



OWNER'S MANUAL

LED TV^{*}

* LG LED TVs are LCD TVs with LED backlighting.

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

29UT55D

www.lg.com

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WARNING

- If you ignore the warning message, you may be seriously injured or there is a possibility of accident or death.



CAUTION

- If you ignore the caution message, you may be slightly injured or the product may be damaged.



NOTE

- The note helps you understand and use the product safely. Please read the note carefully before using the product.

LICENSES

Supported licenses may differ by model. For more information of the licenses, visit www.lg.com.



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



The terms HDMI and HDMI High-Definition Multimedia Interface, and the HDMI logo are trademarks or registered trademarks of HDMI Licensing LLC in the United States and other countries.



This DivX Certified® device has passed rigorous testing to ensure it plays DivX® video. To play purchased DivX movies, first register your device at vod.divx.com. Find your registration code in the DivX VOD section of your device setup menu.

DivX Certified® to play DivX® video up to HD 1080p, including premium content. DivX®, DivX Certified® and associated logos are trademarks of DivX, LLC and are used under license.

Covered by one or more of the following U.S. patents: 7,295,673; 7,460,668; 7,515,710; 7,519,274.



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OPEN SOURCE SOFTWARE NOTICE INFORMATION

To obtain the source code under GPL, LGPL, MPL, and other open source licenses, that is contained in this product, please visit <http://opensource.lge.com>.

In addition to the source code, all referred license terms, warranty disclaimers and copyright notices are available for download.

LG Electronics will also provide open source code to you on CD-ROM for a charge covering the cost of performing such distribution (such as the cost of media, shipping, and handling) upon email request to opensource@lge.com. This offer is valid for three (3) years from the date on which you purchased the product.

**NOTE**

- Image shown may differ from your TV.
- Your TV's OSD (On Screen Display) may differ slightly from that shown in this manual.
- The available menus and options may differ from the input source or product model that you are using.
- New features may be added to this TV in the future.
- The TV can be placed in standby mode in order to reduce the power consumption. And the 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.

ASSEMBLING AND PREPARING

Unpacking

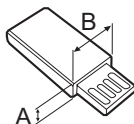
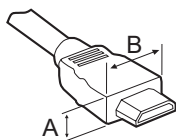
Check your product box for the following items. If there are any missing accessories, contact the local dealer where you purchased your product. The illustrations in this manual may differ from the actual product and item.

**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 warranty.

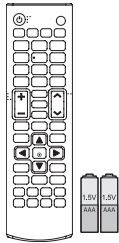
**NOTE**

- 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.
- Use a certified cable with the HDMI logo attached. If you do not use a certified HDMI cable, the screen may not display or a connection error may occur.
- Recommended HDMI cable types
 - High-Speed HDMI[®]/TM Cable
 - High-Speed HDMI[®]/TM Cable with Ethernet
- For an optimal connection, HDMI cables and USB devices should have bezels less than 10 mm thick and 18 mm width. Use an extension cable that supports USB 2.0 if the USB cable or USB memory stick does not fit into your TV's USB port.



*A ≤ 10 mm

*B ≤ 18 mm



**Remote control,
Batteries (AAA)**
(See p. 31)



**CD(Owner's Manual /
Software / Guides), Cards**



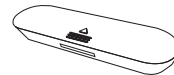
Stand Body
(See p.10,11)



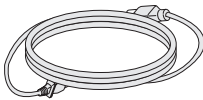
Stand Base
(See p. 11)



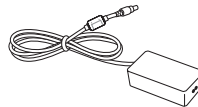
Stand Screws
2 EA, M4 x L10
(See p.10,12)



Stand Screw cover
(See p.10,12)



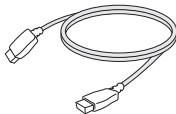
Power Cord
(See p. 13)



AC-DC Adapter
(See p. 13)

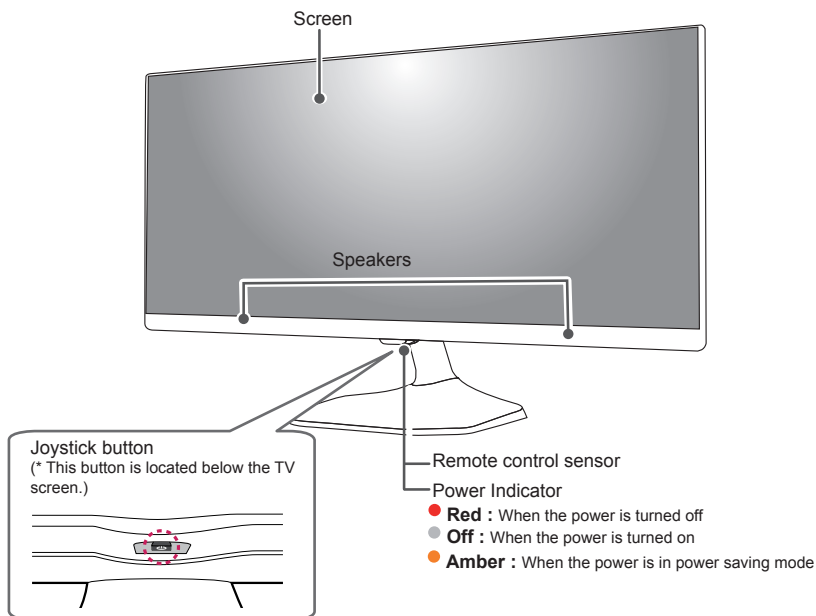


Cable Holder
(See p. 14)



HDMI Cable
(See p.23,29)

Parts and buttons



NOTE

- You can set the power indicator light to on or off by selecting OPTION in the main menus.

Using the Joystick button

You can simply operate the TV functions, pressing or moving the joystick button up, down, left or right.

Basic Functions

	Power On	When the TV is turned off, place your finger on the joystick button and press it once and release it. (However, if the Menu button is on the screen, pressing the joystick button will let you exit the Menu.)
	Power Off	When the TV is turned on, place your finger on the joystick button and press it once for a few seconds and release it.
	Volume Control	If you place your finger over the joystick button and move it left or right, you can adjust the volume level you want.
	Programmes Control	If you place your finger over the joystick button and move it up or down, you can scroll through the saved programmes what you want.



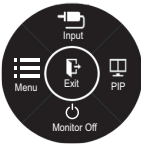
NOTE

- When your finger over the joystick button push it to the up, down, left or right, be careful not to press the joystick button. If you press the joystick button first, you may not adjust the volume level and saved programmes.

Adjusting the Menu

When the TV is turned on, press the joystick button one time.

You can adjust the Menu items (, , , , ) moving the joystick button up, down, left or right.

		Input	Changes the input source.
		PIP	Turns the PIP mode on or off.
		Monitor Off	Turns the power off.
		Menu	Configures the settings.
		Exit	Exits the OSD menu.

Lifting and moving the TV

Please note the following advice to prevent the TV from being scratched or damaged and for safe transportation regardless of its type and size.

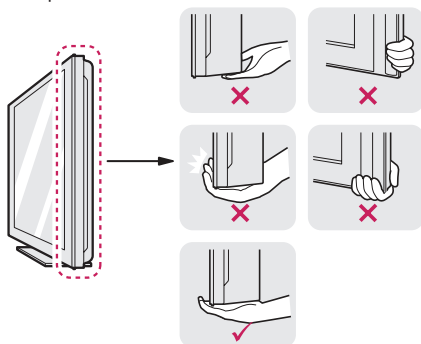


CAUTION

- Avoid touching the screen at all times, as this may result in damage to the screen.
- 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 prevent the screen from scratches.



- Hold the top and bottom of the TV frame firmly. Make sure not to hold the transparent part.

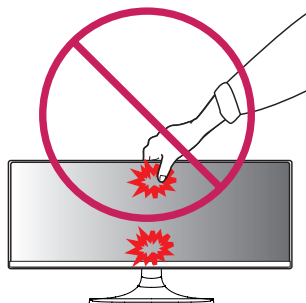


- When transporting the TV, do not expose the TV to jolts or excessive vibration.
- When transporting the TV, keep the TV upright, never turn the TV on its side or tilt towards the left or right.
- Do not apply excessive pressure to cause flexing /bending of frame chassis as it may damage screen.



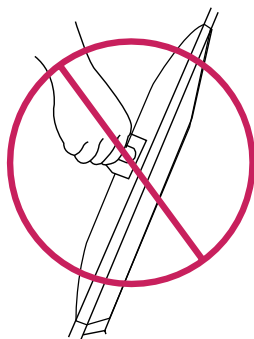
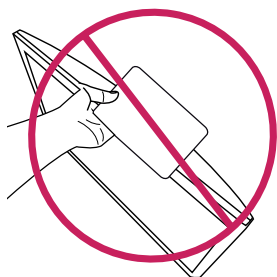
CAUTION

- When handling the TV, be careful not to damage the protruding joystick button.



**CAUTION**

- Do not carry the TV upside-down as this may cause it to fall off its stand, resulting in damage or injury.
- Do not carry the TV upside-down by holding the stand body as this may cause it to fall off, resulting in damage or injury.
- The illustration shows a general example of installation and may look different from the actual product.

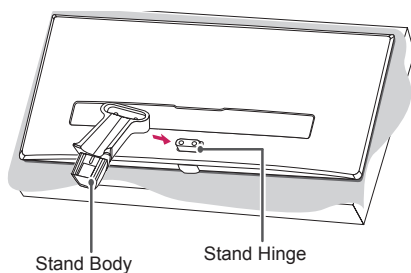


Setting up the TV

Attaching the Stand

1

Check the orientation (front and rear) of the stand base and mount the **Stand Body** to the **Stand Hinge** as shown in the figure.

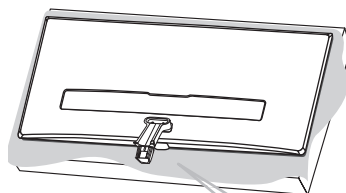


CAUTION

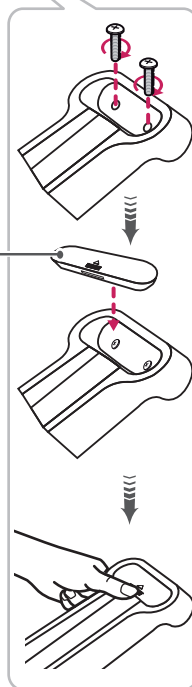
- When attaching the stand to the TV set, place the screen facing down on a cushioned table or flat surface to protect the screen from scratches.

2

Turn the screw to the right into the back of the stand body and close the **Stand Screw Cover**.



Stand Screw Cover

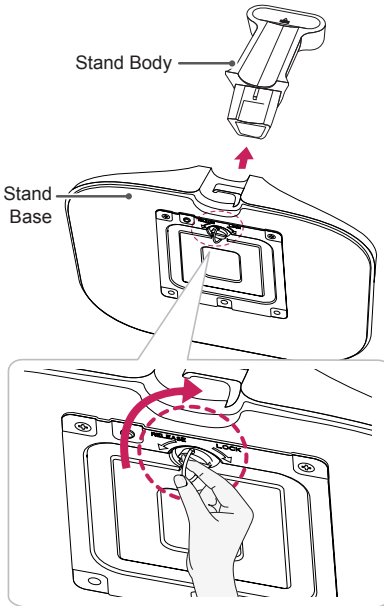


NOTE

- If you don't fasten the screw tightly, TV will fall down and get damaged.
- Tighten the screws firmly to prevent the TV from tilting forward. Do not over tighten.

3

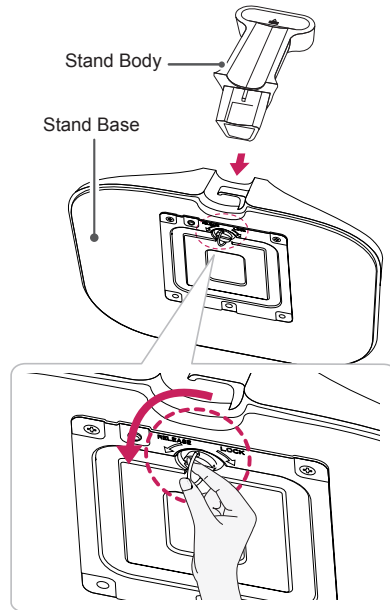
Fix the **Stand Base** to the **Stand Body** and turn the screws on the **Stand Base** to the right.



