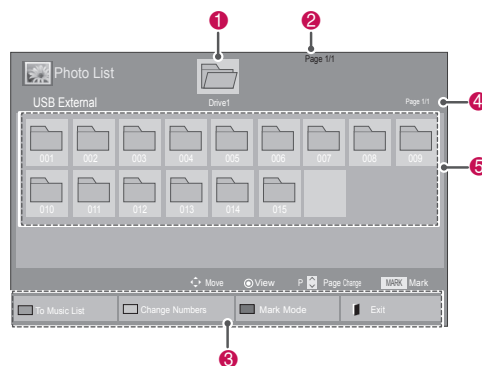
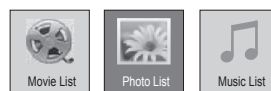
power source. We do not guarantee an USB cable for an external power source.

- If your USB memory device has multiple partitions, or if you use a USB multi-card reader, you can use up to 4 partitions or USB memory devices.
- If a USB memory device is connected to a USB multi-card reader, its volume data may not be detected.
- If the USB memory device does not work properly, disconnect and reconnect it.
- How fast a USB memory device is detected differs from device to device.
- If the USB is connected in Standby Mode, specific hard disk will automatically be loaded when the TV is turned on.
- The recommended capacity is 1 TB or less for a USB external hard disk and 32 GB or less for USB memory.
- Any device with more than the recommended capacity may not work properly.
- If a USB external hard disk with a “Energy Saving” function does not work, turn the hard disk off and on again to make it work properly.
- USB storage devices below USB 2.0 are supported as well. But they may not work properly in the movie list.
- Maximum of 999 folders or files can be recognized under one folder.
- The file arrangement of the USB storage device is similar to that of Windows XP and supports up to 100 alphabetical characters.
- If there are a lot of folders or files all within one folder, the device may not be able to access these properly.

## Browsing files

Access the photo, music, or movie lists and browse files.

- 1 Connect a USB storage device.
- 2 Press **Home** to scroll to main menus.
- 3 Press the Navigation buttons to scroll to **My Media** and press **OK**.
- 4 Press Navigation buttons to scroll to **PHOTO LIST**, **MUSIC LIST** or **MOVIE LIST** and press **OK**.



No.	Description
1	Moves to upper level folder
2	Current page/Total pages
3	Corresponding buttons on the remote control
4	Current page/ total pages of contents under the folder focused on 1
5	Contents under the folder focused on 1
Button	Description
Green button	Repeatedly, press the GREEN button to converted to Photo List->Music List, Music List->Movie List or Movie List->Photo List.
Yellow button	A method to view in 5 large thumbnail or simple list.
Blue button	Convert to Mark Mode.

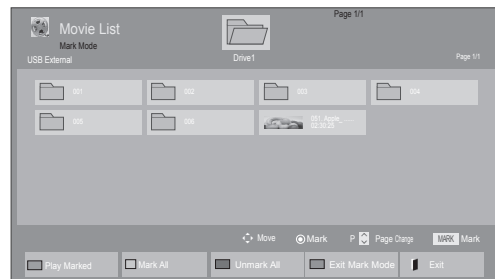
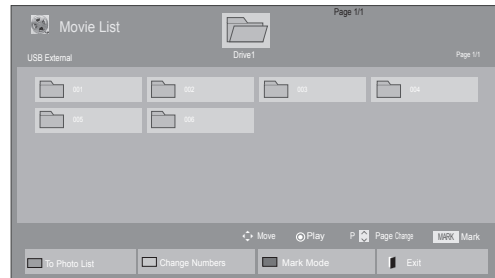
Supported file format

Type	Supported file format
<b>Movie</b>	<p>DAT,MPG,MPEG,VOB,AVI,DivX,MP4,MKV,T S,TRP,TP,ASF,WMV,FLV)</p> <p><b>Movie</b>(* .mpg/* .mpeg/* .dat/* .ts/* .trp/* .tp/* .vob/* .mp4/* .mov/* .mkv/* .divx/* .avi/* .asf/* .wmv/* .flv/* .avi(motion-jpeg)/* .mp4(motion-jpeg)/* .mkv(motion-jpeg))supporting file</p> <p><b>Video format</b> : DivX3.11, DivX4.12, DivX5.x, DivX6, Xvid1.00, Xvid1.01, Xvid1.02, Xvid1.03, Xvid1.10 beta-1/beta-2, Mpeg-1, Mpeg-2, Mpeg-4, H.264/AVC, VC1, JPEG, Sorenson H.263</p> <p><b>Audio format</b> : Dolby Digital, AAC, Mpeg, MP3, LPCM, HE-AAC, ADPCM, WMA</p> <p><b>Bit rate</b> : within 32 kbps to 320 kbps(MP3)</p> <p><b>External Subtitle format</b> : * .smi/* .srt/* .sub (MicroDVD,Subviewer1.0/2.0)/* .ass/* .ssa/* .txt(TMPlayer)/* .psb(PowerDivX)</p> <p><b>Internal Subtitle format</b> : only, XSUB (It is the subtitle format used in DivX6 files)</p>
<b>Photo</b>	<p>JPEG</p> <p>Baseline : 64 x 64 to 15360 x 8640 Progressive : 64 x 64 to 1920 x 1440</p> <ul style="list-style-type: none"> <li>You can play JPEG files only.</li> <li>Non-supported files are displayed in the form of predefined icon.</li> </ul>
<b>Music</b>	<p>MP3</p> <p>Bit rate 32 to 320</p> <ul style="list-style-type: none"> <li>Sampling rate MPEG1 Layer3 : 32 kHz, 44.1 kHz, 48 kHz</li> <li>Sampling rate MPEG2 Layer3 : 16 kHz, 22.05 kHz, 24 kHz</li> <li>Sampling rate MPEG2.5 Layer3 : 8 kHz, 11.025 kHz, 12 kHz</li> </ul>

Viewing movies

Play video files on the TV. Your TV displays all of the video files saved in a USB storage device or shared folder on a PC.

- 1 Press the Navigation buttons to scroll to **My Media** and press **OK**.
- 2 Press the Navigation buttons to scroll to **Movie List** and press **OK**.
- 3 Select **Drive1** to access the connected USB storage device.
- 4 Press the Navigation buttons to scroll to a folder you want and press **OK**.
- 5 Press the Navigation buttons to scroll to a file you want and press **OK**.





ENGLISH

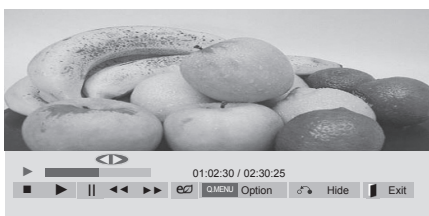
Menu	Description
<b>Play Marked</b>	Play the selected movie file. Once a movie file finishes playing, the next selected one will be played automatically.
<b>Mark All</b>	Mark all movie files on the screen.
<b>Unmark All</b>	Deselect all marked movie files.
<b>Exit Mark Mode</b>	Exit the Mark Mode.







## 6 Play a movie.

**NOTE**


- Non-supported files are displayed the preview image by icon only .
- Abnormal files are displayed in the form of bitmap .

## 7 Control playback by using the following buttons.



Button	Description
	Stops the playback
	Plays a video
	Pauses or resumes the playback
	Scans backward in a file
	Scans forward in a file
<b>Home or Q.MENU</b>	Show the <b>Option</b> menu.
<b>BACK</b>	Hide the menu on the full-sized screen.
<b>EXIT</b>	Return to normal TV viewing.
	Skips to specific points in a file during playback. The time of a specific point will appear on the status bar. In some files, this function may not work properly.
<b>ENERGY SAVING</b>	Press the <b>ENERGY SAVING</b> button repeatedly to increase the brightness of your screen.
<b>AV MODE</b>	Press the <b>AV MODE</b> button repeatedly to select the desired source.

## Tips for using playing video files

- Some user-created subtitles may not work properly.
- Some special characters are not supported in subtitles.
- HTML tags are not supported in subtitles.
- Subtitles in languages other than the supported languages are not available.
- Changing font and colour in subtitles is not supported.
- Subtitles in languages other than one specified are not supported.
- Video files with subtitle files of 1 MB or larger may not be played properly.
- The screen may suffer temporary interruptions (image stoppage, faster playback, etc.) when the audio language is changed.
- A damaged movie file may not be played correctly, or some player functions may not be usable.
- Movie files produced with some encoders may not be played correctly.
- If the video and audio structure of recorded file is not interleaved, either video or audio is outputted.
- HD videos with a maximum of 1920x1080@25/30P or 1280x720@50/60P are supported, depending on the frame.
- Videos with resolutions higher than 1920x1080@25/30P or 1280x720@50/60P may not work properly depending on the frame.
- Movie files other than the specified types and formats may not work properly.
- Max bitrate of playable movie file is 20 Mbps. (only, Motion JPEG : 10 Mbps)
- We do not guarantee smooth playback of profiles encoded level 4.1 or higher in H.264/AVC.
- DTS Audio codec is not supported.
- A movie file more than 30 GB in file size is not supported for playback. The file size limit is dependent on the encoding environment.
- A DivX movie file and its subtitle file must be located in the same folder.
- A video file name and its subtitle file name must be identical for it to be displayed.
- Playing a video via a USB connection that doesn't support high speed may not work properly.
- Files encoded with GMC(Global Motion Compensation) and Qpel (Quarterpel Motion Estimation) may not be played.
- When you are watching the movie by Movie List function, you can adjust an image by Energy Saving and AV Mode key on the remote control. User setup for each image mode does not operate.
- Trick Mode does not support other functions than  if video files do not have index information.
- Video file names that contain special characters may not be playable.

Video options

- 1 Press **Q. MENU** to access the **Pop-Up** menus.
- 2 Press the Navigation buttons to scroll to **Set Video Play.**, **Set Video.** or **Set Audio.** and press **OK**.

**NOTE**

- Option values changed in **Movie List** does not affect **Photo List** and **Music List**.
- Option value changed in **Photo List** and **Music List** are changed likewise in **Photo List** and **Music List** excluding **Movie List**.
- When replaying the video file after stopping, you can play from where it stopped previously.

<b>Sync</b>	Adjusts the time synchronisation of the subtitle from -10 secs to +10 secs by steps of 0.5 secs during movie play.
<b>Position</b>	Changes the position of the subtitle either up or down during movie play.
<b>Size</b>	Selects your desired Subtitle size during movie play.
<b>Repeat</b>	Turn on/off repeat function of movie playback. When turned on, the file within the folder will be played back repeatedly. Even when the repeated playback is turned off, it can run the playback if the file name is similar to the previous file.

When you select the **Set Video Play.**,

- 1 Press the Navigation buttons to scroll to show the **Picture Size**, **Audio Language**, **Subtitle Language** or **Repeat**.
- 2 Press the Navigation buttons to scroll to make appropriate adjustments.

Menu	Description
<b>Picture Size</b>	Selects your desired picture format during movie play.
<b>Audio Language</b>	Changes the Language Group of the audio during movie play. Files with a single audio track cannot be selected.
<b>Subtitle Language</b>	Turn on/off the subtitle.
<b>Language</b>	Activated for SMI subtitle and can select the language within the subtitle.
<b>Code Page</b>	Can select the font for subtitle. When set to default, same font as general menu will be used.

Subtitle Language	Support Language
<b>Latin1</b>	English, French, Spanish, Portuguese, Malaysia, Indonesia
<b>Cyrillic</b>	Russian
<b>Thai</b>	Thai
<b>Hebrew</b>	Hebrew
<b>Arabic</b>	Arab, Parsi, Krudish
<b>Unicode(UTF-16)</b>	Vietnamese language

**NOTE**

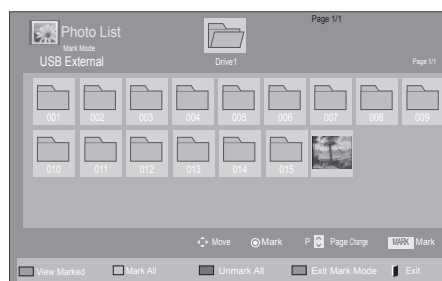
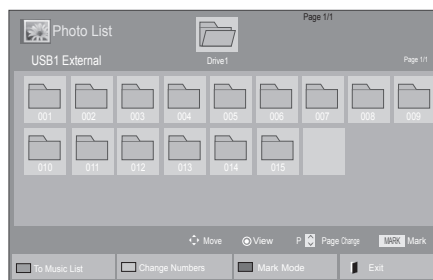
- Only 10,000 of sync blocks can be supported within the subtitle file.
- When playing a video, you can adjust the Picture Size by pressing the **RATIO** button.

