



# OWNER'S MANUAL

## Safety and Reference

LED TV\*

\*Disclaimer

LG LED TV applies LCD screen with LED backlights.

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

MT57\* MT77\* MT47\* MT48\*

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## Licenses

Supported licenses may differ by model. For more information about licenses, visit [www.lg.com](http://www.lg.com).



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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](http://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.

## 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>.

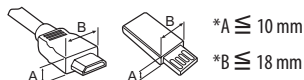
In addition to the source code, all referred license terms, warranty disclaimers and copyright notices are available for download.

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](mailto:opensource@lge.com). This offer is valid for three (3) years from the date on which you purchased the product.

## Preparing

### 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.
- 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.
- 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.



- 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®/™ cable
  - High-Speed HDMI®/™ cable with Ethernet

### CAUTION

- Do not use any unapproved items to ensure the safety and product life span.
- Any damage or injuries caused by using unapproved items are not covered by the warranty.
- Some models have a thin film attached on to the screen and this must not be removed.

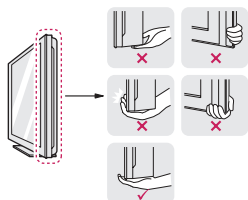
## Lifting and moving the TV

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

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



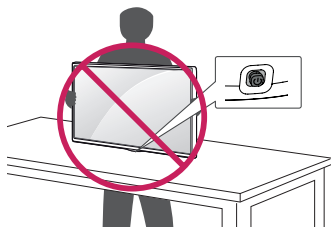
- Hold the top and bottom of the TV frame firmly. Make sure not to hold the transparent part, speaker, or speaker grill area.



- When transporting 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

- Avoid touching the screen at all times, as this may result in damage to the screen.
- When handling the TV, be careful not to damage the protruding joystick button. (Depending on model)



## Setting up the TV

### ⚠ 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.
- Do not carry the monitor upside-down by holding the stand body (or stand base) as this may cause it to fall off, resulting in damage or injury.

### ! NOTE

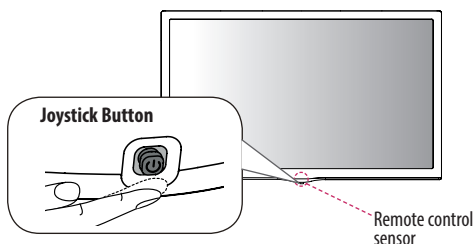
- Remove the stand before installing the TV on a wall mount by performing the stand attachment in reverse. (Only MT57D, MT57V, MT77D, MT77V, MT47T)
- Lift up the latch at the bottom of the stand base and detach the stand base from the TV. (Only MT47D, MT47V, MT47U, MT48D, MT47DC, MT47VC, MT57VC)

## Using the joystick button

(Only 22/24/27MT57\*, 24MT77\*, 22/24/28/29MT47\*, 28MT48\*)

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

- Image shown may differ from your TV.







### Basic functions

	Power On	When the TV is turned off, place your finger on the joystick button and press it once and release it.
	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. (However, if the Menu button is on the screen, pressing and holding the joystick button will let you exit the Menu.)
	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 scrolls through the saved programmes you want.

## 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.

	TV off	Turns the power off.
	Close	Clears on-screen displays and returns to TV viewing.
	Input List	Changes the input source.
	Settings	Accesses the main menu.

### NOTE

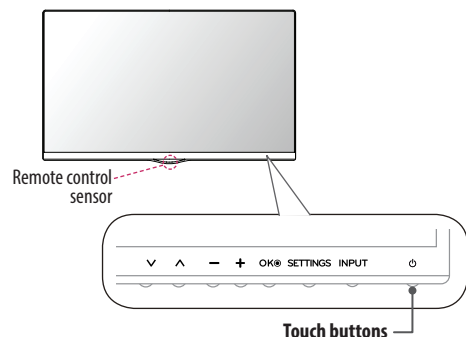
- If you press the joystick button first, you may not be able to adjust the volume level and saved programmes.

### CAUTION

- When your finger over the joystick button and push it to the up, down, left or right, be careful not to press the joystick button.





## Using the touch buttons

(Only 23/27MT77\*)



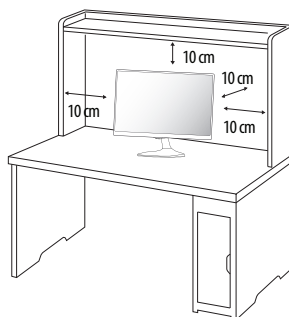
### NOTE

- All of the buttons are touch sensitive and can be operated through simple touch with your finger. Power and control touch button are located on the bottom.