Detaching the Stand

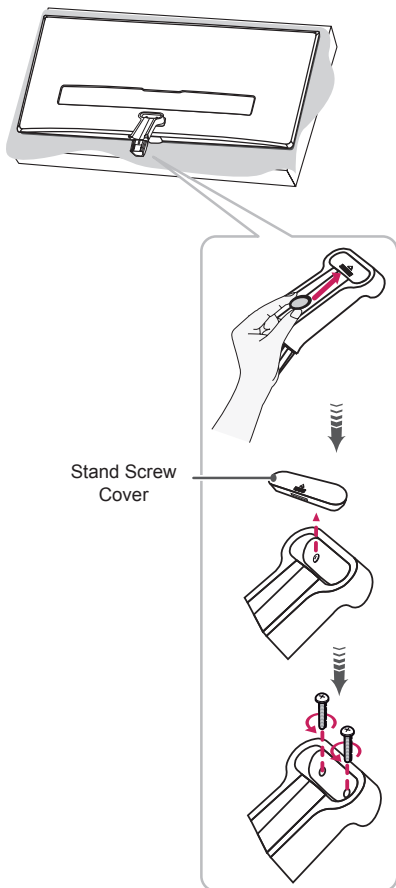
1

Turn the screw to the left, and then pull out the **Stand Base** from the **Stand Body**.



2

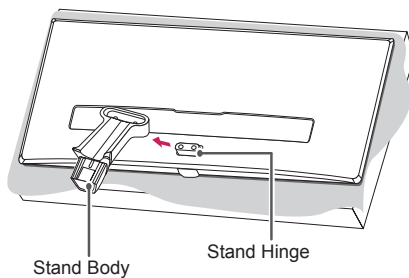
Open the **Stand Screw Cover** on the back of the **Stand Body** and turn the screws on the stand body to the left.

**CAUTION**

- To remove the stand screw cover, use a screwdriver, coin or similar object.
- Removing the cover by hand may cause injury.

3

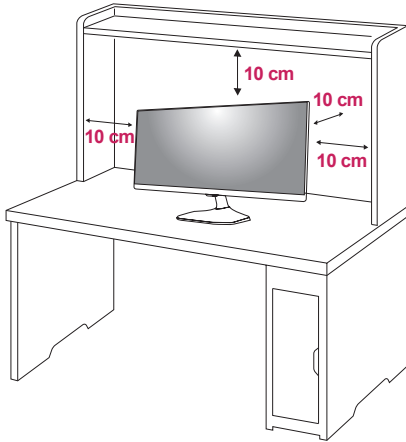
Detach the **Stand Body** from the TV.

**CAUTION**

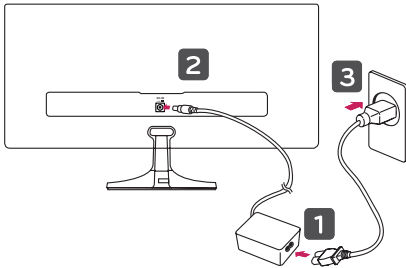
- When detaching the stand to the TV set, place the screen facing down on a cushioned table or flat surface to protect the screen from scratches.

Mounting on a table

- 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 AC-DC Adapter and Power Cord to a wall outlet.

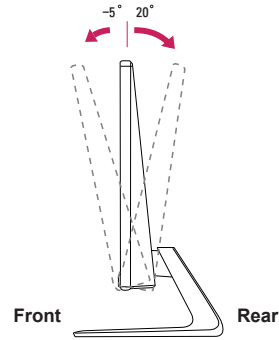


CAUTION

- Do not place the TV near or on sources of heat, as this may result in fire or other damage.
- Disconnect the power cord first, and then move or install the TV. Otherwise electric shock may occur.

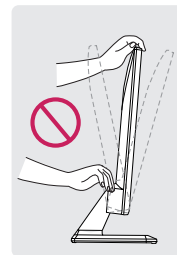
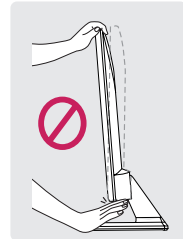
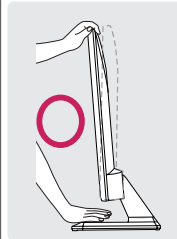
Adjusting the angle of the TV to suit view

- Tilt from -5 to +20 degrees up or down to adjust the angle of the TV to suit your view.



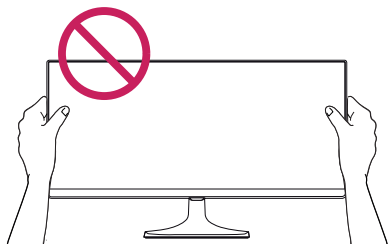
WARNING

- When you adjust the angle, do not hold the button of the TV frame as shown on the following illustration, as may injure your fingers.

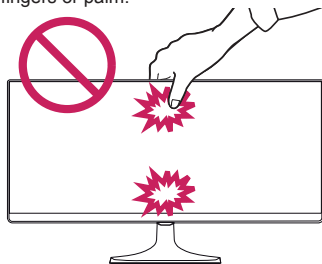


**CAUTION**

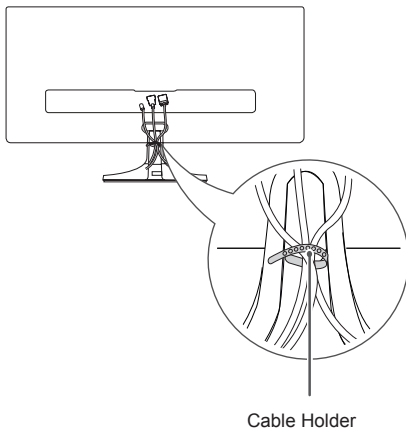
- Be careful not to touch or press the screen area when adjusting the angle of the TV.



- Be careful not to press the screen with your fingers or palm.

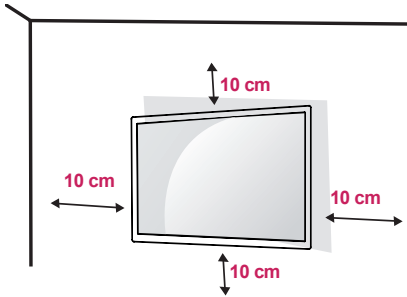
**Tidying cables**

- 1 Gather and bind the cables with the supplied cable holder.
- 2 Place the cable on the hook located on the stand base.



Cable Holder

Mounting on a wall



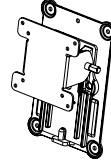
For proper ventilation, allow a clearance of 10 cm on each side and from the wall. Detailed installation instructions are available from your dealer, see the optional Tilt Wall Mounting Bracket Installation and Setup Guide.

If you intend to mount the TV to a wall, attach Wall mounting interface (optional parts) to the back of the TV.

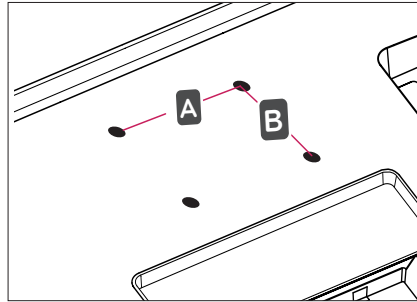
When you install the TV using the wall mounting interface (optional parts), attach it carefully so it will not drop.

- 1 If you use screw longer than standard, the TV might be damaged internally.
- 2 If you use improper screw, the product might be damaged and drop from mounted position. In this case, LG Electronics is not responsible for it.

Wall mount (A x B)	75 x 75
Standard screw	M4 X L10
Number of screws	4
Wall mount bracket (optional)	RW120



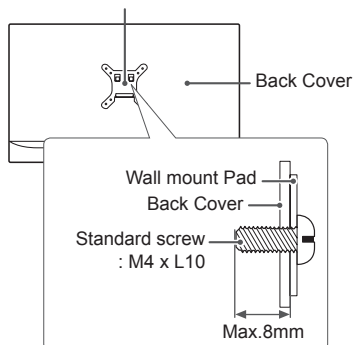
- Wall mount (A x B)



**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 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 mounts that meet the VESA standard. Any damages or injuries by misuse or using an improper accessory are not covered by the warranty.
- Screw length from outer surface of back cover should be under 8mm.

Wall mount Pad

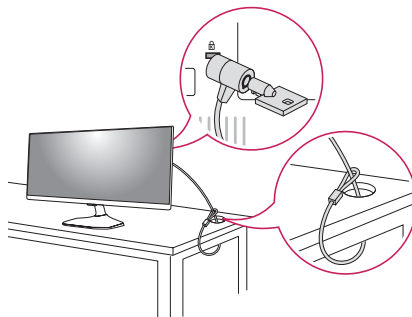
**NOTE**

- Use the screws that are listed on the VESA standard screw specifications.
- The wall mount kit includes an installation manual and necessary parts.
- The wall mount bracket is optional. You can obtain additional accessories from your local dealer.
- The length of screws may differ depending on the wall mount. Be sure to use the proper length.
- For more information, refer to the instructions supplied with the wall mount.

Using the Kensington security system

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

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

**NOTE**

- The Kensington security system is optional. You can obtain additional accessories from most electronics stores.

WATCHING TV

Turning the TV on for the first time

When you access the TV for the first time, the **Factory Reset** screen appears. Select a language and customize the basic settings.

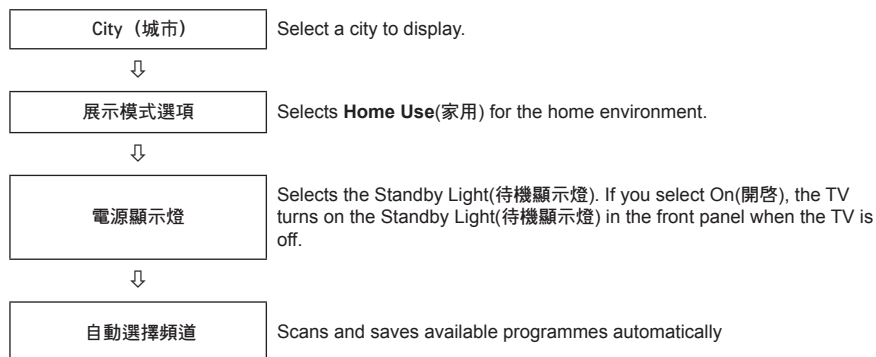
- 1 Connect the power cord to a power outlet.
- 2 Standby Light is turned on. Set the joystick buttons on the TV or press the power, TV/PC, $\wedge$ P $\vee$, INPUT, number buttons on the remote control to turn the TV on.
The Standby Light is turned off.
- 3 The **Factory Reset** screen appears if you access the TV for the first time.



NOTE

- If you do not operate the TV within 40 seconds when the setting menu screen appears, the setting menus will disappear.

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



NOTE

- For those countries without confirmed DTV broadcasting standards, some DTV features might not work, depending on the DTV broadcasting environment.
- To display images in the best quality for your home environment, select **Home Use**(家用) mode.
- **Store Demo**(商店展示) mode is suitable for the retail environment.
- If you select **Store Demo**(商店展示) mode, the previously customized settings will switch to the default settings of **Store Demo**(商店展示) mode in 5 minutes.

- 5 When the basic settings are complete, press **OK** $\odot$.



NOTE

- If you do not complete the **Factory Reset**, it will appear whenever you access the TV.

- 6 To turn the TV off, press the power button on the remote control or joystick button for a few second. The Standby Light is turned on.

**CAUTION**

- Disconnect the power cord from the power outlet when you do not use the TV for a long period of time.

**NOTE**

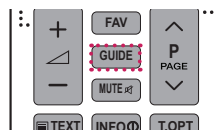
- You can also switch the TV from PC mode to TV mode, press **TV/PC**.
- You can also access **Factory Reset** by accessing **OPTION** in the main menus.

TV display (5:9 OSD)

Programme Guide

Press the **GUIDE** button on the remote control while you are watching TV.

- On the right-hand side (5:9 OSD) of the TV screen, the details of programme you are currently watching and the programme organization information are displayed.
- DTV channels are marked only in 'Other Channels' list.

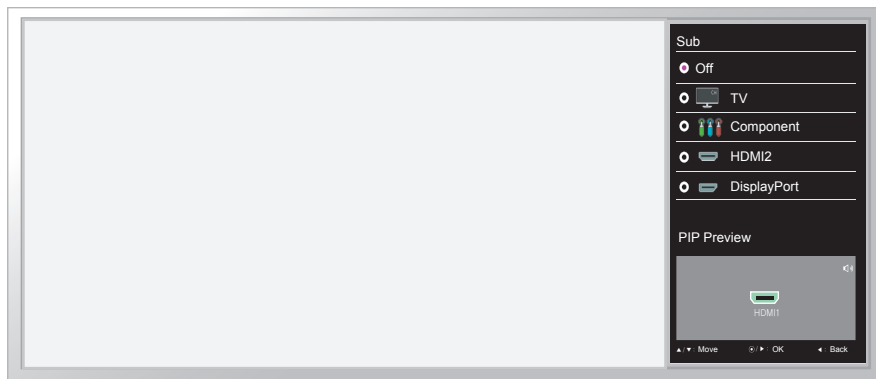
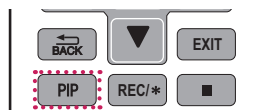


NO.	Description
1	Displays the programme you are currently watching.
2	Displays the broadcasting type of the programme you are currently watching.
3	Displays the broadcasting type icon. (e.g., HD, Dolby, Digital, etc.)
4	Displays the current date and time.
5	Displays the current programme schedule or the entire programme list.
6	Displays the information of programme you are currently watching.
7	Displays the running time of the programme. - Displays the progress including start and end times of the programme.
8	Displays the available functions. - If the programme you are currently watching is focused, the Watch function is displayed. - If the programme you are not currently watching is focused, the Schedule function is displayed. - If other channel guide is focused, the Watch function is displayed.
9	Displays the programme guide for all programmes.