When you select the **Set Video**,

- 1 Press the Navigation buttons to scroll to make appropriate adjustments. (See p.48)

When you select the **Set Audio**,

- 1 Press the Navigation buttons to scroll to show the **Sound Mode**, **Auto Volume**, **Clear Voice II** or **Balance**.
- 2 Press the Navigation buttons to scroll to make appropriate adjustments. (See p.53)



Menu	Description
<b>View Marked</b>	Display the selected photo file.
<b>Mark All</b>	Mark all photo files on the screen.
<b>Unmark All</b>	Deselect all marked photo files.
<b>Exit Mark Mode</b>	Exit the Mark Mode.



## Viewing photos

View image files saved in a USB storage device or shared folder on a PC through the network connection. The displays on the screen may differ from the model.

- 1 Press the Navigation buttons to scroll to **My Media** and press **OK**.
- 2 Press the Navigation buttons to scroll to **Photo List** and press **OK**.
- 3 Press the Navigation buttons to select **Drive1** to access the connected USB storage device.
- 4 Press the Navigation buttons to scroll to a folder you want and press **OK**.
- 5 Press the Navigation buttons to scroll to a file you want and press **OK**.

- 6 View photos.

### NOTE

- Non-supported files are displayed the preview image by icon only .
- Abnormal files are displayed in the form of bitmap .



Using photo options

Use the following options while viewing photos.



Options

Number of selected photos

Option	Description
<b>Slideshow</b>	Starts or stops a slideshow with selected photos. If there are no selected photos, all photos saved in the current folder display during a slideshow. To set a slideshow speed, select <b>Option</b> .
<b>BGM</b>	Turns the background music on or off. To set the background music folder, select <b>Option</b> . You can adjust Option by Q.MENU or Home button on the remote control.
<b>⤵ (Rotate)</b>	Rotates photos clockwise (90°, 180°, 270°, 360°).  <div style="border: 1px solid black; padding: 5px;"> <p><b>NOTE</b></p> <ul style="list-style-type: none"> <li>The supported photo size is limited. You cannot rotate a photo if the resolution of the rotated width is larger than the supported resolution size.</li> </ul> </div>
<b>Q</b>	View the photo by zoom in 2, 4 times.
<b>ENERGY SAVING</b>	Press the <b>ENERGY SAVING</b> button repeatedly to change the brightness of your screen.

<b>Option</b>	<ul style="list-style-type: none"> <li><b>Slide Speed:</b> Selects a slideshow speed (<b>Fast</b>, <b>Medium</b>, <b>Slow</b>).</li> <li><b>BGM:</b> Selects a music folder for the background music.</li> </ul> <div style="border: 1px solid black; padding: 5px;"> <p><b>NOTE</b></p> <ul style="list-style-type: none"> <li>You cannot change the music folder while the background music is playing.</li> <li>You can only select the MP3 folder saved on the device that currently displays the photo.</li> </ul> </div>
<b>Hide</b>	Hides the option window. To display the options, press <b>OK</b> .

Photo options

- 1 Press **Q. MENU** or **Home** to show the **Option** menus.
- 2 Press the Navigation buttons to scroll to **Set Photo View.**, **Set Video.** or **Set Audio.** and press **OK**.

**NOTE**

- Option values changed in **Movie List** does not affect **Photo List** and **Music List**.
- Option value changed in **Photo List** and **Music List** are changed likewise in **Photo List** and **Music List** excluding **Movie List**.

When you select the **Set Photo View**,

- 1 Press the Navigation buttons to scroll to select **Slide Speed** or **BGM**.
- 2 Press the Navigation buttons to scroll to make appropriate adjustments.

When you select the **Set Video**,

- 1 Press the Navigation buttons to scroll to make appropriate adjustments. (See p.48)

When you select the **Set Audio**,

- 1 Press the Navigation buttons to scroll to show the **Sound Mode, Auto Volume, Clear Voice II or Balance**.
- 2 Press the Navigation buttons to scroll to make appropriate adjustments. (See p.53)

### Listening to music

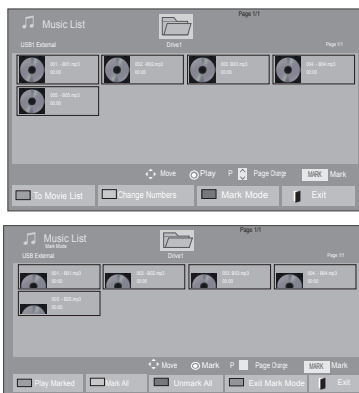
- 1 Press the Navigation buttons to scroll to **My Media** and press **OK**.
- 2 Press the Navigation buttons to scroll to **Music List** and press **OK**.
- 3 Press the Navigation buttons to select **Drive1** to access the connected USB storage device.
- 4 Press the Navigation buttons to scroll to a folder you want and press **OK**.
- 5 Press the Navigation buttons to scroll to a file you want and press **OK**.

- 6 Play music.

- 7 Control playback by using the following buttons.



Button	Description
	Stops playback
	Plays a music file
	Pauses or resumes playback
	Skips to the next file
	Skips to the previous file
	When playing, When you press the  button, the previous music file will be played. When you press the  button, the next music file will be played.
Green button	Start playing the selected music files and then move to the <b>Photo List</b> .
<b>ENERGY SAVING</b>	Press the <b>ENERGY SAVING</b> button repeatedly to change the brightness of your screen.
<b>Home or Q.MENU</b>	Show the Option menu.
<b>Hide</b>	Hides the option window. To display the options, press <b>OK</b> .
<b>EXIT</b>	When you press the <b>EXIT</b> button while the Music player is displayed, only the music will be stopped and the player will not return to normal TV viewing. When you press the <b>EXIT</b> button while the music is stopped or while the music player is hidden, the player will return to normal TV viewing.
<b>&lt; &gt;</b>	When using the <b>&lt; &gt;</b> button during playback a cursor indicating the position can be played.













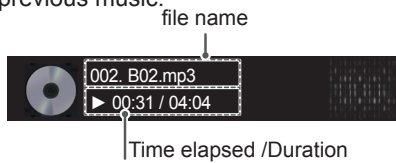
Menu	Description
<b>Play Marked</b>	Display the selected music file.
<b>Mark All</b>	Mark all music files on the screen.
<b>Unmark All</b>	Deselect all marked music files.
<b>Exit Mark Mode</b>	Exit the Mark Mode.

#### Tips for playing music files

- This unit cannot support the ID3 Tag embedded MP3 files.

### ! NOTE

- Non-supported files are displayed the preview image by icon only .
- Abnormal files are displayed in the form of bitmap .
- A damaged or corrupted music does not play but displays 00:00 in playtime.
- A music downloaded from a paid service with copyright protection does not start but displays inappropriate information in playtime.
- If you press **OK**,  buttons, screen saver is stopped.
- The **PLAY** () , **Pause** () ,  ,  ,  buttons on the remote control are also available in this mode.
- You can use the  button to select the next music and the  button to select the previous music.



### Music options

- 1 Press **Q. MENU** to access the Pop-Up menus.
- 2 Press the Navigation buttons to scroll to **Set Audio Play.** or **Set Audio.** and press **OK**.

### ! NOTE

- Option values changed in **Movie List** does not affect **Photo List** and **Music List**.
- Option value changed in **Photo List** and **Music List** are changed likewise in **Photo List** and **Music List** excluding **Movie List**.

When you select the **Set Audio Play.**,

- 1 Press the Navigation buttons to scroll to select the **Repeat** or **Random**.
- 2 Press the Navigation buttons to scroll to make appropriate adjustments.

When you select the **Set Audio.**,

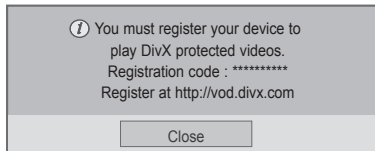
- 1 Press the Navigation buttons to scroll to select the **Sound Mode, Auto Volume, Clear Voice II** or **Balance**.
- 2 Press the Navigation buttons to scroll to make appropriate adjustments. (See p.53)

## DivX® VOD Guide

### DivX® VOD Registration

In order to play purchased or rented DivX® VOD contents, you should register your device with 10 digit DivX registration code from your device at [www.divx.com/vod](http://www.divx.com/vod).

- 1 Press **Home** to access the main menus.
- 2 Press the Navigation buttons to scroll to **MY MEDIA** and press **OK**.
- 3 Press the Blue button.
- 4 Press the Navigation buttons to scroll to **DivX VOD Registration** and press **OK**.
- 5 View the registration code of your TV.
- 6 When you are finished, press **EXIT**. When you return to the previous menu, press **BACK**.



ENGLISH

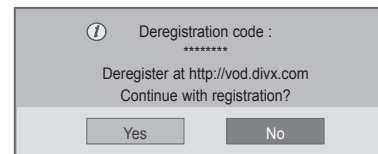
### NOTE

- Movie files are supported as follows  
**Resolution** : under 1920x1080 WxH pixels  
**Frame rate** : under 30 frames/sec(1920x1080), under 60 frames/sec(under 1280x720)
- Video Codec : MPEG 1, MPEG 2, MPEG 4, H.264/AVC, DivX 3.11, DivX 4.12, DivX 5.x, DivX 6, Xvid 1.00, Xvid 1.01, Xvid 1.02, Xvid 1.03, Xvid 1.10-beta1, Xvid 1.10-beta2, JPEG, VC1, Sorenson H.263/H.264.

### DivX® VOD Deregistration

You should deregister your device with 8 digit DivX deregistration code from your device at [www.divx.com/vod](http://www.divx.com/vod).

- 1 Press **Home** to access the main menus.
- 2 Press the Navigation buttons to scroll to **MY MEDIA** and press **OK**.
- 3 Press the Blue button.
- 4 Press the Navigation buttons to scroll to **DivX Deregistration** and press **OK**.
- 5 Press the Navigation buttons to select **Yes** to confirm.



- 6 When you are finished, press **EXIT**. When you return to the previous menu, press **BACK**.

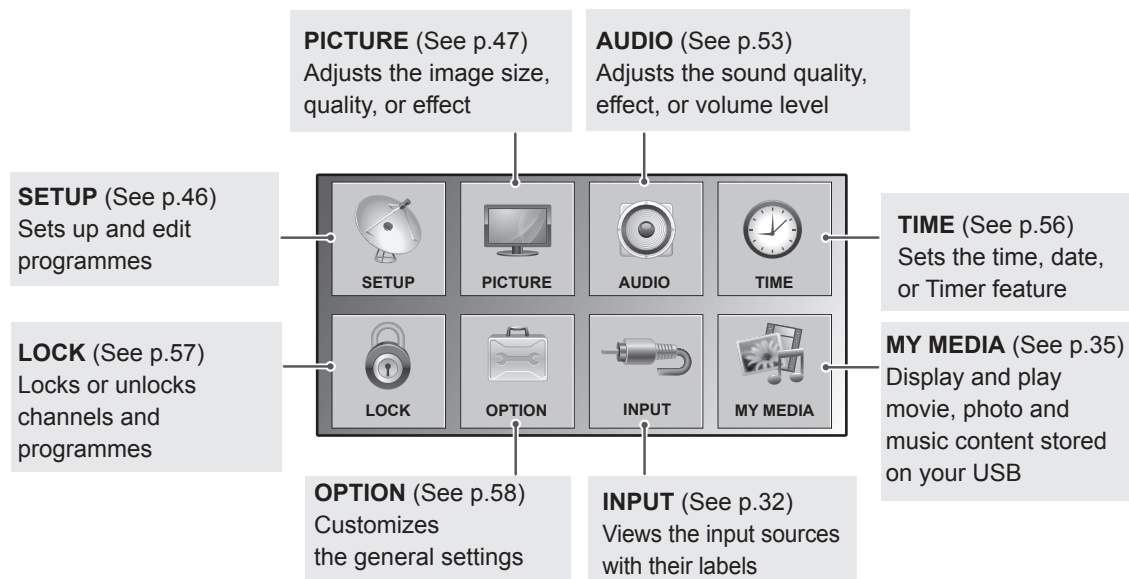
### NOTE

- Once the deregistration is executed, you must register your device again to see DivX® VOD contents.

# CUSTOMIZING TV SETTINGS

## Accessing main menus

- 1 Press **Home** to access the main menus.
- 2 Press the Navigation buttons to scroll to one of the following menus and press **OK**.
- 3 Press Navigation buttons to scroll to the setting or option you want and press **OK**.
- 4 When you are finished, press **EXIT**.



## Customizing settings

### SETUP settings

- Image shown may differ from your TV.

- 1 Press **Home** to access the main menus.
- 2 Press the Navigation buttons to scroll to **SETUP** and press **OK**.
- 3 Press the Navigation buttons to scroll to the setting or option you want and press **OK**.  
- To return to the previous level, press **BACK**.
- 4 When you are finished, press **EXIT**.