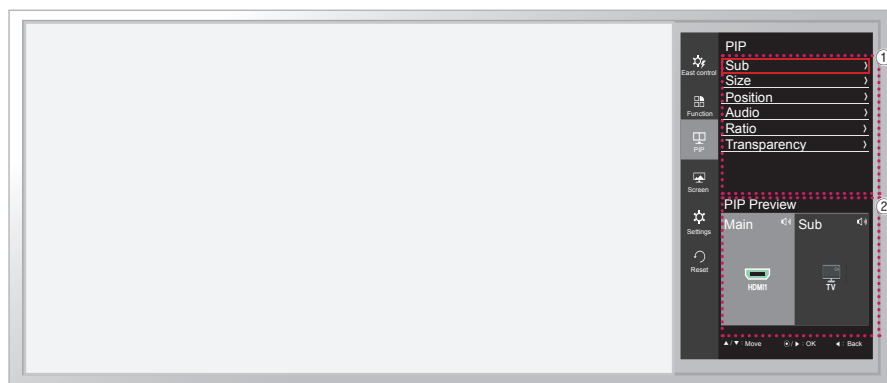
PIP function

Press the **PIP** button on the remote control while you are watching HDMI1,2, DisplayPort.

- Configured Sub screen is saved until change the Main screen.



While watching PIP, press the **PIP SETTINGS** button on the remote control to display the Sub Menu.



NO.	Description								
1	Sub	PIP Map		PIP Sub					
				HDMI1	HDMI2	Display Port	TV	Component	AV
		Current input	HDMI1	X	O	O	O	O	X
			HDMI2	O	X	O	O	O	X
			DisplayPort	O	O	X	O	O	X
			TV	X	X	X	X	X	X
			Component	X	X	X	X	X	X
		AV	X	X	X	X	X	X	
Size	Sets the size of the PIP Sub window. (Small / Medium / Large / Balanced)								
Position	Sets the position of the PIP Sub window. (top left, top right, bottom left or bottom right) * This function is disabled when the size is set to [Balanced].								
Audio	Selects the audio input. * Only the items that are available under the current combination are enabled (PIP Main/PIP Sub).								
Ratio	Sets the aspect ratio of PIP Sub. * This function is enabled when Size is set to [Balanced].								
Transparency	Sets the opacity of PIP. (Off / 25 % / 50 % / 75 %) * This function is disabled when Size is set to [Balanced].								
2	Displays the configured OSD icon and its name.								

**NOTE**

- PIP can be used when setting of HDMI resolution supporting PC and 480p/576p/720p/1080p signal is configured.

MAKING CONNECTIONS

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

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



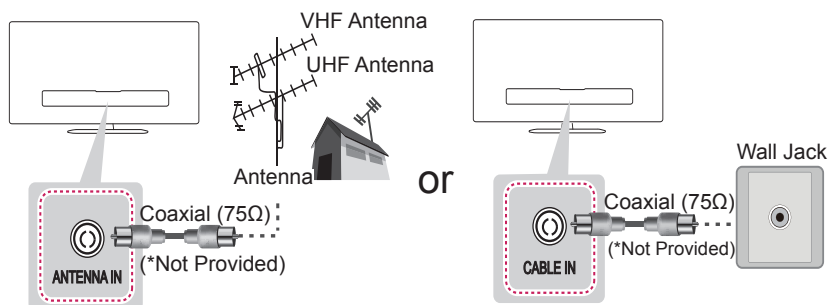
NOTE

- If you record a TV program on a DVD recorder or VCR, make sure to connect the TV signal input cable to the TV through a DVD recorder or VCR. For more information about recording, refer to the manual supplied with the connected device.
- The external device connection may differ from the model.
- Connect external devices to the TV regardless of the order of the TV port.

Connecting an antenna

Connect an antenna, cable or cable box to watch TV referring to the following. The illustrations may differ from the actual accessories and an RF cable is optional.

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



NOTE

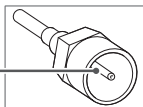
- Use a signal splitter to use more than 2 TVs.
- If the image quality is poor, install a signal amplifier properly to improve the image quality.
- If the image quality is poor with an antenna connected, aim the antenna to the proper direction.
- Visit <http://AntennaWeb.org> for more information about the antenna and cable connection.



CAUTION

- Make sure not to bend the copper wire of the RF cable.

Copper wire



- Complete all connections instructions between devices, and then connect the power cord to the power outlet to prevent damages to your TV.

External Device Connection

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

HDMI connection

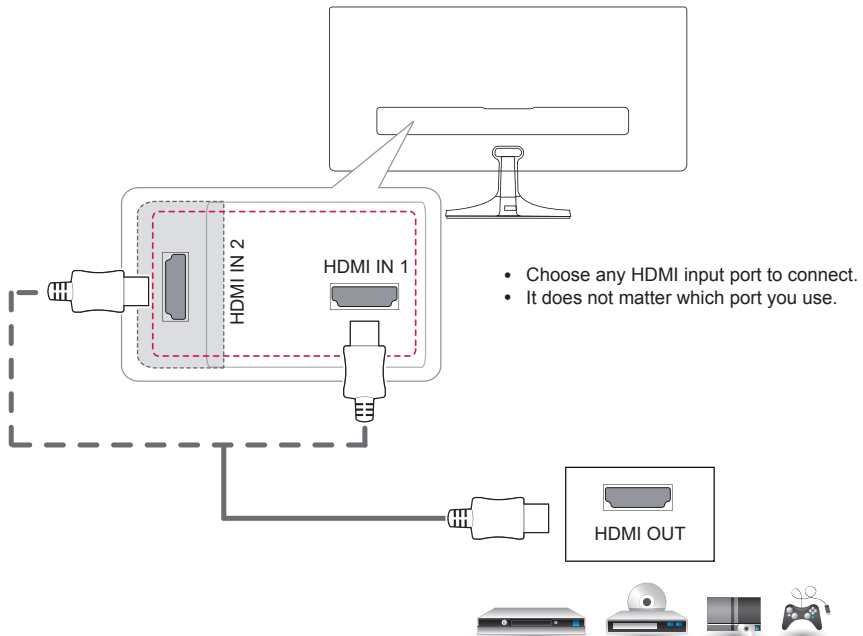
HDMI is the best way to connect a device.

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 on the following illustration.



NOTE

- HDMI cable to the HDMI input and a digital broadcast receiver, connect the HDMI output. Video, with sound output.
- Press the **INPUT** button on the remote control to select either HDMI IN 1 or HDMI IN 2.
- Dolby Digital and DTS are not supported. If no sound is coming out, set the audio output of the connected device to PCM.
- Using a non-standard HDMI cable may cause a problem with some of the functions. It is highly recommended to use a standard cable.



DVD / Blu-Ray / HD Cable Box /
HD STB / Gaming device

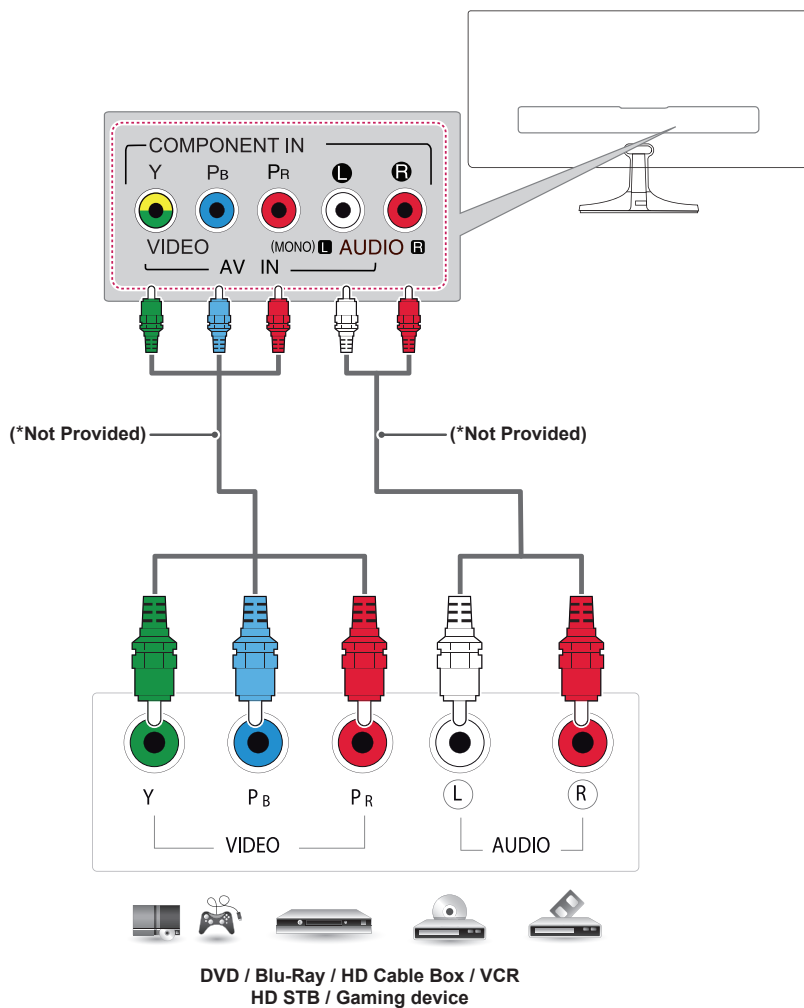
Component connection

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 on the following illustration. To display images by using progressive scan, make sure to use a component cable.



NOTE

- If cables are installed incorrectly, image is displayed as black-and-white or abnormal colour.
- Check to ensure each cable is matched with the corresponding colour connection.
- Press the **INPUT** button on the remote control to select component.



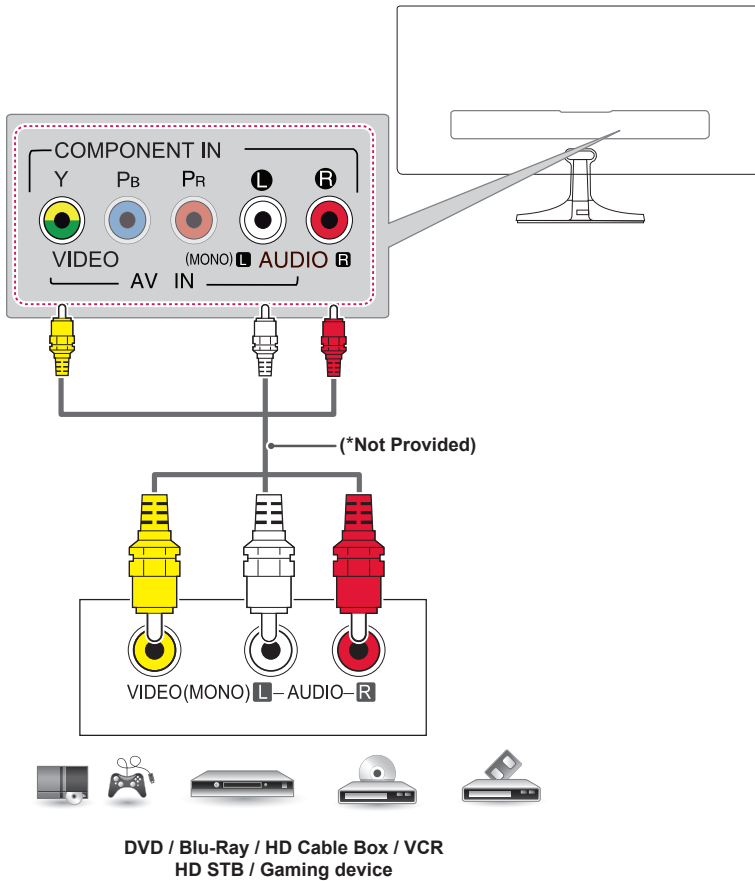
Composite connection

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 on the following illustration.



NOTE

- Check to ensure each cable is matched with the corresponding colour connection.
- Press the **INPUT** button on the remote control to select AV.



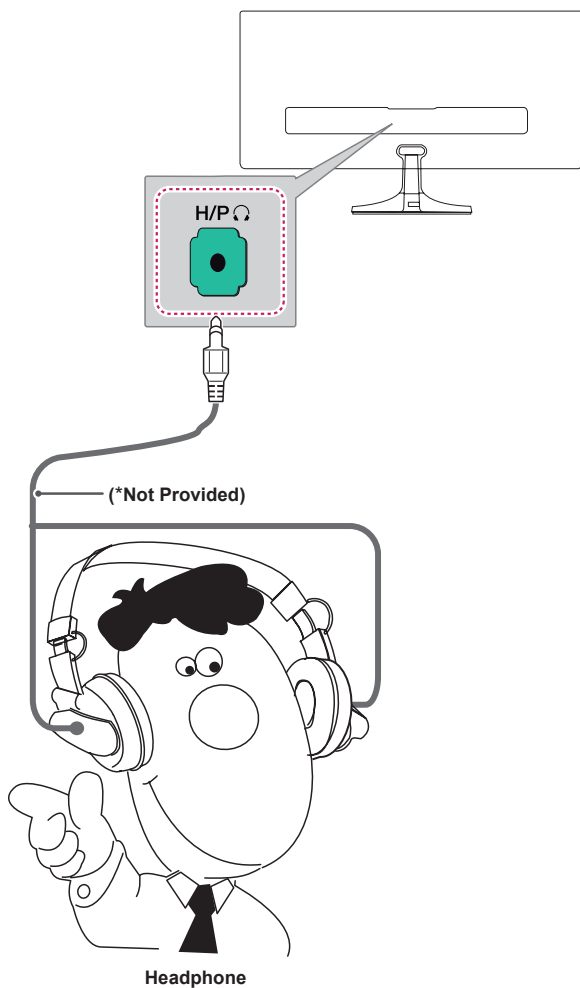
Headphone connection

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



NOTE

- AUDIO menu items are disabled when connecting a headphone.
- Headphone impedance: $16\ \Omega$
- Max audio output of headphone: 2.5 mW to 5.5 mW
- Headphone jack size: 0.35 cm



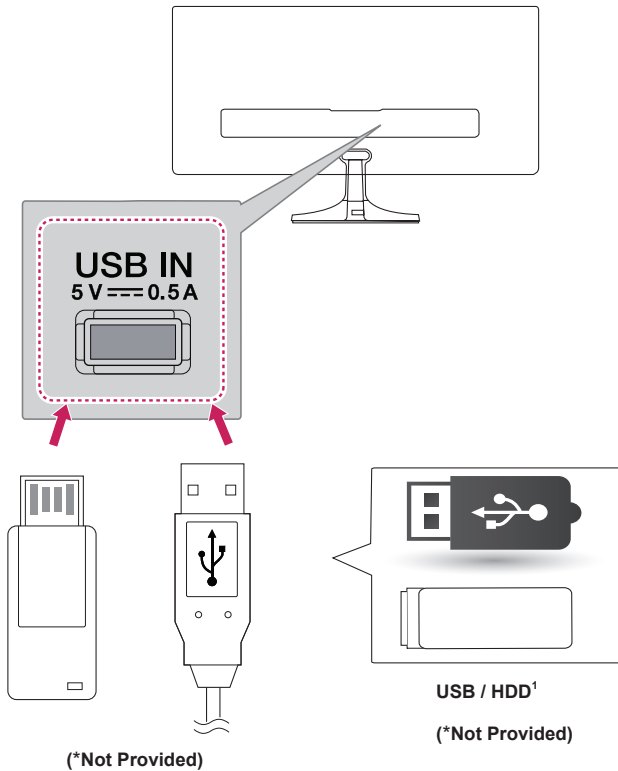
Connecting a USB Device

Connect a USB storage device such as USB flash memory, external hard drive, MP3 player or a USB memory card reader to the TV and select input as USB to use various multimedia files.



NOTE

- It may not work when USB 3.0 devices are connected.



- 1 The USB port provides 0.5A electric current. If you need more electric current in the case of an HDD, use a separate power adaptor.

Connecting to a PC

Your TV supports the Plug & Play* feature.

- Plug & Play: The function when a PC recognizes a connected device and requires no driver to be installed.



NOTE

- It is recommended to use an TV with the HDMI connection for the best image quality.
- If you turn the TV on when the set is cold, the screen may flicker. This is normal.
- Some red, green, or blue spots may appear on the screen. This is normal.
- Do not press the screen with your finger for a long time as this may result in temporary distortion on the screen.
- Avoid displaying a fixed image on the screen for a long period of time to prevent image burn. Use a screensaver if possible.
- When connecting the power cord to the outlet, use a grounded (3-hole) multi-socket or a grounded power outlet.

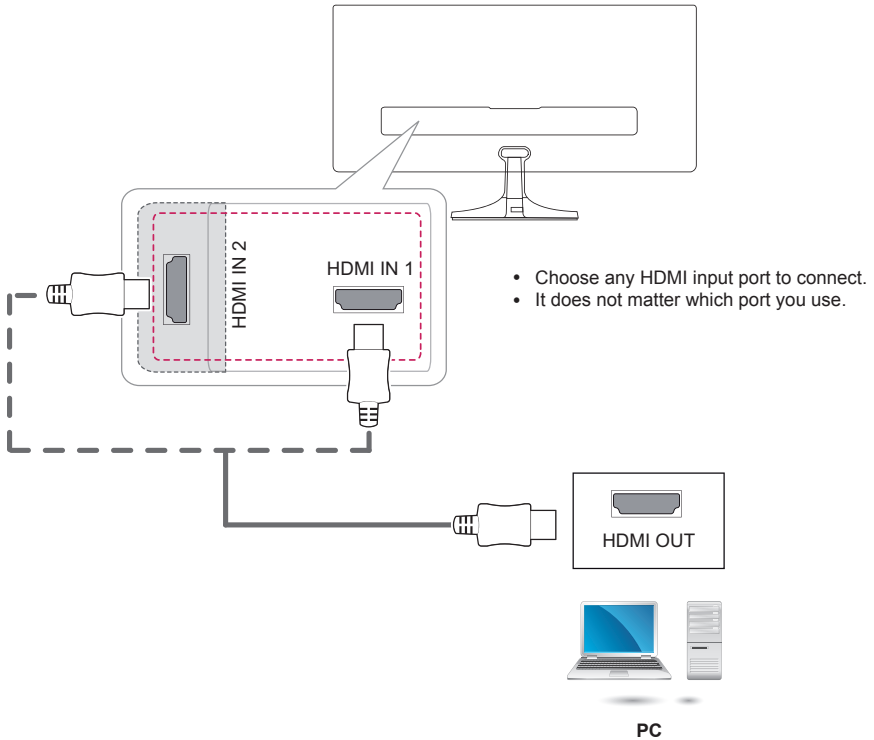
HDMI connection

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



NOTE

- Use a High Speed HDMI® cable.
- Please check your PC settings if you cannot hear any sound in HDMI mode.
- Press the **INPUT** button on the remote control to select either HDMI IN 1 or HDMI IN 2.
- Using a DVI to HDMI cable may cause compatibility issues.
- If the PC is connected through a HDMI, the device may cause compatibility issues.
- Dolby Digital and DTS are not supported. If no sound is coming out, set the audio output of the connected device to PCM.
- Using a non-standard HDMI cable may cause a problem with some of the functions. It is highly recommended to use a standard cable.



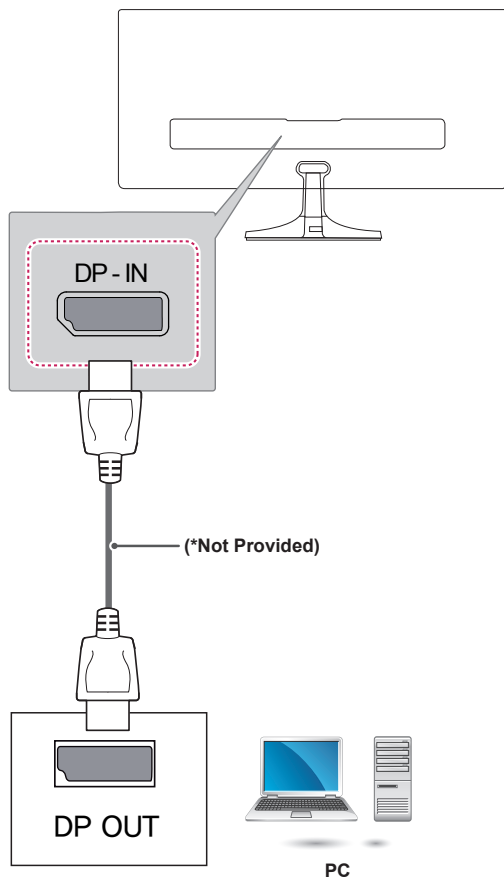
Display Port connection

Transmits the digital video and audio signals from your PC to the TV. Connect your PC to the TV using the display port cable as illustrated below.



NOTE

- Sound may not hear depending on the DP version of your PC.
- Dolby Digital and DTS are not supported. If no sound is coming out, set the audio output of the connected device to PCM.
- Press the **INPUT** button on the remote control to select DisplayPort.
- Using a DP to HDMI or DP to DVI cable may cause compatibility issues.
- HDMI signals are not converted to DP signals. If you use a DP to HDMI cable, you can watch your media on a PC or other device with DP output by using the HDMI port.

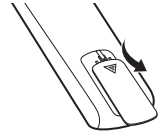


REMOTE CONTROL

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 the $\oplus$ and $\ominus$ ends to the label inside the compartment, and close the battery cover. 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.
- In Analogue TV and some countries, some remote control buttons may not work.

Make sure to point the remote control toward the remote control sensor on the TV.

	⏻ (POWER) Turns the TV on or off. TV/RAD Selects Radio, TV and DTV programme. SUBTITLE Recalls your preferred subtitle in digital mode. AD By pressing the AD button, audio descriptions function will be enabled. TV/PC Selects TV or PC mode. INPUT Changes the input source.
	Number buttons Enters numbers. LIST Accesses the saved programme list. Q.VIEW Returns to the previously viewed programme.
	FAV Accesses your favourite programme list. GUIDE Shows programme guide. MUTE Mutes all sounds. + - Adjusts the volume level. ^ P v Scrolls through the saved programmes ^ PAGE v Moves to the previous or next screen.
	Teletext buttons (TEXT / T.OPT) These buttons are used for teletext. INFO Views the information of the current programme and screen.
	SETTINGS Accesses the main menus. PIP SETTINGS PIP Displays the Menu screen for the PIP mode. Q. MENU Accesses the quick menus. 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. EXIT Clears all on-screen displays and returns to TV viewing.
	PIP Turns the PIP mode on or off. REC/* Starts to record and displays record menu. (Depending on model) Control buttons () Controls the USB menus, or the compatible devices (USB). Colour buttons These access special functions in some menus. (: Red, : Green, : Yellow, : Blue) - + (Backlight) Adjusts the brightness of the screen by controlling the screen backlight.



NOTE

- On MHEG programme, you cannot adjust the backlight with the yellow or blue key.

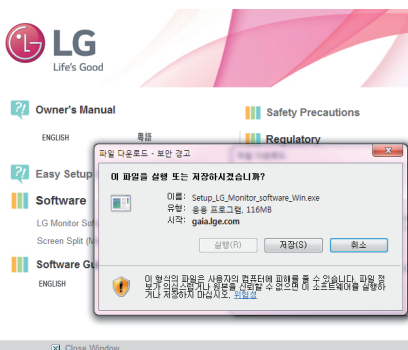
INSTALLING LG MONITOR SOFTWARE

Insert the the Manual CD included in the product package into your PC's CD driver and install the LG Monitor Software.

- 1 Set up Internet Explorer as the default web browser.



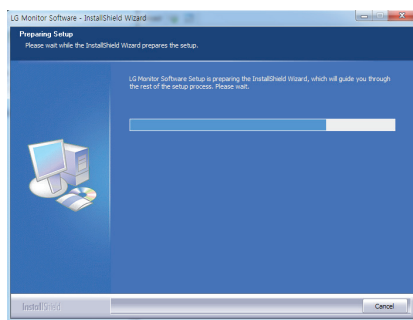
- 2 Click **LG Monitor Software** on the CD's main screen. When the file download window appears, click **Run**. (Although the screen below may differ depending on your operating system or Internet Explorer version, the installation methods are the same.)



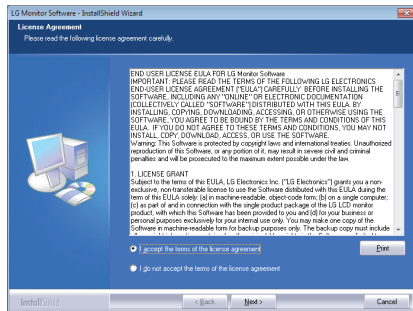
NOTE

- Windows 7 must be updated to Service Pack 1 or higher.

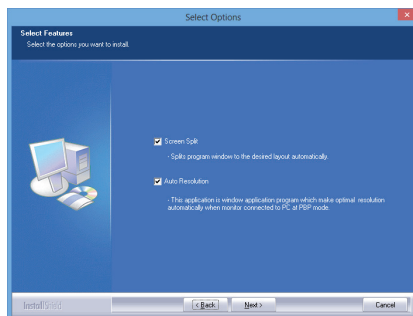
- 3 Follow the instructions to proceed with the installation.



- 4 Check **I accept the terms of the agreement** on the License Agreement screen and then click the **Next** button.