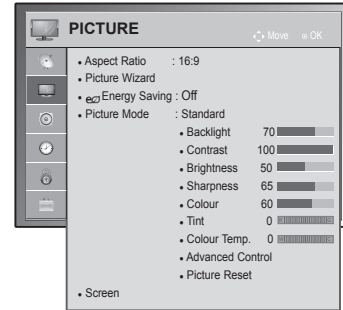
The available programme settings are described in the following:

Setting	Description
<b>Auto Tuning</b>	Tunes and stores all available programmes through antennas or cable inputs (See p.21).
<b>Manual Tuning</b>	Tunes and stores the programmes you want manually (See p.21).
<b>Programme Edit</b>	Adds or deletes programmes on the programme (See p.23).

- Image shown may differ from your TV.

## PICTURE settings


- 1 Press **Home** to access the main menus.
- 2 Press the Navigation buttons to scroll to **PICTURE** and press **OK**.
- 3 Press the Navigation buttons to scroll to the setting or option you want and press **OK**.  
- To return to the previous level, press **BACK**.
- 4 When you are finished, press **EXIT**.



The available picture settings are described in the following.

(Depending on model)

Setting	Description										
<b>Aspect Ratio</b>	Changes the image size to view images at its optimal size (See p.31).										
<b>Picture Wizard</b>	Adjusts the image quality and calibrates the screen by following the on-screen instructions. The customized options will be saved as <b>Expert1</b> in the <b>Picture Mode</b> . <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;"><b>Standard</b></td> <td>Mode to set standard picture quality. <b>(Black Level, White Level, Tint, Colour, Horizontal Sharpness, Vertical Sharpness, Backlight)</b></td> </tr> <tr> <td><b>Preferred</b></td> <td>Mode to set user preferred picture quality rather than standard picture. <b>(Black Level, White Level, Tint, Colour, Sharpness, Dynamic Contrast, Colour Temperature, Backlight)</b></td> </tr> </table> <div style="border: 1px solid gray; padding: 10px; margin-top: 10px;"> <p><b>NOTE</b></p> <ul style="list-style-type: none"> <li>• If you stop the setting before the final stage, the changes will not be applied.</li> <li>• If you use <b>Picture Wizard</b>, the Energy saving feature will turn off automatically.</li> <li>• If the picture quality setting of <b>Expert1</b> is changed, use the <b>Picture Reset</b> before entering the <b>Picture Wizard</b> to reset the picture quality setting.</li> <li>• In RGB-PC/HDMI-PC/DVI-PC mode, the changed Colour, Tint and H/V Sharpness values are not applied.</li> </ul> </div>	<b>Standard</b>	Mode to set standard picture quality. <b>(Black Level, White Level, Tint, Colour, Horizontal Sharpness, Vertical Sharpness, Backlight)</b>	<b>Preferred</b>	Mode to set user preferred picture quality rather than standard picture. <b>(Black Level, White Level, Tint, Colour, Sharpness, Dynamic Contrast, Colour Temperature, Backlight)</b>						
<b>Standard</b>	Mode to set standard picture quality. <b>(Black Level, White Level, Tint, Colour, Horizontal Sharpness, Vertical Sharpness, Backlight)</b>										
<b>Preferred</b>	Mode to set user preferred picture quality rather than standard picture. <b>(Black Level, White Level, Tint, Colour, Sharpness, Dynamic Contrast, Colour Temperature, Backlight)</b>										
<b>Energy Saving</b>	Reduces the power consumption by adjusting the screen brightness. <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th colspan="2">Option</th> </tr> <tr> <td style="width: 20%;"><b>Auto</b> (Depending on model)</td> <td>*This feature is not available for all models. The most suitable brightness is automatically adjusted according to the surrounding conditions.</td> </tr> <tr> <td><b>Off</b></td> <td>The <b>Energy Saving</b> is off</td> </tr> <tr> <td><b>Minimum/Medium/Maximum</b></td> <td>Selects the brightness level.</td> </tr> <tr> <td><b>Screen off</b></td> <td>The screen turns off in 3 seconds.</td> </tr> </table> <div style="border: 1px solid gray; padding: 10px; margin-top: 10px;"> <p><b>NOTE</b></p> <ul style="list-style-type: none"> <li>• When adjusting <b>Energy Saving</b> in MHEG mode, the <b>Energy Saving</b> setting is applied after MHEG is finished.</li> <li>• When you select <b>Screen Off</b>, the screen will be turned off in 3 seconds and <b>Screen Off</b> will start.</li> <li>• Selecting '<b>Screen Off</b>' while tuned to a radio station channel will reduce power consumption.</li> <li>• If you adjust '<b>Energy Saving-Auto</b>(Depending on model), <b>Maximum</b>', <b>Backlight</b> feature will not work.</li> <li>• When selecting <b>Auto</b>, <b>Backlight</b> is automatically adjusted through intelligent sensor according to the surrounding condition when intelligent sensor is in the TV. (Depending on model)</li> </ul> </div>	Option		<b>Auto</b> (Depending on model)	*This feature is not available for all models. The most suitable brightness is automatically adjusted according to the surrounding conditions.	<b>Off</b>	The <b>Energy Saving</b> is off	<b>Minimum/Medium/Maximum</b>	Selects the brightness level.	<b>Screen off</b>	The screen turns off in 3 seconds.
Option											
<b>Auto</b> (Depending on model)	*This feature is not available for all models. The most suitable brightness is automatically adjusted according to the surrounding conditions.										
<b>Off</b>	The <b>Energy Saving</b> is off										
<b>Minimum/Medium/Maximum</b>	Selects the brightness level.										
<b>Screen off</b>	The screen turns off in 3 seconds.										

Setting	Description
<b>Picture Mode</b>	Selects one of the preset image or customizes options in each mode for the best TV screen performance. You are also able to customize advanced options of each mode. The available preset picture modes vary depending on the TV.
<b>Mode</b>	
<b>Intelligent sensor</b>	*This feature is not available for all models. Adjusts picture according to the surrounding conditions.
<b>Vivid</b>	Adjusts the video image for the retail environment by enhancing the contrast, brightness, colour, and sharpness.
<b>Standard</b>	Adjusts the image for the normal environment.
<b>Cinema</b>	Optimizes the video image for a cinematic look to enjoy movies as if you are in a movie theatre
<b>Sport</b>	Optimizes the video image for high and dynamic actions by emphasizing primary colours such as white, grass, or sky blue.
<b>Game</b>	Optimizes the video image for a fast gaming screen such as PCs or games.
<b>Expert</b>	Adjusts the detailed video image settings for video experts as well as general viewers.
	<p> <b>NOTE</b></p> <ul style="list-style-type: none"> <li>• <b>Picture Mode</b> adjusts the TV for the best picture appearance. Select the preset value in the <b>Picture Mode</b> menu based on the programme category.</li> <li>• When the Intelligent sensor function is on, the most suitable picture is automatically adjusted according to the surrounding conditions.</li> <li>• You can also adjust <b>Picture Mode</b> in the <b>Q. Menu</b>.</li> </ul>



Setting	Description														
<b>TruMotion</b> (Depending on model)	<p>*This feature is not available for all models.                      It is used for the best picture quality without any motion blur or judder when you enter a quick image or Film Source.                      TruMotion works with all inputs except PC mode.                      This feature is disabled in RGB-PC, HDMI-PC and <b>MY MEDIA-Photo List</b> mode.                      If you enable "<b>TruMotion</b>", noise may appear on the screen.                      If this occurs, set "<b>TruMotion</b>" to "<b>Off</b>".                      If you select "<b>Picture Mode-Game</b>", set "<b>TruMotion</b>" to "<b>Off</b>".</p> <table border="1" data-bbox="384 534 1335 793"> <thead> <tr> <th data-bbox="384 534 587 564">Option</th> <th data-bbox="590 534 1335 564"></th> </tr> </thead> <tbody> <tr> <td data-bbox="384 569 587 605"><b>High</b></td> <td data-bbox="590 569 1335 605">Provide smoother picture movement.</td> </tr> <tr> <td data-bbox="384 610 587 646"><b>Low</b></td> <td data-bbox="590 610 1335 646">Provide smooth picture movement. Use this setting for standard use.</td> </tr> <tr> <td data-bbox="384 651 587 687"><b>Off</b></td> <td data-bbox="590 651 1335 687">Turn off TruMotion Operation.</td> </tr> <tr> <td data-bbox="384 692 587 728"><b>User</b></td> <td data-bbox="590 692 1335 728">User can adjust Judder and Blur level in TruMotion Operation, separately.</td> </tr> <tr> <td data-bbox="384 733 587 769"><b>Judder</b></td> <td data-bbox="590 733 1335 769">Adjusts noise of the screen.</td> </tr> <tr> <td data-bbox="384 774 587 810"><b>Blur</b></td> <td data-bbox="590 774 1335 810">Adjusts after-image of the screen.</td> </tr> </tbody> </table>	Option		<b>High</b>	Provide smoother picture movement.	<b>Low</b>	Provide smooth picture movement. Use this setting for standard use.	<b>Off</b>	Turn off TruMotion Operation.	<b>User</b>	User can adjust Judder and Blur level in TruMotion Operation, separately.	<b>Judder</b>	Adjusts noise of the screen.	<b>Blur</b>	Adjusts after-image of the screen.
Option															
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<b>SCREEN</b>	<p>Customizes the PC display options.</p> <table border="1" data-bbox="384 836 1335 1110"> <thead> <tr> <th data-bbox="384 836 587 866">Option</th> <th data-bbox="590 836 1335 866"></th> </tr> </thead> <tbody> <tr> <td data-bbox="384 871 587 907"><b>Resolution</b></td> <td data-bbox="590 871 1335 907">Selects a proper resolution when your PC uses.</td> </tr> <tr> <td data-bbox="384 911 587 948"><b>Auto Configure</b></td> <td data-bbox="590 911 1335 948">Sets the TV to optimize the options automatically for the TV display.</td> </tr> <tr> <td data-bbox="384 952 587 989"><b>Position</b></td> <td data-bbox="590 952 1335 989">Locates the image at the proper position.</td> </tr> <tr> <td data-bbox="384 993 587 1030"><b>Size</b></td> <td data-bbox="590 993 1335 1030">Adjusts the image size.</td> </tr> <tr> <td data-bbox="384 1034 587 1071"><b>Phase</b></td> <td data-bbox="590 1034 1335 1071">Eliminates horizontal streaking.</td> </tr> <tr> <td data-bbox="384 1075 587 1112"><b>Reset</b></td> <td data-bbox="590 1075 1335 1112">Restores the options to the default setting.</td> </tr> </tbody> </table>	Option		<b>Resolution</b>	Selects a proper resolution when your PC uses.	<b>Auto Configure</b>	Sets the TV to optimize the options automatically for the TV display.	<b>Position</b>	Locates the image at the proper position.	<b>Size</b>	Adjusts the image size.	<b>Phase</b>	Eliminates horizontal streaking.	<b>Reset</b>	Restores the options to the default setting.
Option															
<b>Resolution</b>	Selects a proper resolution when your PC uses.														
<b>Auto Configure</b>	Sets the TV to optimize the options automatically for the TV display.														
<b>Position</b>	Locates the image at the proper position.														
<b>Size</b>	Adjusts the image size.														
<b>Phase</b>	Eliminates horizontal streaking.														
<b>Reset</b>	Restores the options to the default setting.														

## Basic image options (Depending on model)

Setting	Description
<b>Backlight</b>	<p>Adjusts the brightness of the screen by controlling the LCD backlight. If you decrease the brightness level, the screen becomes darker and the power consumption will be reduced without any video signal loss.</p> <ul style="list-style-type: none"> <li>• If you use the “<b>Energy saving - Auto, Maximum</b>”, <b>Backlight</b> will not be available.</li> <li>• Benefits of using <b>Backlight</b> <ul style="list-style-type: none"> <li>- The electricity consumption is reduced by up to 60 %.</li> <li>- The black brightness is reduced. (As the black has greater depth, you can enjoy a better quality definition.)</li> <li>- You can adjust brightness with maintaining original signal resolution.</li> </ul> </li> </ul>
<b>Contrast</b>	Increases or decreases the gradient of the video signal. You may use <b>Contrast</b> when the bright part of the picture is saturated.
<b>Brightness</b>	Adjusts the base level of the signal in the picture.
<b>Sharpness</b>	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.
<b>Colour</b>	Adjusts intensity of all colours.
<b>Tint</b>	Adjusts the balance between red and green levels.
<b>Colour Temp.</b>	Set to warm to enhance hotter colours such as red, or set to cool to enhance cooler colours such as blue.
<b>Advanced Control or Expert Control</b>	Customizes the advanced options
<b>Picture Reset</b>	Restores the options of each mode to the factory default

**NOTE**

- You cannot adjust colour, sharpness and tint in the RGB-PC/HDMI-PC mode.