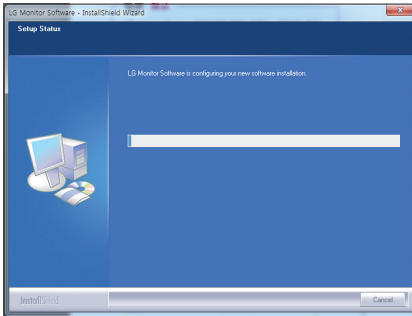
- 5 Select the programme that you want to install.



NOTE

- **Screen Split** : This program automatically splits the program window as desired.
- **Auto Resolution**: This is a program that auto-matically changes the resolution to the optimal settings when connecting the monitor to the PC in PIP mode.
 - ※ This program is not supported in Clone Mode.
 - ※ Extended Mode is not supported when using a single display.

- 6 The LG Monitor Software starts the installation as shown below:



- 7 The program you selected on the FUNCTION page will install automatically.

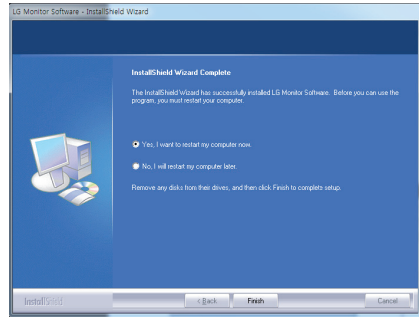


Please wait. Installing Screen Split ...



Please wait. Installing Auto Resolution...

- 8 When the installation is complete, restart your system.

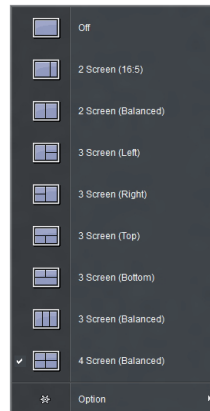


NOTE

- 1 If you run Screen Split, the Screen Split icon [] appears in the system tray at the right bottom of the PC screen.



- 2 Right-click the Screen Split icon and select a layout you want.



CUSTOMIZING SETTINGS

Accessing the Main Menus

The menus displayed on the TV screen may vary depending on the selected input mode.

TV, Component, AV

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

When you return to the previous menu, press  **BACK**.

PICTURE	Adjusts the image size, quality or effect.
AUDIO	Adjusts the sound quality, effect or volume level.
SETUP	Sets up and edit programmes.
TIME	Sets the time, date or Timer feature.
LOCK	Locks or unlocks channels and programmes.
OPTION	Customizes the general settings.

PICTURE



To select Picture Mode

SETTINGS> PICTURE> Picture Mode	
Selects the picture mode optimized for the viewing environment or the programme. Depending on input signal, available range of picture modes may differ.	
Expert mode is for picture tuning professionals to control and fine-tune using a specific image. For normal images, the effects may not be dramatic.	
Vivid	Heightens contrast, brightness and sharpness to display vivid images.
Standard	Displays images in standard levels of contrast, brightness and sharpness.
Eco	[This feature is available in certain countries only] The Energy Saver feature changes settings on the TV to reduce power consumption.
Cinema / Game	Displays the optimum picture for movie, game.
Sport	[This feature is available in certain countries only.] Optimised picture mode for sport. The pitch and kits are presented in vibrant colours, with crystal-clear images even for fast movements.
Expert 1 Expert 2	Menu for adjusting picture quality that allows experts and amateurs to enjoy the best TV viewing. This is the adjustment menu provided for ISF-certified picture tuning professionals. (ISF logo can only be used on ISF-certified TVs.) ISFccc: Imaging Science Foundation Certified Calibration Control

To fine-tune picture mode

SETTINGS> PICTURE> Picture Mode> Backlight / Contrast / Brightness / Sharpness / Colour / Tint / Colour Temp.	
First select a Picture Mode of your choice. Depending on the input signal or other picture settings, the range of detailed items for adjustment may differ.	
Backlight	Adjusts the display brightness by varying the brightness of the LCD panel.
Contrast	Adjusts the Colour contrast and brightness of the screen.
Brightness	
Sharpness	
Colour	Adjusts the sharpness of the screen.
Tint	Adjusts the Colour depth of the screen.
Colour Temp.	Adjusts the gamma, Colour temperature and Colour of the screen.
	Adjusts the overall tint of the picture. In Expert mode, you can fine-tune the picture using the Gamma or Method options.

To set advanced control

SETTINGS> PICTURE> Picture Mode> Advanced Control / Expert Control	
Calibrates the screen for each picture mode; or adjusts picture settings for a special screen. First select a Picture Mode of your choice. Depending on input signal or other picture settings, the range of detailed items for adjustment may differ.	
Dynamic Contrast	Adjusts the contrast to the optimal level according to the brightness of the image.
Dynamic Colour	Adjusts colours to make the image appear in more natural colours.
Skin Colour	Sets Skin colour spectrum separately to implement the skin colour as defined by the user.
Sky Colour	Sky colour is set separately.
Grass Colour	Natural colour spectrum (meadows, hills, etc.) can be separately set.

Gamma	Sets the gradation curve according to the output of picture signal in relation to the input signal.
Colour Gamut	Selects the range of colours that can be expressed.
Edge Enhancer	Shows clearer and distinctive yet natural edges of the video.
Expert Pattern	[This feature is available on certain models only] Patterns used for expert adjustment
Colour Filter	Filters a specific colour spectrum in RGB colours to fine-tune colour saturation and hue accurately.
Colour Temperature	Adjusts the overall tone of the screen as desired. In Expert mode, detailed fine-tuning can be set via Gamma method, etc.
Colour Management System	This is a system that experts use when they adjust colour with a test pattern. They can select from six colour areas (Red / Green / Blue / Cyan / Magenta / Yellow) without affecting other colours. For normal images, adjustments may not result in noticeable colour changes.

To set additional picture options

SETTINGS> PICTURE> Picture Mode> Picture Option	
[This feature is available on certain models only] Adjusts detailed setting for images. Depending on input signal or other picture settings, the range of detailed items for adjustment may differ.	
Noise Reduction	Eliminates noise in the picture.
MPEG Noise Reduction	Eliminates noise generated while creating digital picture signals.
Black Level	Adjusts the brightness and contrast of the screen to suit the black level of the input picture by using the blackness (black level) of the screen.
Real Cinema	Optimizes the screen for movie viewing.
Motion Eye Care	[This feature is available on certain models only.] Saves power consumption by adjusting the brightness corresponding to the movement of the image on the screen.

To reset picture settings

SETTINGS> PICTURE> Picture Reset/ Reset	
Resets picture settings that the user customizes. Each picture mode is reset. Select the picture mode you wish to reset.	

To adjust Aspect Ratio

Selects the screen aspect ratio.

SETTINGS> PICTURE> Aspect Ratio	
16:9	Resizes images to fit the screen width.
21:9	Resizes the image ratio to fit 21:9 screen.
Just Scan	Displays video images in the original size without removing parts of the edge of the image. In DTV, Component, HDMI, and DVI (over 720p) mode, Just Scan is available.
Original	When your TV receives a wide screen signal it will automatically change to the picture format broadcasted.
Full Wide	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. [This function is only available in Taiwan, Asia, Africa, and Israel.] In DTV mode, Full Wide is available. [This function is only available in the EU, China, and Hong Kong.] In Analogue/DTV/AV/Scart mode, Full Wide is available.

4:3	Resizes images to the previous standard 4:3.
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 up or down.
Zoom	Resizes images to fit the screen width. The top and bottom parts of the image may be cut off.
Cinema Zoom 1	Choose Cinema Zoom when you want to enlarge the picture in correct proportion.

While viewing an external device, these cases may result in image burn:

- a video with stationary caption (such as network name)
- 4 : 3 aspect ratio mode for an extended period

Take caution when using these functions.

Available picture size may differ depending on the input signal.

AUDIO



To use Sound Mode

SETTINGS> AUDIO> Sound Mode	
Adjusts TV audio to an optimal level according to a selected sound mode.	
Standard	Suitable for all types of video.
News / Music / Cinema / Sport(Soccer) / Game	Sets audio optimized for a specific genre.

*soccer : This feature is available in certain countries only.

*News : This feature is available on certain models only.

Using the Sound Effect function

SETTINGS> AUDIO> Sound Effect
the user can select various sound effects.
Sound Effect function is available only for Standard mode in Sound Mode menu.

To adjust Clear Voice II function

SETTINGS> AUDIO> Sound Effect> Clear Voice II
Boosts voice clarity from the TV.

To use MaxxAudio

SETTINGS> AUDIO> Sound Effect> MaxxAudio
MaxxAudio [®] by Waves, recipient of a Technical GRAMMY Award [®] is a suite of studio-quality sound tools for a superior listening experience.

To adjust User Setting function

SETTINGS> AUDIO> Sound Effect> User Setting	
Adjusts the volume to a level of your choice using the User EQ.	
Reset	Resets voice options that the user has changed.

To adjust audio balance

SETTINGS> AUDIO> Sound Effect> Balance
Adjusts left/right audio balance.

Initializing the Sound Effect function**SETTINGS> AUDIO> Sound Effect> Reset**

Initialize the applied effect under the Sound Effect menu.

To set Auto Volume**SETTINGS> AUDIO> Auto Volume**

Auto Volume to On. Varying volume output from channel to channel is automatically adjusted for convenient TV watching when clicking through different channels.

To set sound out**SETTINGS> AUDIO> Sound Out****TV Speaker**

[This feature is available on certain models only.]
Sound is output through the TV speaker.

Headphone

[Only available for models with an earphone/headphone port]
Sound is output through the headphone connected to the earphone/headphone port.
If you connect headphones while the TV is powered on, it automatically detects the headphones and sounds through them.

To use DTV Audio Setting function**SETTINGS> AUDIO> DTV Audio Setting**

[Depending on model]

When an input signal comprises different audio signals, this function allows you to select the audio type you want.

If set to AUTO, the search order is HE-AAC → Dolby Digital+ → Dolby Digital → MPEG and output is produced in the first Audio Format found.

- In Italy / Latvia/ Lithuania only, the search order is HE-AAC → Dolby Digital+ → MPEG → Dolby Digital.

- If the selected Audio Format is not supported, another Audio Format may be used for output.

To synchronize audio and video**SETTINGS> AUDIO> AV Sync. Adjust**

Synchronizes video and audio directly when they do not match.

If you set AV Sync. Adjust to ON, you can adjust the sound output (TV speakers or SPDIF) to the screen image.

To use Sound Optimizer function**SETTINGS> AUDIO> Sound Optimizer**

[Depending on model] Optimized sound for custom TV installation.

Normal

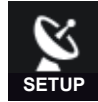
General sound mode.

Wall Mount Type

Optimizes sound for a wall-mounted TV.

Stand Type

Optimizes sound for a stand-mounted TV.

SETUP**Automatically Setting Up Programme****SETTINGS> SETUP> Auto Tuning**

Automatically tunes the programmes.

1. Select Country where the TV is used. Programme settings change depending on the country you choose.

2. Initiate Auto Tuning.

3. Set Auto Tuning following screen instructions.

If Input Source is not connected properly, programme registration may not work.

Auto Tuning only finds programmes that are currently broadcasting.

If Lock System is turned on, a pop-up window will appear asking for password.

To use Manual Tuning**SETTINGS> SETUP> Manual Tuning**

Adjusts programmes manually and saves the results.

For digital broadcasting, signal strength and signal quality can be checked.

For analogue broadcasting, you can set up station names and use fine tuning (except for Satellite mode).

Normally fine tuning is only necessary if reception is poor.

You can also adjust the Frequency(KHz) and Bandwidth.

To edit programmes**SETTINGS> SETUP> Programme Edit**

Edits the saved programmes.

Watch, add/remove favourite programme, register/delete programme, block/unblock programme, skip, edit programme number and satellite sorting etc. of the selected programme.

To view programme information**Press INFO button.**

Displays information on current programme and/or current time, etc.

Press GUIDE button.

[In Digital mode only]

Obtains information about programmes and airtime. Checks the broadcasting time of the desired programme and schedule viewing.

[This feature is available in certain countries only.] [In Digital mode Only]

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

To set favourite programmes**SETTINGS> SETUP> Programme Edit**

[This feature is available on certain models only.]

1. Select the channel you want.

2. Press the FAV button to select Favorite Group and then OK.

You can check your favorite channels by pressing the LIST button on the remote control.

To use Favourite**Press the FAV button.**

You can only view the channels you set as favorites.

TIME



To set current time

SETTINGS> TIME> Clock	
Checks or changes the time while watching TV.	
Auto	Synchronizes the TV clock to the digital time information sent by the TV station.
Manual	Sets the time and date manually if the auto setup does not correspond to the current time.

To set the TV to turn on and off automatically

SETTINGS> TIME> On Time / Off Time	
Sets On / Off time. Select Off on Repeat to discontinue On Time / Off Time. To use On Time / Off Time, set the current time correctly. Even when the On Time function is on, the TV will turn off automatically in 120 minutes when no button is pressed within that time.	

To use Sleep Timer

SETTINGS> TIME> Sleep Timer	
Turns off the TV after a preset number of minutes. To cancel the Sleep Timer, select Off.	

LOCK



To set password

SETTINGS> LOCK> Set Password	
Set or changes TV password. The initial password is set to [0000].	

To lock system

SETTINGS> LOCK> Lock System	
Locks the selected channel or external input. First set Lock System to On.	
Block Programme	Blocks programmes with content inappropriate for children. Programmes can be selected but the screen is blank and the audio is muted. To watch a locked programme, enter the password.

To use Key Lock

SETTINGS> LOCK> Key Lock	
Locks control buttons on TV. Key Lock function remains intact even in case of power outage or when the power cord is removed from the wall socket. Key Lock function can only be set by remote control, and not by the button on the TV. Even though Key Lock is set to ON, TV's buttons can turn on the power.	

OPTION

**SETTINGS> OPTION> Language**

You can select the language of the menu displayed on the screen and the digital sound broadcasting.

Menu Language	Selects a language for the display text.
Audio Language	[In Digital mode Only]: Selects the desired language when watching digital broadcasting containing several voice languages.
Subtitle Language	[In Digital mode Only]: [This feature is available in certain countries 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.
Text Language	[In Digital mode Only]: [This feature is available in certain countries only.] 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.

SETTINGS> OPTION> City/Area (Depending on country)

Sets the country that the TV uses.

TV settings are changed according to the broadcast environment of the selected country.

If the country setting is changed, the Auto Tuning information screen may appear.

In a country that Digital broadcasting regulation isn't fixed, some DTV functions may not work depending on digital broadcasting circumstances.

To set Hard of Hearing**SETTINGS> OPTION> Hard of Hearing**

[This feature is available in certain countries only.]

This function is used for the hearing impaired.

If it is set to on, the subtitle is displayed by default.

To set Power Indicator**SETTINGS> OPTION> Standby Light**

[This function is available on certain models or in certain countries only.]

Turns the standby light in the front panel of the TV on/off.

To set up USB storage**SETTINGS> OPTION> Divx(R) VOD**

Registration	Checks DivX Reg. Code for replaying DivX protected videos. Register at http://vod.divx.com . Use Reg. Code to rent or purchase movies at www.divx.com/vod . - Rented/purchased DivX files cannot be played if the DivX Registration Code of a different device is used. Use only the DivX Registration Code granted to this specific device. - Converted files not conforming to the DivX Codec Standard may not play or may produce abnormal sound.
Deregistration	Deregisters DivX.

To specify Factory Reset**SETTINGS> OPTION> Factory Reset**

All stored information is deleted and TV settings are reset.
TV turns itself off and back on, and all settings are reset.
When Lock System is in place, a pop-up window appears and asks for password.
Do not turn off the power during initialization.

To change TV mode**SETTINGS> OPTION> Mode Setting**

Selects Standard or Store Demo.
When in use in home, please select Standard.
Store Demo mode is for store display.

SETTINGS> OPTION> Customer Support> Software Update

Uses Software Update to check and obtain the latest version. If not updated, certain functions may not work properly.

Software Update	Set it to On. If an update is available, a prompt will appear to perform the update.
Automatic update mode	[This feature is available on certain models only] If an update is available, the update automatically starts without prompting.
Check Update Version	[This feature is available on certain models only] Checks the latest update version installed. When a new update is available, the download process can be performed manually.

- When the update starts, the update progress window appears for a short time and disappears.
- [Depending on model] The latest version can be obtained via the digital broadcast signal or an internet connection.
- Changing the programme while downloading the software via a digital broadcast signal interrupts the download process. Returning to the initial programme allows downloading to resume.
- If software is not updated, certain functions may not work properly.
- [For Finland/Sweden/Denmark/Norway models.] If the software update is performed via the broadcasting signal, you will be prompted to continue the update regardless of whether the Automatic update mode is enabled or not.
- [This feature is available in certain countries only.] It is also possible to check manually for available updates.

SETTINGS > OPTION > Customer Support > Picture Test

[This feature is available on certain models only.]
Run a Picture Test first to verify that the image signal output is normal.
If there is no problem with the test image, check connected external devices and the broadcast signal.

SETTINGS > OPTION > Customer Support > Sound Test

[This feature is available on certain models only.]
Run a Sound Test first to verify that the sound signal output is normal.
If there is no problem with the test sound, check connected external devices and the broadcast signal.

Plays content stored on a USB device (external HDD, USB memory stick) directly on the TV, easily and conveniently.

To connect a USB device

Connect the USB storage device to the TV's USB IN terminal.
The connected USB storage device can be used immediately.

To remove the USB device

Q.Menu> USB device

Select a USB storage device that you want to remove.

When you see a message that the USB device has been removed, separate the device from the TV.
Once a USB device has been selected for removal, it can no longer be read. Remove the USB storage device and then re-connect it.

Using a USB storage device - warning

- If the USB storage device has a built-in auto recognition program or uses its own driver, it may not work.
- Some USB storage devices may not work or may work incorrectly.
- Use only USB storage devices formatted with the Windows FAT32 or NTFS File System.
- For external USB HDDs, it is recommended that you use devices with a rated voltage of less than 5 V and a rated current of less than 500 mA.
- It is recommended that you use USB memory sticks of 32 GB or less and USB HDDs of 1 TB or less.
- If a USB HDD with power-saving function does not work properly, turn the power off and on. For more information, refer to the user manual of the USB HDD.
- Data in the USB storage device can be damaged, so be sure to back up important files to other devices. Data maintenance is the user's responsibility and the manufacturer is not responsible for data loss.

To use USB storage

INPUT> USB> Movie List / Photo List / Music List

Selects a file from the list. Displays the file that you choose.
Sets play related settings by checking option during disk playback.

- Movie List : This feature is available on certain models only.

USB supporting file

Maximum data transfer rate	20 Mbps (megabits per second)
External subtitle formats supported	*.smi, *.srt, *.sub (MicroDVD, SubViewer 1.0/2.0), *.ass, *.ssa, *.txt (TMPlayer), *.psb (PowerDivX)
Internal subtitle formats supported	XSUB (supports internal subtitles generated from DivX6)

Available video file

.asf, .wmv	[Video] VC-1 Advanced Profile, VC-1 Simple and Main Profiles, MP43 [Audio] WMA Standard
.3gp, .3gp2	[Video] H.264/AVC, MPEG-4 Part2 [Audio] AAC, AMR(NB/WB)
.divx, .avi	[Video] DivX3.11, DivX4, DivX5, DivX6, XviD, H.264/AVC, Motion JPEG [Audio] MPEG-1 Layer I, II, Dolby Digital, MPEG-1 Layer III (MP3), *DTS
.mp4, .m4v, .mov	[Video] H.264/AVC, MPEG-4 Part 2, XviD [Audio] AAC, MPEG-1 Layer III (MP3)
.mkv	[Video] H.264/AVC, XviD, MPEG-4 Part2 [Audio] HE-AAC, Dolby Digital, MPEG-1 Layer III (MP3), *DTS
.ts, .trp, .tp, .mts, .m2ts	[Video] H.264/AVC, MPEG-2 [Audio] MPEG-1 Layer I, II, MPEG-1 Layer III (MP3), Dolby Digital, Dolby Digital Plus, AAC
.vob	[Video] MPEG-1, MPEG-2 [Audio] Dolby Digital, MPEG-1 Layer I, II, DVD-LPCM
.mpg, .mpeg, .mpe	[Video] MPEG-1 [Audio] MPEG-1 Layer I, II

*DTS : Depending on model

Available music file

mp3	[Bit rate] 32 Kbps - 320 Kbps [Sample freq.] 16 kHz - 48 kHz [Support] MPEG1, MPEG2, Layer2, Layer3
AAC	[Bit rate] Free Format [Sample freq.] 8 kHz ~ 48 kHz [Support] ADIF, ADTS
M4A	[Bit rate] Free Format [Sample freq.] 8 kHz ~ 48 kHz [Support] MPEG-4
OGG	[Bit rate] Free Format [Sample freq.] ~ 48 kHz [Support] Vorbis
WMA	[Bit rate] 128 kbps ~ 320 kbps [Sample freq.] 8 kHz ~ 48 kHz [Support] WMA7, 8, 9 Standard
WMA 10 Pro	[Bit rate] ~ 768 kbps [Channel / Sample freq.] - M0 : Up to 2 / 48 kHz - M1 : Up to 5.1 / 48 kHz - M2 : Up to 5.1 / 96 kHz [Support] WMA 10 Pro

Available photo file

2D(jpeg, jpg, jpe), 3D(jps)	[Available file type] SOF0: baseline, SOF1: Extend Sequential, SOF2: Progressive [Photo size] Minimum: 64 x 64 Maximum: Normal Type: 15360 (W) x 8640 (H) Progressive Type: 1920 (W) x 1440 (H)
3D (mpo)	[Available file type] mpo [Photo size] 4:3 size: 3,648 x 2,736 / 2,592 x 1,944 / 2,048 x 1,536 3:2 size: 3,648 x 2,432
BMP	[Photo size] Minimum : 64 x 64 Maximum : 9600 x 6400
PNG	[Available file type] Interlace, Non-Interlace [Photo size] Minimum : 64 x 64 Maximum : Interlace : 1200 x 800 Non-Interlace : 9600 x 6400

- BMP and PNG format files may be slower to display than JPEG.
- The 3D function may differ, depending on the model.

Items to note when playing videos

- Some subtitles created by users may not work properly.
- The video and subtitle files should be placed in the same folder. For subtitles to display correctly, the video and subtitle files must have the same name.
- We do not support any stream that contains GMC (Global Motion Compensation) or Qpel (Quarterpel Motion Estimation).
- Only H.264/AVC profile level 4.1 and lower is supported.
- Video files that exceed 50 GB (gigabyte) are not supported for playback. The file size limit is dependent on the encoding environment.
- The DTS is supported only for playback of USB and HDMI video files [depending on the model].
- The DTS support may vary depending on your country and model.

If the following symptoms occur, please carry out the checks and adjustments described below. There may be no malfunction.

Operational problems

Cannot view certain channels.

Adjust the location or orientation of the antenna.

Save the channels you wish to view using Auto Tuning or Programme Edit.

There is a delay after the TV is switched on before the image is fully visible.

This is normal. Any delay is due to an image deletion process which cleans up image noise that may occur when the TV is first switched on.

Image problems

Images from previous channel or other channels linger or the screen displays annoying lines.

Adjusts the orientation of the antenna to the TV transmitter, or refer to the manual for instructions on connecting the antenna.

Vibrating horizontal /vertical lines and fishnet patterns appear momentarily.

This may be caused by strong electronic interference. If this is the case, turn off any mobile phones, hair dryers or electric drills.

The screen display freezes or does not work properly during a digital broadcast.

This may occur in case of a weak signal or unstable reception. Adjust the antenna orientation and cable connections.

If the signal strength or quality is low on Manual Tuning, check with the TV station or administration office.

Digital broadcasting is not available even though the cable is connected.

Check with the cable operator providing your subscription and/or signal. (Depending on your subscription, digital broadcasting may not be supported.)

The display is inactive or unclear when connected to an HDMI[®] source.

Check the HDMI[®] cable specifications. If your HDMI[®] cable is not genuine, images may fade in and out or not be displayed properly.

Ensure that all cables are securely connected. When connections are not secure, images may not be properly displayed.

Does not work with a USB storage device.

Verify that the USB cable is version 2.0 or higher.

Sound problems

Screen display is on but there is no sound.
Check other TV channels. [Depending on model] Ensure the TV Speaker is set to On.
For an analogue broadcast, stereo is not clear or sound comes from one speaker only.
In a poor reception area (areas with weak or unstable signals) or if Multi Audio is not stable, select Mono on Audio. Adjust the Balance using the Navigation Button.
TV sound is not in sync with the image or the sound breaks up occasionally.
If the issue affects a specific TV channel only, it may be caused by problems with the broadcast signal for the individual station. Check with the TV station or your cable operator.
The volume changes when I change channel.
Volume can vary from channel to channel. Set Auto Volume to On.
On certain programmes, there is no sound at all, or only the background music can be heard (in case of a programme created for overseas viewers).
In Language, set Language → Audio Language to the language of your choice. Even if you change the language on Audio, you can go back to the default setup once you turn off the power or change the programme.
There is no sound when connected to an HDMI® / USB source.
Make sure that the High Speed HDMI™ or HDMI® cable is high speed. Check that the USB cable is version 2.0 or higher. Use only regular music (*.mp3) files.