## Advanced image options (Depending on model)

Setting	Description
<b>Dynamic Contrast</b>	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.
<b>Dynamic Colour</b>	Adjusts screen colours so that they look livelier, richer and clearer. This feature enhances hue, saturation and luminance so that red, blue and green white look more vivid.
<b>Clear White</b>	Makes the white area of the screen brighter and clearer.
<b>Skin Colour</b>	It detects the skin area of video and adjusts it to express a natural skin colour.
<b>Noise Reduction</b>	Reduces screen noise without compromising video quality.
<b>Digital Noise Reduction</b>	Removes noise caused by compressing video.
<b>Gamma</b>	You can adjust brightness of dark area and middle gray level area of the picture. <ul style="list-style-type: none"> <li>• Low: Make the dark and middle gray level areas brighter.</li> <li>• Medium: Express the original picture level.</li> <li>• High: Make the dark and middle gray level area darker.</li> </ul>
<b>Black Level</b>	Sets black level of the screen to proper level. This function is available in the following modes: AV (NTSC-M), HDMI, Component . <ul style="list-style-type: none"> <li>• Low: The reflection of the screen gets darker.</li> <li>• High: The reflection of the screen gets brighter.</li> <li>• Auto : Sets black level of the screen to High or Low automatically according to the input signal level.</li> </ul>
<b>Eye Care</b>	Adjusts 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, Intelligent Sensor."
<b>Film Mode or Real Cinema</b>	Makes video clips recorded in film look more natural by eliminating judder effect. DVD and Blu-ray movies are filmed at 24 frames per second (fps). With LG Real Cinema, every frame is consistently processed 5 times in 1/24 of a second producing 120 fps with TruMotion or 2 times in 1/24 of a second producing 48 fps without TruMotion, thus totally eliminating the judder effect. This function can also work when TruMotion is off.

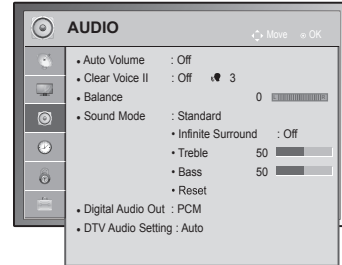
## Advanced image options (Depending on model)

Setting	Description
<b>Colour Gamut</b>	<p><b>Advanced Control</b> Maximizes the utilization of colour to increase colour quality. Standard: Displays standard set of colours. Wide: Increase number of colours used.</p>
	<p><b>Expert Control</b> Displays colour domain of the signal. Standard: Displays standard set of colours. Wide: Increase number of colours used. EBU: Mode to display EBU standard colour area. SMPTE: Mode to display SMPTE standard colour area. BT709: Mode to display BT709 standard colour area.</p>
<b>Edge Enhancer</b>	Shows clearer and distinctive yet natural edges of the video.
<b>xvYCC</b> (available in Cinema and Expert mode)	<p>*This feature is not available for all models. This is produces richer colours. This feature represents rich colours as much as a conventional video signal. This function is enabled in "Picture mode - Cinema, Expert" when xvYCC signal is inputted through HDMI.</p>
<b>Colour Filter</b>	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.
<b>Expert Pattern</b> (available in Expert modes)	This is the pattern used for expert adjustment This function is enabled in "Picture Mode - Expert" when you watch DTV.
<b>Colour Temperature</b>	Adjusts the overall colour of the screen by changing the white baseline.
	<p>a. Method : 2 Points</p> <ul style="list-style-type: none"> <li>• Pattern: Inner, Outer</li> <li>• Red/Green/Blue Contrast, Red/Green/Blue Brightness: The adjustment range is -50 to +50.</li> </ul> <p>b. Method : 10 Point IRE</p> <ul style="list-style-type: none"> <li>• Pattern: Inner, Outer</li> <li>• 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.</li> <li>• 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.</li> <li>• Red/Green/Blue: The adjustment range is -50 - +50.</li> </ul> <p>c. Apply to all inputs</p>
<b>Colour Management System</b>	<p>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/Yellow/Cyan/Magenta). 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.</p>

## AUDIO settings

• Image shown may differ from your TV.

- 1 Press **Home** to access the main menus.
- 2 Press the Navigation buttons to scroll to **AUDIO** and press **OK**.
- 3 Press the Navigation buttons to scroll to the setting or option you want and press **OK**.  
- To return to the previous level, press **BACK**.
- 4 When you are finished, press **EXIT**.



The available audio settings are described in the following.

(Depending on model)

Setting	Description
<b>Auto Volume</b>	Activates the Auto Volume feature to keep the volume level consistent whenever you change channels. The volume level may not be consistent due to different signal conditions of broadcasting stations.
<b>Clear Voice II</b>	Sets whether to enhance human voice clarity. You can adjust the level of clarity when you set this feature on.  <div style="border: 1px solid gray; padding: 5px;"> <p><b>NOTE</b></p> <ul style="list-style-type: none"> <li>If you select "On" for <b>Clear Voice II</b>, <b>Infinite Surround</b> feature will not work.</li> <li>Select levels from '-6' to '+6'.</li> </ul> </div>
<b>Balance</b>	Adjust balance between the left and right speakers according to your room environment.
<b>Sound Mode</b>	Selects one of the preset sound modes or customizes options in each mode.
<b>Mode</b>	
Standard	Select when you want standard-quality sound.
Music	Select when you listen to music.
Cinema	Select when you watch movies.
Sport	Select when you watch sports events.
Game	Select when you play games.
<b>Option</b>	
Infinite Surround	<b>Infinite Surround</b> is a patented LG proprietary sound processing technology that strives immersive 5.1 surround sound impression with front two loudspeakers.
Treble	Controls the dominant sounds in the output. When you turn up the treble, it will increase the output to the higher frequency range.
Bass	Controls the softer sounds in the output. When you turn up the bass, it will increase the output to the lower frequency range.
Reset	Resets the sound mode to the default setting.

ENGLISH

Setting	Description		
<b>Digital Audio Out</b>	<p>It is possible to use in DTV, HDMI, DivX mode.            This function allows you to select your preferred Digital Audio Output.            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.</p>		
	Item	Audio Input	Digital Audio output
	Auto	MPEG Dolby Digital Dolby Digital Plus HE-AAC	PCM Dolby Digital Dolby Digital Dolby Digital
	PCM	All	PCM
<b>DTV Audio Setting (In digital mode only)</b>	<p>When different audio types exist in an input signal, this function allows you to select the audio type you want.</p>		
	Mode		
	<b>Auto</b>	Automatically outputs in the order <b>HE-AAC &gt; Dolby Digital+ &gt; Dolby Digital &gt; MPEG</b> or <b>Dolby Digital+ &gt; Dolby Digital &gt; HE-AAC &gt; MPEG</b> .	
<b>HE-AAC, Dolby Digital+, Dolby Digital, MPEG</b>	<p>Allows users to select the audio type they want.            ex) If <b>MPEG</b> is selected, <b>MPEG</b> is always outputted.            If <b>MPEG</b> is not supported, another audio type is set in that order.</p>		
	See "Audio Language" on p.58		

This feature may not be applied based on country broadcasting circumstance.

**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 Press **Q. MENU** and press the Navigation to access the **Audio** or **Audio Language** and press **OK**.
- 2 Press the Navigation button to scroll to sound output and press **OK**.

Broadcast	On Screen Display
<b>Mono</b>	MONO
<b>Stereo</b>	STEREO
<b>Dual</b>	DUAL I , DUAL II , DUAL I + II
<b>NICAM</b>	NICAM

- **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.

ENGLISH

**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.

## TIME settings

- Image shown may differ from your TV.

- 1 Press **Home** to access the main menus.
- 2 Press the Navigation buttons to scroll to **TIME** and press **OK**.
- 3 Press the Navigation buttons to scroll to the setting or option you want and press **OK**.
  - To return to the previous level, press **BACK**.
- 4 When you are finished, press **EXIT**.



The available time settings are described in the following

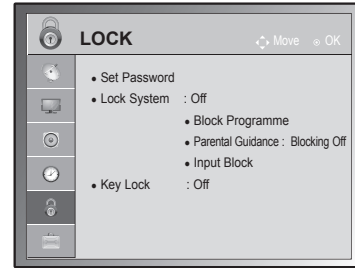
Setting	Description
<b>Clock</b>	<p>Sets the time, date, time zone and daylight-saving time feature. The time will be set automatically according to a digital channel signal which includes time information provided by the broadcasting station. If not, set the time and date manually. <b>Time Zone</b> is enabled only in Australia, Indonesia and Israel only.</p> <p><b>NOTE</b></p> <ul style="list-style-type: none"> <li>• &lt; Only Australia &gt; When you select a Time Zone city, the TV time is set by the time offset information based on Time Zone and GMT (Greenwich Mean Time) which is received with the broadcast signal and the time is set automatically by a digital signal.</li> <li>• &lt;Only Indonesia, Israel&gt; GMT (Greenwich Mean Time) which is received with the broadcast signal and the time is set automatically by a digital signal.</li> <li>• When if the city name in Time Zone is changed into offset, you can change time by 1 hour.</li> <li>• Time Zone menu can be changed in Auto mode.</li> </ul>
<b>Off Time/On Time</b>	<p>Sets the time to turn on or off the TV automatically. To use this function, you should set the current time and date in advance.</p> <p><b>NOTE</b></p> <ul style="list-style-type: none"> <li>• If you set both Off time and On time features to the same time, the Off time feature overrides the On time feature.</li> </ul>
<b>Sleep Timer</b>	<p>Sets the length of time until the TV to turns off. When you turn the TV off and turn it on again, the Sleep timer feature will be set to off.</p>
<b>Alarm</b> (Depending on model)	<p>*This feature is not available for all models.</p> <p>The alarm sound will go off when the designated time passes. When 60 seconds pass, the alarm sound will stop. If you do not want Alarm function, select "Off"</p> <ul style="list-style-type: none"> <li>• When the alarm is set to "On" with the power on, alarm icon will be displayed on the clock LED on the front of the TV. (Except for 26/32LK33**)</li> <li>• When alarm operates in standby mode, press the any button to stop alarm.</li> <li>• When alarm operates in power on mode, press the OK button to stop alarm.</li> </ul>



## LOCK settings

• Image shown may differ from your TV.

- 1 Press **Home** to access the main menus.
- 2 Press the Navigation buttons to scroll to **LOCK** and press **OK**.
- 3 Press the Navigation buttons to scroll to the setting or option you want and press **OK**.  
- To return to the previous level, press **BACK**.
- 4 When you are finished, press **EXIT**.



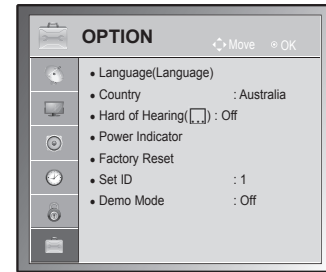
The available lock settings are described in the following.

Setting	Description
<b>Lock System</b>	Activates or deactivates the lock system.
<b>Set Password</b>	Changes the 4-digit password. The default PIN is "0 0 0 0". If you forget your password, press '0', '3', '2', '5' on the remote control handset.
<b>Block Programme</b>	Blocks the programmes that contain inappropriate contents for children by pressing the Green button. The Lock icon appears in front of the blocked programmes. The programmes can be selected but the screen blank and the audio is muted. To watch a locked channel, enter the password. It is available to use this function in <b>Lock System "On"</b>
<b>Parental Guidance (In Digital mode only)</b>	This function operates according to information from the broadcasting station. Therefore if the signal has incorrect information, this function does not operate. A password is required to gain access to this menu. This set is programmed to remember which option it was last set to even if you switch the set off. Prevents children from watching certain adult's TV programmes, according to the ratings limit set. Enter a password to watch a blocked programme. Rating differs by country.
<b>Input Block</b>	Block the input sources. It is available to use this function in <b>Lock System "On"</b>
<b>Key Lock</b>	Locks or unlocks the buttons on the TV.

• Image shown may differ from your TV.

## OPTION settings

- 1 Press **Home** to access the main menus.
- 2 Press the Navigation buttons to scroll to **OPTION** and press **OK**.
- 3 Press the Navigation buttons to scroll to the setting or option you want and press **OK**.  
- To return to the previous level, press **BACK**.
- 4 When you are finished, press **EXIT**.