PC connection problem

The screen display does not come on after connecting to the computer.
Make sure that the computer and the TV are securely connected. Check whether the resolution is correctly set for PC input. To use the TV as a secondary monitor, check if the connected desktop or laptop supports dual monitor display.
There is no sound after connecting the computer with the HDMI cable.
Check with manufacturer of your video card to ensure it supports HDMI voice output. (Video cards in DVI format require connection of a separate sound cable.)
When connected to the computer, the display is partially cut off or shifts to one side.
Set the resolution to support PC input. (If this does not work, reboot the computer.)

Problems replaying movies in USB

[This feature is available on certain models only.]

cannot view the files on the Movie List.

Check whether the file on the USB storage device can be read on the computer.

Check whether the file extension is supported.

The file is invalid. The above error message appears mean Sound, video or subtitles is not normal.

Make sure that the file replays normally on the computer's video player. (Check for damaged files.)

Check if My Media can support the selected file.

- For information on requesting service, refer to the following menu.

[This feature is available on certain models only.]

SETTINGS> OPTION> Customer Support> Product/Service Info.

Time Machine^{Ready} function

(This feature is only available in certain countries.)

What is Time Machine^{Ready}?

Time Machine^{Ready} is a function that allows you to record a programme you are currently watching or want to watch and rewind a programme you are watching in real time.

Instant recording	Immediately records a programme you are watching. •Due to DRM, the content protection technology used, the recorded video cannot be played on PCs or other TV models. The video also cannot be played if the TV's video circuit has been replaced.
Scheduled recording	Selects a programme you want or sets the time to record.
Play	Plays back the recordings.
Live Playback	Rewinds a programme you are watching, in real time.

- (This feature is only available in certain countries.) You can record digital programmes transmitted through an RF cable.
- Recording of content containing copyright information is not supported.
- All broadcasts are protected by copyright so you may need to receive permission from the appropriate copyright owners before reproducing or playing back these broadcasts. If a user records audio or video using this device, the recordings must be for personal use only. Selling, transferring or renting recordings protected by copyright is prohibited.
- You must connect a USB HDD storage device to use the Time Machine^{Ready} function.
- Videos recorded by other TV models cannot be played.

Setting the Time Machine^{Ready} Functions

You can change the settings for Time Machine^{Ready} while using the Time Machine^{Ready} function.

OK > Settings	
Live Playback	•On : Enables the Live Playback function automatically when you turn on the TV. •Off : Disables the Live Playback function.
Auto deleting for Recordings	Automatically deletes old recordings when a USB HDD device is full in order to secure space to save new recordings.

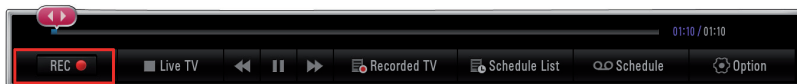
- Protected recordings are not deleted automatically.
- Recordings saved on a USB HDD device can get damaged. The manufacturer is not liable for any damaged recordings as it is the user's responsibility to manage their content.

Using Instant Recording

(This feature is only available in certain countries or models.)

To record what you are watching immediately, press the **OK** button on the remote control and press the **REC** button on the progress bar that appears.

The Live TV button changes to the Recording stop button when recording is in progress.



- Instant recording can also be done using the **REC** button on the remote control.
- Up to 3 hours of instant recording is supported. To change the end time of the recording, press the Stop Option button and set the Modify recording end time option.
- The amount of time available for recording will vary depending on the capacity of your USB HDD storage device.
- Press the **OK** button while recording to display information about the recording in the top right-hand corner of the screen.
- The **OK** button operation may vary depending on the country.
- If you force your TV to power off while recording, the recorded content may not be saved. Ideally, you should stop the recording and check that the programme has been recorded before turning the TV off.
- Some functions may not be available while recording is in progress.

Stopping Recording	When the progress bar appears, press the Recording stop button. Alternatively, you may select the Stop Option button on the progress bar or press the REC button on the remote control and select Stop recording.
Modifying the recording end time	When the progress bar appears, select the Stop Option button or press the REC button on the remote control and select Modify recording end time. •You can set up to 5 hours for the Modify recording end time option.

Viewing recorded TV

Recordings saved on a USB HDD device can get damaged.

OK > Recorded TV	
Play on previous playtime	Resumes playback of a recording you have already started.
Play from the start	Plays back the selected recording from the beginning.

- Up to 300 recordings can be added in Recorded TV.

Managing Recordings

OK > Recorded TV > Delete Marked	
Delete	Deletes the selected recording.
Protection	Prevents the selected recording from being automatically deleted.
Mark All / Unmark All	Selects or deselects all recordings.
Exit Mark Mode	Exits the selection mode and returns to the previous mode.

Controlling the Playback of Recordings

While playing, press the **OK** button on the remote control.



1. Adjust picture while playing
2. View the recordings
3. Save clip / Repeat
4. Energy saving
5. View in 3D (only compatible with models that support 3D)
6. Set recordings playback option

Scheduling a Recording

This function allows you to record a programme you want to watch at the date and time you set. Press the **OK** button on the remote control and then click Schedule on the progress bar that appears.



Select schedule by program	You can select a programme to execute remind or scheduled recording.
Manual Timer	You can select a date, time and channel to execute remind or scheduled recording.

- The **OK** button operation may vary depending on the country.
- When no Programme Guide is available, only the Manual scheduling menu is displayed.
- The length of the scheduled recording should be at least 2 minutes long.

To Check or Modify the Schedule List

OK > Schedule list

This is a function you can use to check, modify or delete the remind and scheduled recording you have set.



- The **OK** button operation may vary depending on the country.
- Up to 30 programmes can be added to the Schedule list.

What Is Live Playback?**(This feature is only available in certain countries or models.)**

This function allows you to temporarily save the programme you are currently watching to a USB HDD device, so you can play back any scenes you might miss. You can also continue watching from where you were previously, for example, if you go out for a while.

- To use the Live Playback function, set Live Playback mode to On.
- Temporary saving is done only in digital broadcasting mode. When in analogue broadcasting mode, only the portions saved in digital broadcasting mode can be used.
- With the Live Playback function, you can play a programme back for up to two hours. This time may vary depending on your region. Recordings created on your region using the Live Playback feature will be deleted.
- Use the left or right navigation button on the remote control to rewind or fast forward the current video by 10 seconds.

Connecting a USB HDD Device for Time Machine^{Ready}

- 1 Prepare a USB HDD storage device.
- 2 Connect the USB HDD device to the USB port on the side or back of the TV.
- 3 Set Live Playback mode to On.

- The Time Machine^{Ready} feature requires a USB storage device which contains a hard disk drive (HDD).
- It is recommended that you use a USB HDD device with a capacity of between 40 GB and 2 TB.
- To remove a USB HDD device, select Quick Menu → USB Device. Make sure you receive the confirmation message that the USB HDD device has been removed before disconnecting.
- If a USB HDD device is faulty, the Time Machine^{Ready} function may not operate normally.
- If you use a USB extension cable, the USB device may not be recognised or may not work properly.

HDMI1, HDMI2, DisplayPort

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



Easy control



Function



PIP



Screen



Settings



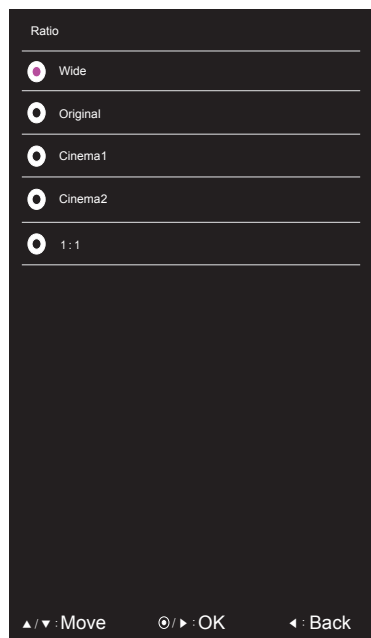
Reset

Each option is described below.

Menu		Description
Easy control	Brightness	Adjusts the brightness and contrast of the screen.
	Contrast	
	Volume	Adjusts the volume level.
	Input	Changes the input source.
	Ratio	Adjusts the screen ratio.
Function		Adjusts SES, picture mode and MaxxAudio.
PIP		Displays the screens of two input modes on one TV.
Screen	Picture	Adjusts the sharpness, black level, and response time of the screen.
	Colour	Adjusts the gamma, Colour temperature and Colour balance of the screen.
Settings		Sets the Language, Standby Light and Key Lock.
Reset		Resets to the default settings as of the day of purchase.

Ratio Settings

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



Each option is described below.

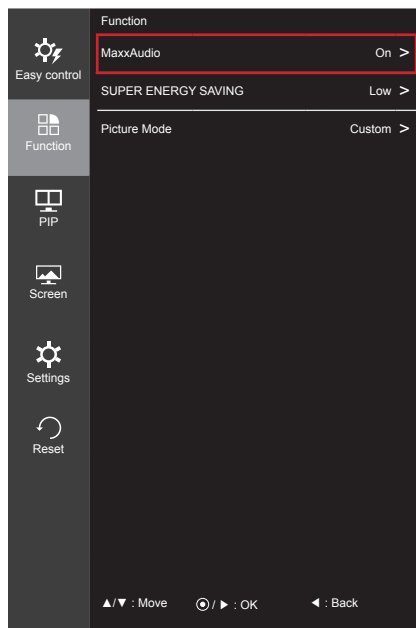
Menu > Easy control > Ratio	Description
Wide	Displays the video in wide-screen, regardless of the video signal input.
Original	Displays a video according to the input video signal aspect ratio.
Cinema1	Enlarges the screen with an aspect ratio of 21:9. (at 1080p)
Cinema2	Enlarges the screen with an aspect ratio of 21:9 including the black box area at the bottom for subtitles. (at 1080p)
1:1	The aspect ratio is not adjusted from the original.

**NOTE**

- The display may look the same for Wide, Original and 1:1 options at the recommended resolution (2560 x 1080).
- The ratio is disabled in the interlaced signal.

Function Settings

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

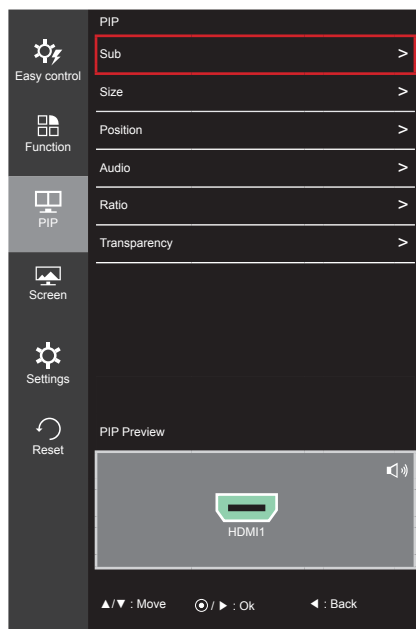


Each option is described below.

Menu > Function		Description
MaxxAudio	On	MaxxAudio® by Waves, recipient of a Technical GRAMMY Award® is a suite of studio-quality sound tools for a superior listening experience.
	Off	Disables the MaxxAudio function.
SES (Super Energy Saving)	High	Enables the SES function, which allows you to save energy according to the SES high efficiency.
	Low	Enables the SES function, which allows you to save energy according to the SES low efficiency.
	Off	Disables the SES function.
Picture Mode	Custom	Allows the user to adjust each element. The Colour mode of the main menu can be adjusted.
	Reader 1	Adjusts the screen to improve the visual effects to read the news. if you want to make the screen brighter, you can adjust it on OSD menu.
	Reader 2	Adjusts the screen to improve the visual effects to display the cartoon. if you want to make the screen brighter, you can adjust it on OSD menu.
	Photo	Optimizes the screen to view photos.
	Cinema	Optimizes the screen to improve the visual effects of a video.
	Game	Optimizes the screen for game play.

PIP Settings

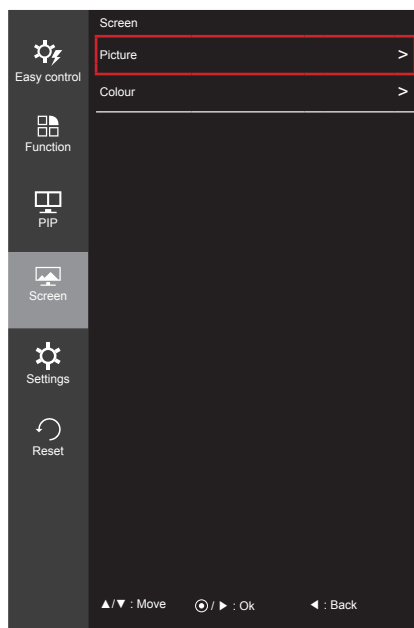
- 1 Press **SETTINGS** to access the main menus.
- 2 Press the Navigation buttons to scroll to one of the following menus and press **OK** .
- 3 Press the Navigation buttons to scroll to the setting or option you want and press **OK** .
- 4 When you are finished, press **EXIT**.
When you return to the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



- on page 20 for the setting of that option "PIP function" section for more information.

Picture Settings

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

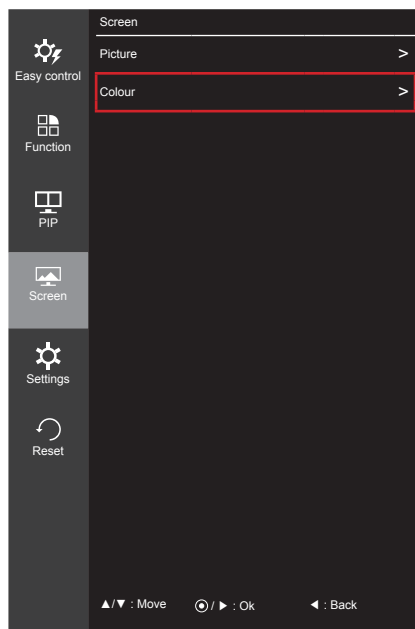


Each option is described below.

Menu > Screen> Picture		Description
Sharpness		Adjusts the sharpness of the screen.
Black Level		Sets the offset level (for HDMI only). Offset: as a reference for a video signal, this is the darkest Colour the TV can display.
		High The picture of the screen gets brighter.
		Low The picture of the screen gets darker.
Response Time		Sets a response time for displayed pictures based on the speed of the screen. For a normal environment, it is recommended that you use Normal. For a fast-moving picture, it is recommended that you use High. Setting to High may cause image sticking.
		High Sets the response time to High.
		Middle Sets the response time to Middle.
		Low Sets the response time to Low.
		Off Off the response time.

Colour Settings

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

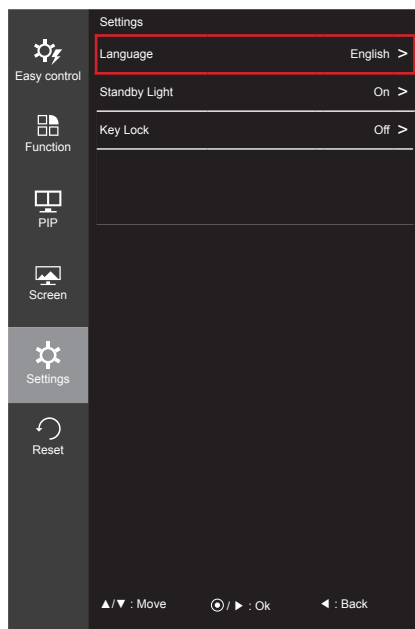


Each option is described below.

Menu> Screen> Colour	Description	
Gamma	Custom gamma setting: When using the gamma 0, gamma 1, and gamma 2 TV settings, higher gamma settings mean a brighter image is displayed and vice versa.	
Colour Temp	Selects the factory default picture Colour. Custom: You can customize the picture Colour. Warm: Sets the screen Colour to a reddish tone. Medium: Sets the screen Colour between a red and blue tone. Cool: Sets the screen Colour to a bluish tone.	
Red / Green / Blue	You can customize the picture Colour using Red, Green, and Blue Colours.	
Six Colour	Meets the user requirements for Colours through adjusting the Colour and saturation of the six Colours (red, green, blue, cyan, magenta, yellow) and saving the settings.	
	Hue	Adjusts tone of the screen.
	Saturation	Adjusts the saturation of the screen Colours. The lower the value, less saturated and bright the Colours become. The higher the value, the more saturated and dark the Colours become.
Reset	Returns the Colour settings to the default settings.	

Settings

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



Each option is described below.

Menu > Settings	Description	
Language	Sets the menu screen to the desired language.	
Standby Light	Turns the power indicator on the front side of the TV on/off.	
	On	The Standby Light is automatically turned on.
	Off	The Standby Light is turned off.
Key Lock	Prevents incorrect key input.	
	On	Key input is disabled.
	Off	Key input is enabled.

Reset

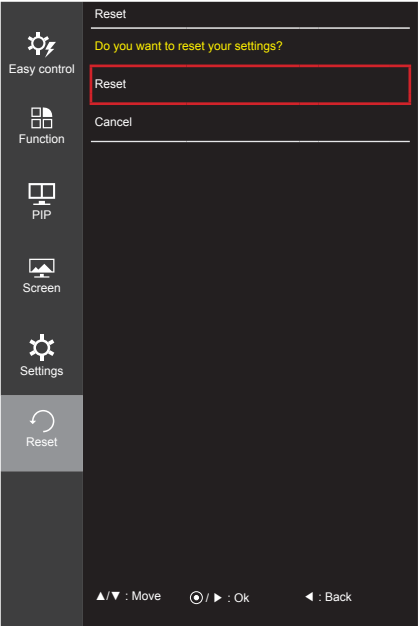
- 1

Press **SETTINGS** to access the main menus.
- 2

Press the Navigation buttons to scroll to one of the following menus and press **OK** .
- 3

Press the Navigation buttons to scroll to the setting or option you want and press **OK** .
- 4

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



Each option is described below.

Menu > Reset	Description
Do you want to reset your settings?	
Reset	Resets to the default settings.
Cancel	Cancel the reset.

MAINTENANCE

Cleaning Your TV

Clean your TV regularly to keep the best performance and to extend the product's lifespan.



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, wipe the surface with a dry 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 clean and 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 discolourations.

Cabinet and stand

To remove dust, wipe the cabinet with a dry 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.



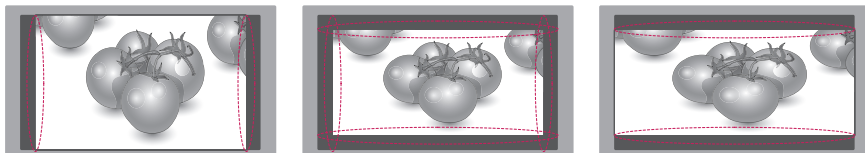
CAUTION

- 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) to prevent image burn.

TROUBLESHOOTING

Symptom	Troubleshooting
No image is displayed.	- Check whether there is a power cut or whether the power cord is properly connected to the power outlet. - Check if the standby indicator is turned off. - If the screen is turned off due to use of the Energy Saving mode, press any button on the remote control to disable the Energy Saving mode and display the image. - Move the mouse or press any key, then the screen will appear.
The 'Out of Range' message is displayed on the screen.	This symptom occurs when signals from the PC (video card) are out of the horizontal or vertical frequency range of the product. Please see the Product Specification section of this manual and configure your display again.
The 'No Signal' message is displayed on the screen.	- This symptom occurs when the signal cable between the PC and the product is not connected. Check the signal cable and connect it again. - Check if the input setting is correct when the PC and the product are connected.
The screen position is incorrect when using a PC.	Check whether the resolution or frequency of the video card is set within the appropriate range for the product and go to Control Panel > Display > Settings to set it to the recommended resolution.
There are still images sticking after power off.	- Displaying a still image for a prolonged time may cause damage to the screen, resulting in the retention of the image. - Use a screen saver to protect the screen when using the product for a prolonged period of time.
The display is discoloured (16 Colour).	Set the Colour to 24 bit (true Colour) or higher. In Windows, go to Control Panel > Display > Settings > Colour Quality.
The screen Colour is unstable or the images are displayed in only one Colour.	Check if the signal cable is connected properly. Reconnect the cable or reinsert the PC's video card.
Spots appear on the screen.	When using the Product, pixilated spots (red, green, blue, white or black) may appear on the screen. This is normal for the LCD screen. It is not an error nor is it related to the Product's performance.
The 'Key Locked' message displays on the screen.	The key lock is enabled. Go to Menu > Settings (Lock) and set 'Key Lock' to Off.
The remote control is not working.	- Make sure that there are no obstacles between the remote control and the Product. - Check whether the batteries are correctly inserted with the correct polarity. - If the batteries are weak, replace both of the batteries with new ones. - The product may malfunction in a place where a lamp with an electronic stabilizer (3-wavelength lamp) is installed.
Nothing is displayed on the TV screen.	Use the TV/PC switch key to select TV.
When playing games, the picture is cut off.	The picture may not fill the entire screen when playing games with a resolution that is not supported. If the problem persists even after changing the resolution, contact the game manufacturer.

**NOTE**

- **Vertical Frequency:** In order to display an image, the screen must be refreshed dozens of times per second like a fluorescent lamp. The number of times the screen is refreshed per second is called vertical frequency or refresh rate and is represented by Hz.
- **Horizontal Frequency:** The time it takes to display one horizontal line is called the horizontal cycle. The number of horizontal lines displayed in one second can be calculated by dividing one by the horizontal cycle. This is called horizontal frequency and is represented by kHz.

**NOTE**

- Check if the graphics card's resolution or frequency is within the range allowed by the Product and set to the recommended (optimal) resolution in **Control Panel > Display > Settings**.
- Failing to set the graphics card to the recommended (optimal) resolution may result in blurred text, a dimmed screen, a truncated display area or misalignment of the display.
- The configuration procedure may differ depending on your computer and/or operating system. Also, some graphics cards may not support certain resolutions. If this is the case, contact the manufacturer of the computer or graphics card for assistance.
- Some graphics cards may not support the 2560 x 1080 resolution. If the resolution cannot be displayed, contact the manufacturer of your graphics card.

SPECIFICATIONS

	Digital TV	Analogue TV
Television system	DTMB	PAL-D/K, PAL-I, NTSC-M
Programme coverage	DTMB:21 to 69	PAL-D/K: VHF/UHF 1 to 69, CATV 1 to 47 PAL-I: VHF/UHF 1 to 69, CATV 1 to 47 NTSC-M: VHF/UHF 2 to 78, CATV 1 to 71

Panel	Screen Type	730 mm Wide
	Pixel Pitch	0.2628 mm (H) x 0.2628 mm (V)
Video Signal	Max. Resolution	2560 × 1080 @ 60 Hz
	Recommended Resolution	2560 × 1080 @ 60 Hz
	Horizontal Frequency	30 kHz to 90 kHz
	Vertical Frequency	56 Hz to 75 Hz
	Synchronization Type	Digital
Input Connector		TV, Component, AV(CVBS), HDMI*2, USB, DP
Power	Rated Voltage	19 V --- 3.2 A
	Power Consumption	On Mode : 42 W (typ.) Off Mode ≤ 0.5 W
AC/DC Adapter		Manufacturer : LIEN CHANG, Model : LCAP39 Manufacturer : APD, Model : DA-65G19
		In : AC 100 - 240 V ~ 50/60 Hz
		Out : DC 19 V --- 3.42 A
Tilt	Tilt Range	-5 to 20°
Dimensions (Width x Height x Depth) Weight		With Stand
		703.0 mm x 414.2 mm x 213.2 mm 5.6 kg
		Without Stand
		703.0 mm x 328.5 mm x 64.0 mm 5.2 kg
Environmental conditions	Operating Temperature Operating Humidity	10 °C to 35 °C 20 % to 80 %
	Storage Temperature Storage Humidity	-10 °C to 60 °C 5 % to 90 %

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

HDMI / DisplayPort(PC) supported mode

Resolution	Horizontal Frequency(kHz)	Vertical Frequency(Hz)
720 x 400	31.468	70.080
640 x 480	31.469 37.500	59.940 75.000
800 x 600	37.879 46.875	60.317 75.000
1024 x 768	48.363 60.023	60.004 75.029
1152 x 864	67.500	75.000
1280 x 720	45.000	60.000
1280 x 1024	63.981 79.976	60.020 75.025
1600 x 900	60.000	60.000
1680 x 1050	65.290	59.954
1920 x 1080	67.500	60.000
2560 x 1080	66.700	60.000

**NOTE**

- The recommended resolution is 2560 x 1080 / 60 Hz. However, it may not be supported depending on your PC or AV model.

HDMI(VIDEO) supported mode

Resolution	Horizontal Frequency(kHz)	Vertical Frequency(Hz)
720 x 480	31.500	60.000
720 x 576	31.250	50.000
1280 x 720	37.500 45.000	50.000 60.000
1920 x 1080	33.750	60.000
	28.125	50.000
	33.750	30.000
	56.250 67.500	50.000 60.000

Component supported mode

Resolution	Horizontal Frequency(kHz)	Vertical Frequency(Hz)
720 x 480	15.730 15.750	59.940 60.000
720 x 576	15.625	50.000
720 x 480	31.470 31.500	59.940 60.000
720 x 576	31.250	50.000
1280 x 720	44.960 45.000 37.500	59.940 60.000 50.000
1920 x 1080	33.720	59.940
	33.750	60.000
	28.125	50.000
	56.250	50.000
	67.432 67.500	59.940 60.000

Component port connecting information

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

**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 can not be changed, change the PC graphic card or consult the manufacturer of the PC graphic card.
- The synchronization input waveform for Horizontal and Vertical frequencies are separate.
- If using a sound card, adjust PC sound as required.



Make sure to read the Safety Precautions before using the product.

Keep the Owner's Manual (CD) in an accessible place for future reference. The model and serial number of the TV is located on the back and one side of the TV. Record it below should you ever need service.

MODEL _____

SERIAL _____