The available general settings are described in the following:

(Depending on model)

Setting	Description																		
<b>Language</b>	Selects a language for the display or audio.																		
	<b>Option</b>																		
<b>Menu Language</b>	Select your desired language.(Except for Australia, New Zealand, Singapore and South Africa.)																		
<b>Audio Language</b> (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.  <table border="1" style="width: 100%; text-align: center;"> <thead> <tr> <th colspan="2">Audio Language OSD Information</th> </tr> <tr> <th>Display</th> <th>Status</th> </tr> </thead> <tbody> <tr> <td>N.A</td> <td>Not Available</td> </tr> <tr> <td></td> <td>MPEG Audio</td> </tr> <tr> <td></td> <td>Dolby Digital Audio</td> </tr> <tr> <td></td> <td>Audio for "Visual Impaired"</td> </tr> <tr> <td></td> <td>Audio for "Hearing Impaired"</td> </tr> <tr> <td></td> <td>Dolby Digital Plus Audio</td> </tr> <tr> <td></td> <td>HE-AAC Audio</td> </tr> </tbody> </table>	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		HE-AAC Audio
Audio Language OSD Information																			
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	Dolby Digital Audio																		
	Audio for "Visual Impaired"																		
	Audio for "Hearing Impaired"																		
	Dolby Digital Plus Audio																		
	HE-AAC Audio																		
<b>Subtitle Language</b> (In Digital mode only)	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.  <table border="1" style="width: 100%; text-align: center;"> <thead> <tr> <th colspan="2">Subtitle Language OSD Information</th> </tr> <tr> <th>Display</th> <th>Status</th> </tr> </thead> <tbody> <tr> <td>N.A</td> <td>Not Available</td> </tr> <tr> <td></td> <td>Teletext Subtitle</td> </tr> <tr> <td></td> <td>Subtitle for "Hard of Hearing"</td> </tr> </tbody> </table>	Subtitle Language OSD Information		Display	Status	N.A	Not Available		Teletext Subtitle		Subtitle for "Hard of Hearing"								
Subtitle Language OSD Information																			
Display	Status																		
N.A	Not Available																		
	Teletext Subtitle																		
	Subtitle for "Hard of Hearing"																		
<b>Text Language</b> (In Digital mode only)	In Digital mode, use the Text language function when two or more Text languages are broadcast. If teletext data in a selected language is not broadcast, the default Text language will be displayed. If you select the wrong local country, teletext may not appear correctly on the screen and some problems may occur during teletext operation.																		
	<p><b>NOTE</b></p> <ul style="list-style-type: none"> <li>• When the languages you selected as the primary for Audio Language and Subtitle Language and Text Language are not supported, you can select language in secondary category (Only New Zealand).</li> <li>• The audio/subtitles can be displayed in a simpler form with 1 to 3 characters broadcast by the service provider.</li> <li>• When you select supplementary Audio (Audio for "Visual/Hearing Impaired") the TV may output a part of the Main audio.</li> </ul>																		

ENGLISH

Setting	Description			
<b>Country</b> (Only Australia & New Zealand)	Selects a desired country.			
<b>Hard of Hearing</b> (  ) (In Digital mode only)	This function is for the blind, and provides explanatory audio describing the current situation in a TV programme in addition to the basic audio. - It is only available to use Hard of Hearing on some TV stations in New Zealand.			
<b>Power Indicator</b>	Adjust the power/standby indicator light on the front of the TV.			
	<b>Option</b>			
	<table border="0"> <tr> <td><b>Standby Light</b></td> <td>Set to turn on or off the indicator light in Standby mode.</td> </tr> <tr> <td><b>Power Light</b></td> <td>Set to turn on or off the indicator light when you turn on the power.</td> </tr> </table>	<b>Standby Light</b>	Set to turn on or off the indicator light in Standby mode.	<b>Power Light</b>
<b>Standby Light</b>	Set to turn on or off the indicator light in Standby mode.			
<b>Power Light</b>	Set to turn on or off the indicator light when you turn on the power.			
<b>Data Service</b> (This menu is enabled only in South Africa, Malaysia.)	This function allow users to choose between MHEG (Digital Teletext) and Teletext if both exist at the same time.			
<b>Factory Reset</b>	<p>This function initializes all settings.</p> <div style="border: 1px solid black; border-radius: 10px; padding: 10px; margin-top: 10px;"> <p> <b>NOTE</b></p> <ul style="list-style-type: none"> <li>In <b>Lock System "On"</b>, if you forget your password, press '0', '3', '2', '5' on the remote control handset.</li> </ul> </div>			
<b>Set ID</b>	Adds an ID to the connected devices			
<b>Demo Mode (Depending on model)</b>	Display the slide show to explain the various logo of this TV. The screen is reset automatically after 5 minutes in Demo Mode. If you want to stop the demo, press any button.(except for MUTE,  +, - button)			

## MAKING CONNECTIONS

Connect various external devices to the TV and switch input modes to select an external device. For more information on external device's connection, refer to the manual provided with each device.

Available external devices are: HD receivers, DVD players, VCRs, audio systems, USB storage devices, PC, gaming devices, and other external devices.

 **NOTE**

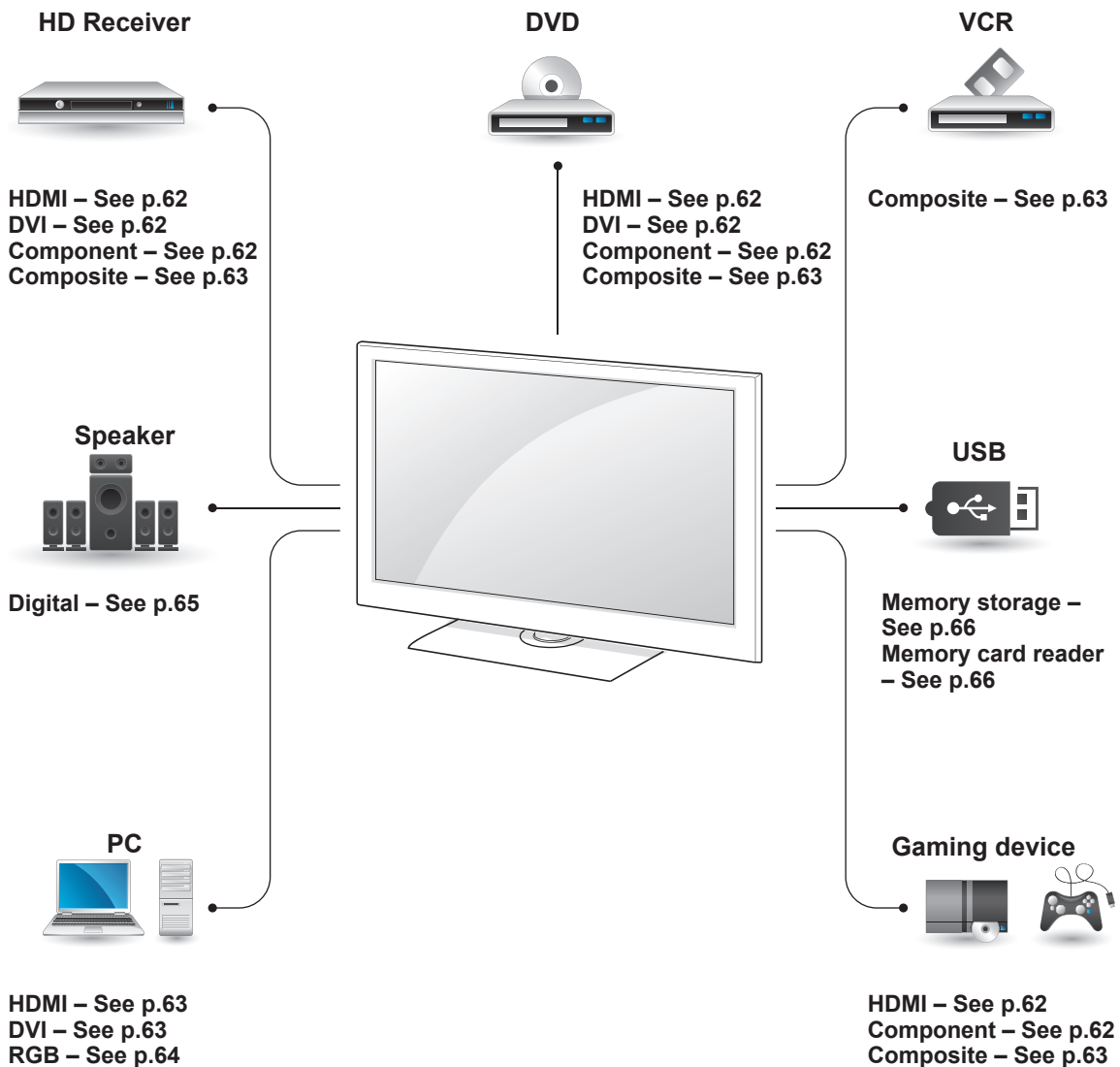
- The external device connection may differ from the model.
- Connect external devices to the TV regardless of the order of the TV port.

## Connection overview

Connect various external devices to the ports on the TV back panel.

- 1 Find an external device you want to connect to your TV as shown on the following illustration.
- 2 Check the connection type of the external device.
- 3 Go to the appropriate illustration and check the connection details.

(Depending on model)



ENGLISH

**NOTE**

- If you connect a gaming device to the TV, use the cable supplied with the gaming device.
- Refer to the external equipment's manual for operating instructions.

- This section on **MAKING CONNECTIONS** mainly uses diagrams for the 32LK33\*\* models.
- Image shown may differ from your TV.

## Connecting to a HD receiver, DVD, or VCR player

Connect a HD receiver, DVD, or VCR player to the TV and select an appropriate input mode.

### HDMI connection

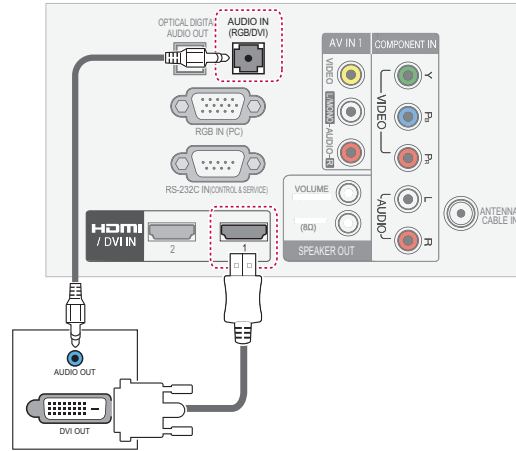
Transmits the digital video and audio signals from an external device to the TV. Connect the external device and the TV with the HDMI cable as shown in the following illustration.

#### 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 High Speed HDMI Cable. If the HDMI cables are not High Speed HDMI Cable, flickering or no screen display can result. Please use the High Speed HDMI Cable.

### DVI to HDMI connection

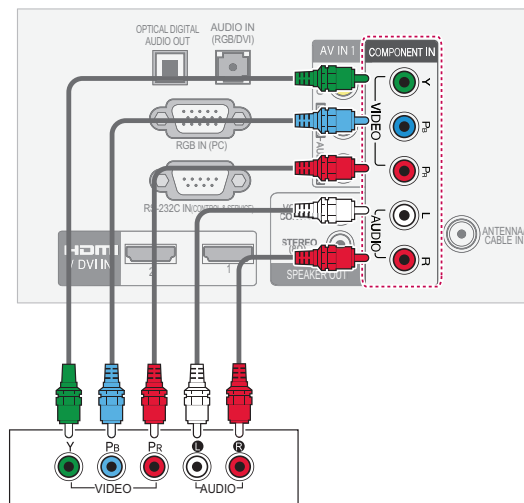
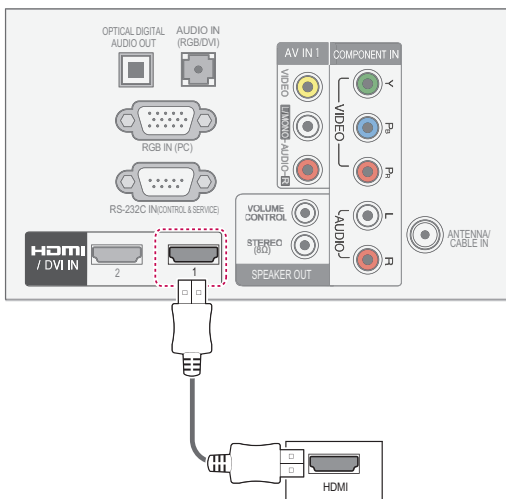
Transmits the digital video signal from an external device to the TV. Connect the external device and the TV with the DVI-HDMI cable as shown in the following illustration. To transmit an audio signal, connect an audio cable.



### Component connection

Transmits the analogue video and audio signals from an external device to the TV. Connect the external device and the TV with the component cable as shown in the following illustration.

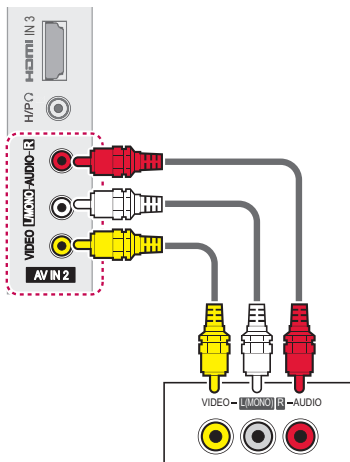
ENGLISH



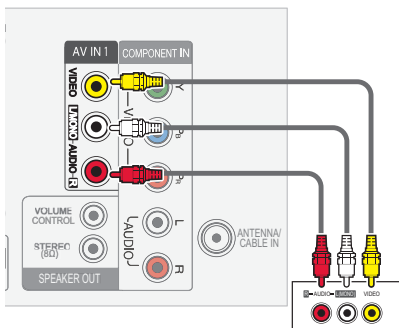
## Composite connection

Transmits the analogue video and audio signals from an external device to the TV. Connect the external device and the TV with the composite cable as shown in the following illustration.

(Depending on model)



or



### ! NOTE

- If you have a mono VCR, connect the audio cable from the VCR to the AUDIO L/ MONO jack of the TV.

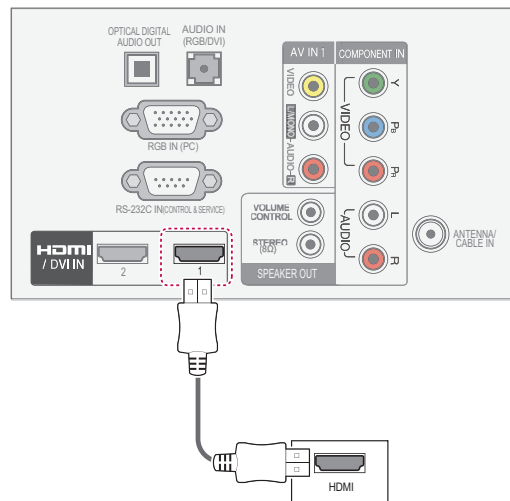
## Connecting to a PC

### ! NOTE

- It is recommended to use the TV set with the HDMI connection for the best image quality.

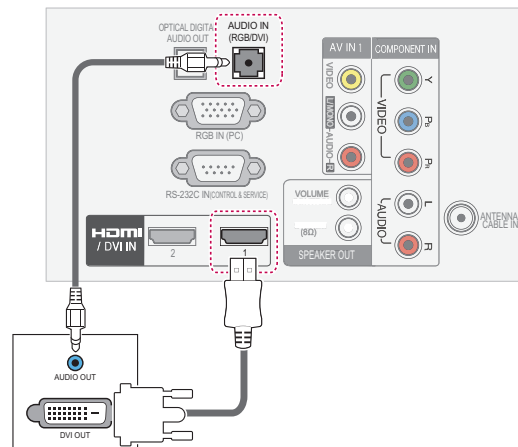
## HDMI connection

Transmits the digital video and audio signals from your PC to the TV. Connect the PC and the TV with the HDMI cable as shown in the following illustrations.



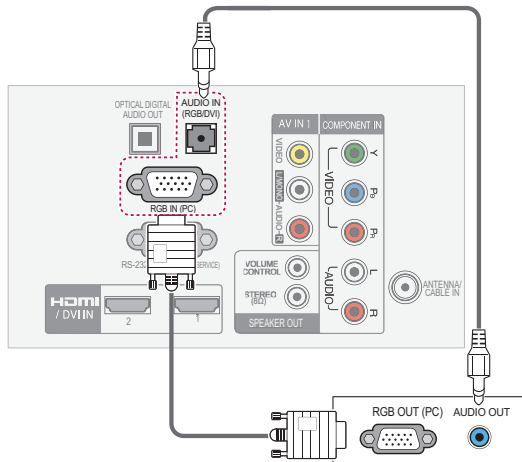
## DVI to HDMI connection

Transmits the digital video signal from your PC to the TV. Connect the PC and the TV with the DVI-HDMI cable as shown in the following illustration. To transmit an audio signal, connect an audio cable.



## RGB Connection

Transmits the analogue video signal from your PC to the TV. Connect the PC and the TV with the supplied D-sub 15 pin signal cable as shown in the following illustrations. To transmit an audio signal, connect an audio cable.



### ! NOTE

- Avoid keeping a fixed image on the set's screen for prolonged periods of time. The fixed image may become permanently imprinted on the screen; use a screen saver when possible.
- 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 cannot 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 1920x1080, 60 Hz(Except for 26/32LK33\*\*), 1360x768, 60 Hz(Only 26/32LK33\*\*) 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.
- 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, there may be interference on the screen. We recommend using under 5m of cable. This provides the best picture quality.

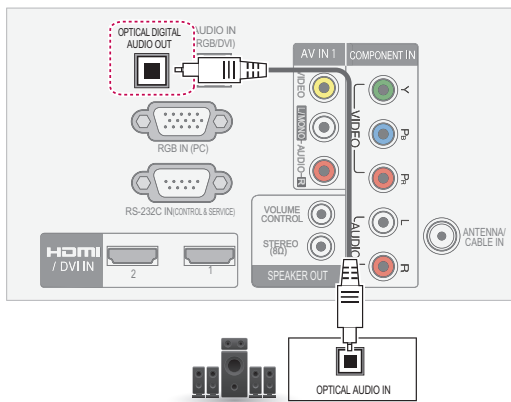


## Connecting to an audio system

Use an external audio system instead of the built-in speaker.

## Digital optical audio connection

Transmits the digital audio signal from the TV to an external device. Connect the external device and the TV with the optical audio cable as shown in the following illustration.



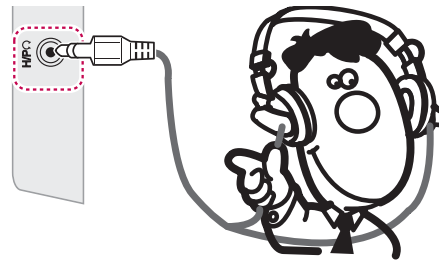
### NOTE

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

## Headphone connection

- This feature is not available for all models.

Transmits the headphone signal from the TV to an external device. Connect the external device and the TV with the headphone as shown on the following illustration.



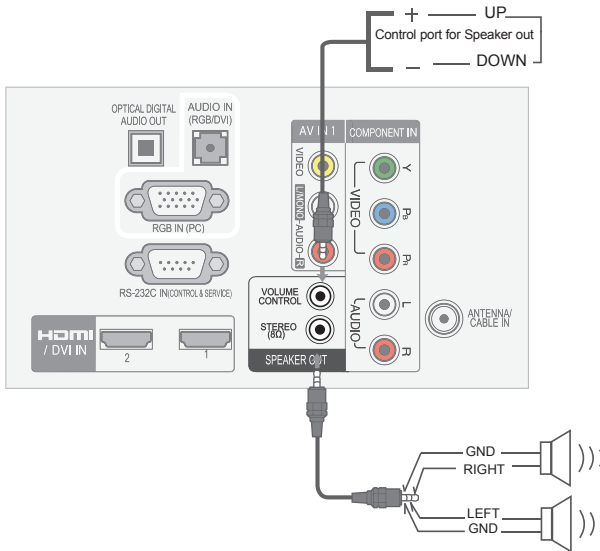
### NOTE

- AUDIO menu items are disabled when connecting a headphone.
- When changing AV MODE with a headphone connected, the change is applied to video but not to audio.
- Optical Digital Audio Out is not available when connecting a headphone.
- Headphone impedance: 16  $\Omega$
- Max audio output of headphone: 10 mW to 15 mW
- Headphone jack size: 0.35 cm

## Speaker output Setup

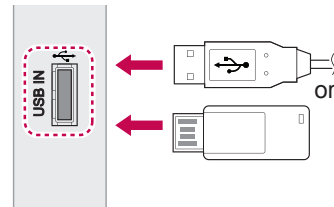
- This feature is not available for all models.

Connect the external speaker to the Speaker output(STEREO) jack on the TV.



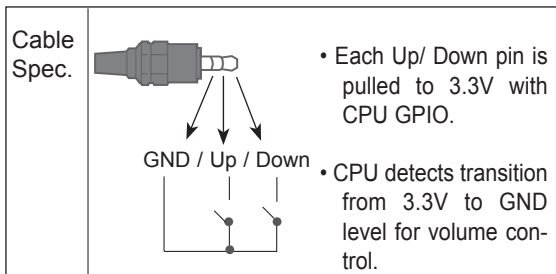
## Connecting to a USB

Connect a USB storage device such as a USB flash memory, external hard drive, a USB memory card reader to the TV and access the My media menu to use various multimedia files. See "Connecting USB storage devices" on p.35 and see "Browsing files" on p.36 .



ENGLISH

### Method of Volume control port



## SIMPLINK connection

Use the TV remote control to play and control the AV device connected with the HDMI cable through HDMI-CEC. Your TV only works with the devices that support HDMI-CEC.

Connect one end of the HDMI cable to the HDMI/DVI IN or HDMI IN terminal on the rear of the TV and the other end to the SIMPLINK device.

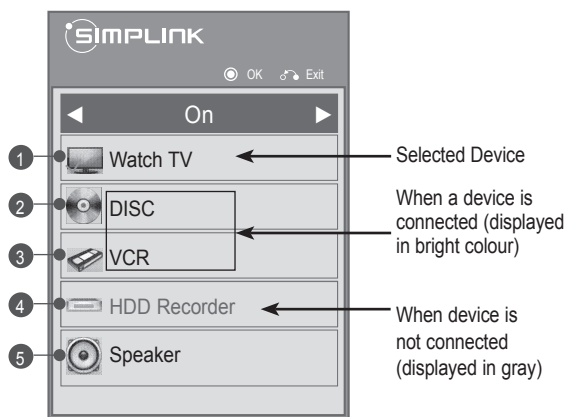
### NOTE

- If the connected device does not support HDMI-CEC, the SIMPLINK feature is unavailable.
- To operate SIMPLINK, an High Speed HDMI Cable with \*CEC function should be used. (\*CEC: Consumer Electronics Control).

## Activating the SIMPLINK feature

- 1 Press SIMPLINK to access the SIMPLINK menus.
- 2 Press the Navigation buttons to scroll to On.
- 3 Press the Navigation buttons to scroll to one of the devices and press **OK**.

- Image shown may differ from your TV.



No.	Description
1	Displays the previously viewed TV channel.
2	Plays discs. When multiple discs are available, the title of the disc appears at the bottom of the screen.
3	Controls the connected VCR.
4	HDD recordings playback: Controls the recording stored in HDD.
5	Audio out to Home theatre speaker or Audio out to TV: Changes the audio output between Home theatre speaker and TV speaker.

- A check mark appears in front of the selected device.
- Available devices display in a bright colour.
- Unavailable devices display in grey.

- 4 Control the selected AV device.
  - **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.
  - **Disc playback:** Control connected AV devices by pressing the Navigation buttons, **OK**, **▶**, **■**, **||**, **◀◀** and **▶▶** buttons.
  - **Power off all devices:** When you power 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 automatically turn on.

### NOTE

- If you change the input source by pressing **INPUT**, the progressing function of the SIMPLINK device will stop.
- If you select a device that has the Home theatre feature, the sound output automatically switches to the Home theatre speaker and the TV speaker turns off.
- If a connected SIMPLINK Home theatre system does not play the audio from the TV, connect the **DIGITAL AUDIO OUT** terminal on the rear of the TV to the **DIGITAL AUDIO IN** terminal on the back of the SIMPLINK device with an optical cable.

# TELETEXT

- This feature is not available in all countries.

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

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

## Switch On/Off

Press the **TEXT** button to switch to teletext. The initial page or last page appears on the screen. Two page numbers, **TV** station name, date and time are displayed on the screen headline. The first page number indicates your selection, while the second shows the current page displayed. Press the **TEXT** button to switch off teletext. The previous mode reappears.

ENGLISH

## Simple Text

### Page selection

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

## Top Text

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

### Block / Group / Page Selection

- 1 With the blue button you can progress from block to block.
- 2 Use the yellow button to proceed to the next group with automatic overflow to the next block.
- 3 With the green button you can proceed to the next existing page with automatic overflow to the next group.
- 4 Alternatively, the **P ^** button can be used. The **RED** button permits you to return to previous selection. Alternatively, the **P v** button can be used.


### Direct Page Selection

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

## Fastext

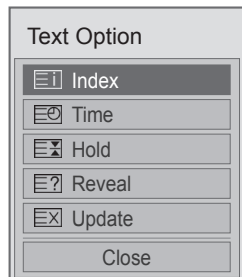
The teletext pages are colour coded along the bottom of the screen and are selected by pressing the corresponding coloured button.

### Page selection

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

## Special Teletext Function

Press the **T. OPT** button and then use Navigation buttons to select the **Text Option** menu.



#### Index

Select the each index page.

#### Time

When viewing a TV programme, select this menu to display the time at the top right hand corner of the screen.

In the teletext mode, press this button to select a sub page number. The sub page number is displayed at the bottom of the screen. To hold or change the sub page, press the RED/GREEN, < > or NUMBER buttons.

#### Hold

Stops the automatic page change which will occur if a teletext page consists of 2 or more sub pages.

The number of sub pages and the sub page displayed is, usually, shown on the screen below the time. When this menu is selected the stop symbol is displayed at the top left-hand corner of the screen and the automatic page change is inactive.

#### Reveal

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

#### Update

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

# MAINTENANCE

Update and clean your TV regularly to keep the best performance and to extend the product lifespan.

## Cleaning your TV

 **CAUTION**

- Make sure to turn the power off and disconnect the power cord and all other cables first.
- When the TV is left unattended and unused for a long time, disconnect the power cord from the wall outlet to prevent possible damage from lightning or power surges.

## Screen and frame

To remove dust or light dirt, wipe the surface with a dry, clean, and soft cloth.

To remove major dirt, wipe the surface with a soft cloth dampened in clean water or a diluted mild detergent. Then wipe immediately with a dry cloth.

 **CAUTION**

- Do not push, rub, or hit the surface with your fingernail or a sharp object, as this may result in scratches on the screen and image distortions.
- Do not use any chemicals, such as waxes, benzene, alcohol, thinners, insecticides, air fresheners, lubricants, as these may damage the screen's finish and cause discolouration.

ENGLISH

## Cabinet and stand

To remove dust or light dirt, wipe the cabinet with a dry, clean, and soft cloth.

To remove major dirt, wipe the cabinet with a soft cloth dampened in a clean water or water containing a small amount of mild detergent. Then wipe immediately with a dry cloth.

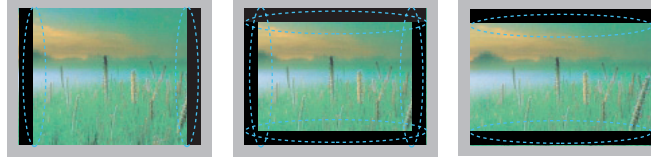
 **CAUTION**

- Do not spray liquid onto the surface. If water enters the TV, it may result in fire, electric shock, or malfunction.
- Do not use any chemicals as this may deteriorate the surface.

## Power cord

Remove the accumulated dust or dirt on the power cord regularly.

## Preventing “Image burn” or “Burn-in” on your TV screen



- If a fixed image displays on the TV screen for a long period of time, it will be imprinted and become a permanent disfigurement on the screen. This is “image burn” or “burn-in” and not covered by the warranty.
- If the aspect ratio of the TV is set to 4:3 for a long period of time, image burn may occur on the letterboxed area of the screen.
- Avoid displaying a fixed image on the TV screen for a long period of time (2 or more hours for LCD, 1 or more hours for the Plasma TV) to prevent image burn.


# TROUBLESHOOTING

## General

Problem	Resolution
Cannot control the TV with the remote control.	<ul style="list-style-type: none"> <li>• Check the remote control sensor on the product and try again.</li> <li>• Check if there is any obstacle between the product and the remote control.</li> <li>• Check if the batteries are still working and properly installed (+ to +, - to -).</li> </ul>
No image display and no sound is produced.	<ul style="list-style-type: none"> <li>• Check if the product is turned on.</li> <li>• Check if the power cord is connected to a wall outlet.</li> <li>• Check if there is a problem in the wall outlet by connecting other products.</li> </ul>
Image appears slowly when the TV turns on.	<ul style="list-style-type: none"> <li>• The image is muted during the product start up process. This is normal. If the image does not appear in a few minutes, unplug the TV for 30 seconds and try again. If the image still does not appear, contact the authorized service centre in your local area.</li> </ul>
Cannot connect external devices.	<ul style="list-style-type: none"> <li>• See "Connection overview" on p.61 and connect an external device.</li> </ul>
The TV turns off suddenly.	<ul style="list-style-type: none"> <li>• Check the power control settings. The power supply may be interrupted.</li> <li>• Check if the Auto sleep feature is activated in the Time settings. See "Sleep Timer" on p.56.</li> </ul>

ENGLISH

## Audio

Problem	Resolution
No sound is produced while images are displaying.	<ul style="list-style-type: none"> <li>• Press  + or - button.</li> <li>• Check if the sound is muted by pressing <b>MUTE</b>.</li> <li>• Scroll to other channels. There may a problem with the broadcast.</li> <li>• Check if the audio cables are connected properly.</li> </ul>
One of the speakers produce noises or does not produce sound.	<ul style="list-style-type: none"> <li>• A change in ambient humidity or temperature may result in an unusual noise when the product turns on or off.</li> <li>• There is no problem with your product.</li> </ul>



## Video

Problem	Resolution
An image displays in black and white or the colour quality is poor.	<ul style="list-style-type: none"> <li>• Adjust the colour setting in the Picture menu (See p.47).</li> <li>• Keep a sufficient distance between this product and other electronic products.</li> <li>• Scroll to other channels. There may be a problem with the broadcast.</li> </ul>
Horizontal or vertical bars appear or images blur	<ul style="list-style-type: none"> <li>• Check if there are local interferences such as an electrical appliance or power tool.</li> </ul>
Lines or streaks appear on images	<ul style="list-style-type: none"> <li>• Check the antenna or aim the antenna to the proper direction.</li> </ul>
Afterimages (ghosts) appear when the product turns off	<ul style="list-style-type: none"> <li>• Pixels may have been damaged from a fixed image displayed for a long time (image burn). Use a screen saver to prevent the pixel damage on the screen.</li> </ul>
The power is on but the screen appears extremely dark.	<ul style="list-style-type: none"> <li>• Adjust the brightness and contrast in the Picture menu (See p.47).</li> </ul>
"No Signal" appears on the screen.	<ul style="list-style-type: none"> <li>• Check if the signal cable is connected between the TV and products properly.</li> <li>• Check the selected input source by pressing <b>INPUT</b>.</li> </ul>
Black spots appear on the screen.	<ul style="list-style-type: none"> <li>• Several pixels in red, green, white, or black may appear on the screen that can attribute to the characteristics of the LCD panel. This is normal.</li> </ul>
The display offset is wrong.	<ul style="list-style-type: none"> <li>• Adjust the position setting in the Picture menu (See p.47).</li> <li>• Check if the video card resolution and frequency are supported by the product. If the frequency is out of range, set to the recommended resolution using the display settings on the external device.</li> </ul>
Thin lines appear in the background of the screen.	<ul style="list-style-type: none"> <li>• Check the video cable connections.</li> </ul>
Horizontal noises appear or characters blur.	<ul style="list-style-type: none"> <li>• Adjust the Phase setting in the Picture menu. See "SCREEN" on p.49</li> </ul>
The reception on some channels is poor	<ul style="list-style-type: none"> <li>• Scroll to other channels. There may be a problem with the broadcast.</li> <li>• The station signal may be weak. Aim the antenna to the proper direction.</li> <li>• Check if there is local interference such as an electrical appliance or power tool.</li> </ul>

## SPECIFICATIONS

MODELS		26LK33**	
		26LK335H-TB	
Dimensions (W x H x D)	With stand	663.0 mm x 484.0 mm x 206.8 mm	
	Without stand	663.0 mm x 423.0 mm x 79.9 mm	
Weight	With stand	7.3 kg	
	Without stand	6.2 kg	
Power requirement		AC 100-240 V~ 50 / 60 Hz	
MODELS		32LK33**	
		32LK335H-TB	
Dimensions (W x H x D)	With stand	800.0 mm x 565.0 mm x 206.8 mm	
	Without stand	800.0 mm x 509.0 mm x 73.8 mm	
Weight	With stand	9.2 kg	
	Without stand	8.2 kg	
Power requirement		AC 100-240 V~ 50 / 60 Hz	

MODELS		32LK45**		37LK45**	
		32LK455H-TA		37LK455H-TA	
Dimensions (W x H x D)	With stand	795.0 mm x 568.0 mm x 207.0 mm		913.0 mm x 639.0 mm x 265.0 mm	
	Without stand	795.0 mm x 504.0 mm x 73.5 mm		913.0 mm x 571.0 mm x 77.4 mm	
Weight	With stand	9.2 kg		12.8 kg	
	Without stand	8.1 kg		11.1 kg	
Power requirement		AC 100-240 V~ 50 / 60 Hz			
MODELS		42LK45**		47LK45**	
		42LK455H-TA		47LK455H-TA	
Dimensions (W x H x D)	With stand	1019.0 mm x 698.0 mm x 265.0 mm		1132.0 mm x 762.0 mm x 265.0 mm	
	Without stand	1019.0 mm x 631.0 mm x 76.5 mm		1132.0 mm x 695.0 mm x 76.5 mm	
Weight	With stand	15.1 kg		19.0 kg	
	Without stand	13.4 kg		17.3 kg	
Power requirement		AC 100-240 V~ 50 / 60 Hz		AC 100-240 V~ 50 / 60 Hz	

Product specifications shown above may be changed without prior notice due to upgrade of product functions.

For the power supply and power consumption, refer to the label attached to the product.

MODELS		32LV35**	37LV35**
		32LV355H-TA	37LV355H-TA
Dimensions (W x H x D)	With stand	764.0 mm x 545.0 mm x 240.0 mm	888.0 mm x 614.0 mm x 240.0 mm
	Without stand	764.0 mm x 484.0 mm x 35.4 mm	888.0 mm x 553.0 mm x 35.4 mm
Weight	With stand	11.4 kg	13.5 kg
	Without stand	9.6 kg	11.7 kg
Power requirement		AC 100-240 V~ 50 / 60 Hz	
MODELS		42LV35**	47LV35**
		42LV355H-TA	47LV355H-TA
Dimensions (W x H x D)	With stand	998.0 mm x 684.0 mm x 256.0 mm	1108.0 mm x 746.0 mm x 256.0 mm
	Without stand	998.0 mm x 615.0 mm x 30.4 mm	1108.0 mm x 677.0 mm x 30.4 mm
Weight	With stand	15.2 kg	20.9 kg
	Without stand	13 kg	18.7 kg
Power requirement		AC 100-240 V~ 50 / 60 Hz	
MODELS		55LV35**	
		55LV355H-TA	
Dimensions (W x H x D)	With stand	1286.0 mm x 847.0 mm x 338.0 mm	
	Without stand	1286.0 mm x 778.0 mm x 30.4 mm	
Weight	With stand	25.5 kg	
	Without stand	21.4 kg	
Power requirement		AC 100-240 V~ 50 / 60 Hz	

Product specifications shown above may be changed without prior notice due to upgrade of product functions.

For the power supply and power consumption, refer to the label attached to the product.

## 76 SPECIFICATIONS

Environment condition	Operating Temperature	0 °C to 40 °C	
	Operating Humidity	Less than 80 %	
	Storage Temperature	-20 °C to 60 °C	
	Storage Humidity	Less than 85 %	
		Digital TV	Analogue TV
New Zealand, Singapore	Television System	DVB-T	PAL/SECAM-B/G/D/K, PAL-I
	Programme Coverage	UHF 21 to 69	BG : VHF/UHF 1 to 69, CATV 01 to 47 I : VHF/UHF 1 to 69, CATV 01 to 47 DK : VHF/UHF 1 to 69, CATV 01 to 47
Australia	Television System	DVB-T	PAL B/B
	Programme Coverage	VHF 06 to 12, UHF 27 to 69	B/B : VHF/UHF 0 to 75, CATV : 2 to 44
Indonesia, Israel	Television System	DVB-T	PAL/SECAM-B/G/D/K, PAL-I, NTSC-M
	Programme Coverage	UHF 21 to 69	BG : VHF/UHF 1 to 69, CATV 01 to 47 I : VHF/UHF 1 to 69, CATV 01 to 47 DK : VHF/UHF 1 to 69, CATV 01 to 47 M : VHF/UHF 2 to 78, CATV 01 to 71
South Africa	Television System	DVB-T	PAL/SECAM-B/G/D/K, PAL-I, NTSC-M
	Programme Coverage	VHF 4 to 11, 13 UHF 21 to 68	BG : VHF/UHF 1 to 69, CATV 01 to 47 I : VHF/UHF 1 to 69, CATV 01 to 47 DK : VHF/UHF 1 to 69, CATV 01 to 47 M : VHF/UHF 2 to 78, CATV 01 to 71
Veitnam, Malaysia	Television System	DVB-T	PAL/SECAM-B/G/D/K, PAL-I, NTSC-M
	Programme Coverage	VHF 6 to 12, UHF 21 to 69	BG : VHF/UHF 1 to 69, CATV 01 to 47 I : VHF/UHF 1 to 69, CATV 01 to 47 DK : VHF/UHF 1 to 69, CATV 01 to 47 M : VHF/UHF 2 to 78, CATV 01 to 71
Iran	Television System	DVB-T	PAL/SECAM-B/G/D/K, PAL-I, NTSC-M
	Programme Coverage	VHF 5 to 12, UHF 21 to 69	BG : VHF/UHF 1 to 69, CATV 01 to 47 I : VHF/UHF 1 to 69, CATV 01 to 47 DK : VHF/UHF 1 to 69, CATV 01 to 47 M : VHF/UHF 2 to 78, CATV 01 to 71
Analogue model	Television System	-	PAL/SECAM-B/G/D/K, PAL-I, NTSC-M
	Programme Coverage	-	BG : VHF/UHF 1 to 69, CATV 01 to 47 I : VHF/UHF 1 to 69, CATV 01 to 47 DK : VHF/UHF 1 to 69, CATV 01 to 47 M : VHF/UHF 2 to 78, CATV 01 to 71
	External Antenna Impedance	75 Ω	75 Ω

ENGLISH

Product specifications shown above may be changed without prior notice due to upgrade of product functions.

For the power supply and power consumption, refer to the label attached to the product.

RGB-PC, HDMI-PC mode

Resolution	Horizontal Frequency (kHz)	Vertical Frequency (Hz)
720x400	31.468	70.08
640x480	31.469	59.94
800x600	37.879	60.31
1024x768	48.363	60.00
1280x768 (RGB-PC)	47.78	59.87
1360x768	47.72	59.80
1280x1024	63.981	60.02
1920x1080 (RGB-PC)	66.587	59.934
1920x1080 (HDMI-PC)	67.5	60.00

(Except for 26/32LK33\*\*)

Component port connecting information

Component ports on the TV	Y	P <sub>B</sub>	P <sub>R</sub>

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

Signal	Component
480i/576i	0
480p/576p	0
720p/1080i	0
1080p	0 (50 Hz / 60 Hz only)

HDMI-DTV mode

Resolution	Horizontal Frequency (kHz)	Vertical Frequency (Hz)
720x480	31.469	59.94
	31.5	60
720x576	31.25	50
1280x720	37.5	50
	44.96	59.94
	45	60
1920x1080	33.72	59.94
	33.75	60
	28.125	50
	26.97	23.97
	27	24
	33.716	29.976
	33.75	30.00
	56.25	50
	67.43	59.94
67.5	60	

## Video supported mode

File Extension name	Video Decoder	Audio Codec	Max Resolution
mpg, mpeg	MPEG1, MPEG2	MP2,MP3,Dolby Digital,LPCM	1920x1080@30p (only Motion JPEG 640x480@30p)
dat	MPEG1	MP2	
ts,trp,tp	MPEG2, H.264/AVC, VC1	MP2,MP3,Dolby Digital, AAC,HE-AAC	
vob	MPEG1, 2	MP2,MP3,Dolby Digital,LPCM	
mp4, mov	MPEG4,DivX 3.11, DivX 4.12, DivX 5.x, DivX 6, Xvid 1.00, Xvid 1.01, Xvid 1.02, Xvid 1.03, Xvid 1.10- beta1/2, H.264/AVC	AAC,HE-AAC,MP3	
mkv	H.264/AVC, MPEG-1,2,4	MP2,MP3,Dolby Digital,AAC HE-AAC,LPCM	
divx, avi	MPEG2, MPEG4,DivX 3.11, DivX 4,DivX 5, DivX 6, Xvid 1.00, Xvid 1.01, Xvid 1.02, Xvid 1.03, Xvid 1.10- beta1/2, H.264/AVC	MP2,MP3,Dolby Digital,LPCM, ADPCM,AAC,HE-AAC	
Motion JPEG (avi, mp4, mkv)	JPEG	LPCM, ADPCM	
asf, wmv	VC1	WMA	
flv	Sorenson H.263, H.264/AVC	MP3, AAC	

## IR CODES

- This feature is not available for all models.

Code (Hexa)	Function	Note
08	⏻ (POWER)	Remote control Button (Power On/Off)
95	ENERGY SAVING	Remote control Button
30	AV MODE	Remote control Button
0B	INPUT	Remote control Button
F0	TV/RAD	Remote control Button
10-19	Number Key 0-9	Remote control Button
53	LIST	Remote control Button
1A	Q.VIEW	Remote control Button
02	↗ +	Remote control Button
03	↘ -	Remote control Button
1E	FAV/MARK	Remote control Button
09	MUTE	Remote control Button
00	P▲	Remote control Button
01	P▼	Remote control Button
43	Home	Remote control Button
AB	GUIDE	Remote control Button
45	Q.MENU	Remote control Button
28	BACK	Remote control Button
AA	INFO	Remote control Button
5B	EXIT	Remote control Button
44	OK	Remote control Button
40	▲	Remote control Button
41	▼	Remote control Button
07	<	Remote control Button
06	>	Remote control Button
72	RED	Remote control Button
71	GREEN	Remote control Button
63	YELLOW	Remote control Button
61	BLUE	Remote control Button
20	TEXT	Remote control Button
21	T.OPT(T.Option)	Remote control Button
39	SUBTITLE	Remote control Button
B1	■	Remote control Button
B0	▶	Remote control Button
BA		Remote control Button
8E	▶▶	Remote control Button
8F	◀◀	Remote control Button
7E	SIMPLINK	Remote control Button
79	RATIO	Remote control Button

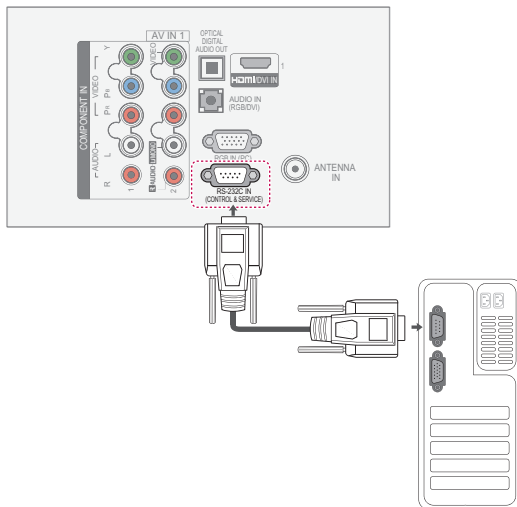
# EXTERNAL CONTROL DEVICE SETUP

## RS-232C Setup

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

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

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



## RS-232C Configurations

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

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

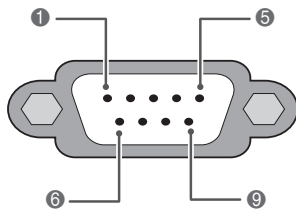
D-Sub 9                      D-Sub 9

### 3-Wire Configurations (Not standard)

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

D-Sub 9                      D-Sub 9

## Type of connector; D-Sub 9-Pin Male



No.	Pin name
1	No connection
2	RX RS232
3	TX RS232
4	IR from TV
5	GND
6	No connection
7	+5V
8	No connection
9	+12V

### Set ID

Set ID number. "Real Data Mapping" on See p.86

- 1 Press **Home** to access the main menus.
- 2 Press the Navigation buttons to scroll to **OPTION** and press **OK**.
- 3 Press the Navigation buttons to scroll to **SET ID** and press **OK**.
- 4 Scroll left or right to select a set ID number and select **CLOSE**. The adjustment range is 1-99.
- 5 When you are finished, press **EXIT**.



## Communication Parameters

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

## Command reference list

(Depending on model)

	COMMAND1	COMMAND2	DATA (Hexadecimal)		COMMAND1	COMMAND2	DATA (Hexadecimal)
01. Power	k	a	00 to 01	14. Bass	k	s	00 to 64
02. Aspect Ratio	k	c	(See p.83)	15. Balance	k	t	00 to 64
03. Screen Mute	k	d	(See p.83)	16. Colour Temperature	x	u	00 to 64
04. Volume Mute	k	e	00 to 01	17. Energy Saving	j	q	00 to 05
05. Volume Control	k	f	00 to 64	18. Auto Configuration	j	u	01
06. Contrast	k	g	00 to 64	19. Tune Command	m	a	(See p.85)
07. Brightness	k	h	00 to 64	20. Programme Add/Skip	m	b	00 to 01
08. Colour	k	i	00 to 64	21. Key	m	c	Key Code
09. Tint	k	j	00 to 64	22. Control Back Light	m	g	00 to 64
10. Sharpness	k	k	00 to 64	23. Input select (Main)	x	b	(See p.86)
11. OSD Select	k	l	00 to 01				
12. Remote Control Lock Mode	k	m	00 to 01				
13. Treble	k	r	00 to 64				

- \* Note : During USB operations such as DivX or EMF, all commands except Power(ka) and Key(mc) are not executed and treated as NG.

## Transmission / Receiving Protocol

### Transmission

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

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

### OK Acknowledgement

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

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

### Error Acknowledgement

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

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

### Data 00: Illegal Code

**01. Power (Command: k a)**

- ▶ To control Power On/Off of the set.

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

Data 00 : Power Off      01 : Power On

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

- ▶ To show Power On/Off.

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

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

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

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

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

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

Data 01 : Normal screen      07 : 14:9  
          (4:3)                      09 : Just Scan  
02 : Wide screen (16:9)    0B : Full Wide  
04 : Zoom                      10 to 1F : Cinema Zoom 1 to 16  
06 : Original

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

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

**03. Screen Mute (Command: k d)**

- ▶ To select screen mute on/off.

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

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

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

- \* In case of video mute on only, TV will display On Screen Display(OSD). But, in case of Screen mute on, TV will not display OSD.

**04. Volume Mute (Command: k e)**

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

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

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

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

**05. Volume Control (Command: k f)**

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

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

Data Min : 00 to Max : 64  
\* Refer to 'Real data mapping'. See p.86.

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

**06. Contrast (Command: k g)**

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

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

Data Min : 00 to Max : 64  
\* Refer to 'Real data mapping'. See p.86.

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

**07. Brightness (Command: k h)**

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

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

Data Min : 00 to Max : 64  
\* Refer to 'Real data mapping'. See p.86.

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

**08. Colour (Command: k i)**

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

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

Data Min : 00 to Max : 64  
\* Refer to 'Real data mapping'. See p.86.

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

## 09. Tint (Command: k j)

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

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

Data Red : 00 to Green : 64  
\* Refer to 'Real data mapping'. See p.86.

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

## 10. Sharpness (Command: k k)

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

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

Data Min : 00 to Max : 64  
\* Refer to 'Real data mapping'. See p.86.

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

## 11. OSD Select (Command: k l)

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

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

Data 00 : OSD off                      01 : OSD on

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

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

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

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

Data 00 : Lock off                      01 : Lock on

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

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

\* In the standby mode, if key lock is on, TV will not turn on by power on key of IR & Local Key.

## 13. Treble (Command: k r)

- ▶ To adjust treble.  
You can also adjust treble in the AUDIO menu.

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

Data Min : 00 to Max : 64  
\* Refer to 'Real data mapping'. See p.86.

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

## 14. Bass (Command: k s)

- ▶ To adjust bass.  
You can also adjust bass in the AUDIO menu.

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

Data Min : 00 to Max : 64  
\* Refer to 'Real data mapping'. See p.86.

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

## 15. Balance (Command: k t)

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

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

Data Min : 00 to Max : 64  
\* Refer to 'Real data mapping'. See p.86.

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

## 16. Colour Temperature (Command: x u)

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

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

Data Min : 00 to Max : 64  
\* Refer to 'Real data mapping'. See p.86.

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

## 17. Energy Saving (Command: j q)

- ▶ To reduce the power consumption of the TV. You can also adjust Energy Saving in PICTURE menu.

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

Power Saving Function					Level				Description
7	6	5	4		3	2	1	0	
0	0	0	0	Low Power	0	0	0	0	Off
0	0	0	0	Low Power	0	0	0	1	Minimum
0	0	0	0	Low Power	0	0	1	0	Medium
0	0	0	0	Low Power	0	0	1	1	Maximum
0	0	0	0	Low Power	0	1	0	1	Screen Off
0	0	0	0	Low Power	0	1	0	0	Auto (Depending on model)

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

## 18. Auto Configure(Command: j u)

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

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

Data 01: To set

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

## 19. Tune Command (Command: m a)

- ▶ Select channel to following physical number.

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

Data00 : High channel data

Data01 : Low channel data

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

No. 394 -> 01 8A (18AH),

DTV No. 0 -> Don't care

Data02 : 0x00 : Analogue Main

0x10 : DTV Main

0x20 : Radio

Channel data range

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

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

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

Data Min: 00 to Max: 7DH

## 20. Programme Add/Skip(Command: m b)

- ▶ To set skip status for the current Programme.

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

Data 00 : Skip      01 : Add

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

## 21. Key(Command: m c)

- ▶ To send IR remote key code.

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

Data Key code - See p.79.

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

## 22. Control Back Light(Command: m g)

- ▶ To control the back light.

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

Data Min : 00 to Max : 64

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

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

▶ To select input source for main picture.

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

Data Structure

MSB	LSB
0	0
0	0
0	0
0	0
0	0
0	0
0	0

└ External Input ┘    └ Input Number ┘

External Input				Data
0	0	0	0	DTV
0	0	0	1	Analogue
0	0	1	0	AV
0	1	0	0	Component
0	1	1	0	RGB
0	1	1	1	HDMI
1	0	0	0	
1	0	0	1	
1	0	1	0	

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

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

ENGLISH

* Real data mapping	
00	Step 0
:	
A	Step 10 (Set ID 10)
:	
F	Step 15 (Set ID 15)
10	Step 16 (Set ID 16)
:	
64	Step 100
:	
6E	Step 110
:	
73	Step 115
74	Step 116
:	
CF	Step 199
:	
FE	Step 254
FF	Step 255

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GNU LGPL v2.1	- directFB - gconv - glibc
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Version 2, June 1991

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