	Scrolls through the saved programmes.
	Adjusts the volume level.
	Selects the highlighted menu option or confirms an input.
<b>SETTINGS</b>	Accesses the main menus, or saves your input and exits the menus.
<b>INPUT</b>	Changes the input source.
	Turns the power on or off.

## Mounting on a table

- Image shown may differ from your TV.
- Lift and tilt the TV into its upright position on a table.
    - Leave a 10 cm (minimum) space from the wall for proper ventilation.



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

### CAUTION

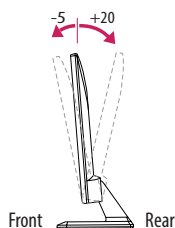
- Do not place the TV near or on sources of heat, as this may result in fire or other damage.
- Please be sure to connect the TV to the AC/DC power adapter before connecting the TV's power plug to a wall power outlet.

## Adjusting the angle of the TV to suit view

(Only 22/24/27MT57D, 22/24/27MT57V, 23/24/27MT77\*, 22/24MT47D, 22/24MT47V, 24MT47U)

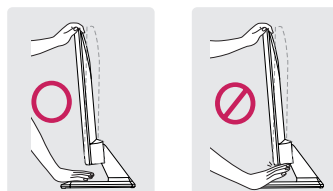
Tilt from +20 to -5 degrees up or down to adjust the angle of the TV to suit your view.

- Image shown may differ from your TV.



### CAUTION

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

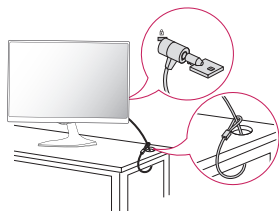


## Using the kensington security system

(This is not available for all models.)

- Image shown may differ from your TV.

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

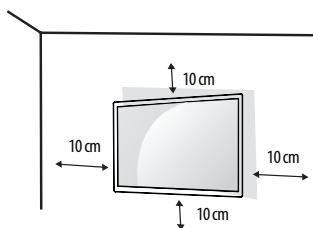


### ! NOTE

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

## 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.

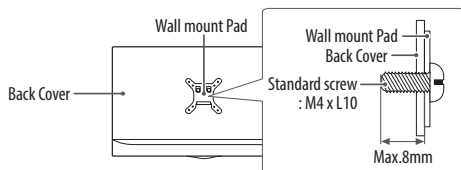
- 1 If you use screw longer than standard, the TV might be damaged internally.
- 2 If you use improper screw, the product might be damaged and drop from mounted position. In this case, LG Electronics is not responsible for it.

## Separate purchase (Wall mounting bracket)

Model	22MT57* 22MT47* 23MT77* 24MT57* 24MT77* 24MT47*	27MT57* 27MT77* 28MT47* 28MT48* 29MT47*
Wall mount (A x B)	75 x 75	100 x 100
Standard screw	M4 x L10	
Number of screws	4	
Wall mount bracket (optional)	RW120	

### ! 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 8 mm.



### ! 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.

# Connections (notifications)

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

- The external device connection may differ from the model.
- Connect external devices to the TV regardless of the order of the TV port.
- If you record a TV programme 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 of recording, refer to the manual provided with the connected device.
- Refer to the external equipment's manual for operating instructions.
- If you connect a gaming device to the TV, use the cable supplied with the gaming device.
- In PC mode, there may be noise associated with the resolution, vertical pattern, contrast or brightness. If noise is present, change the PC output to another resolution, change the refresh rate to another rate or adjust the brightness and contrast on the PICTURE menu until the picture is clear.
- In PC mode, some resolution settings may not work properly depending on the graphics card.

## Antenna connection

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

- 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, try to realign the antenna in the correct direction.
- An antenna cable and converter are not supplied.
- Supported DTV Audio: MPEG, Dolby Digital, Dolby Digital Plus, HE-AAC

## Satellite dish connection

(Only MT57V, MT77V, MT47V, MT47U, MT57VC, MT47VC)

Connect the TV to a satellite dish to a satellite socket with a satellite RF cable (75 Ω).

## CI module connection

(Depending on model)

View the encrypted (pay) services in digital TV mode.

- Check if the CI module is inserted into the PCMCIA card slot in the right direction. If the module is not inserted properly, this can cause damage to the TV and the PCMCIA card slot.
- If the TV does not display any video and audio when CI+ CAM is connected, please contact to the Terrestrial/Cable/Satellite Service Operator.

## Euro scart connection

(Depending on model)

Transmits the video and audio signals from an external device to the TV set. Connect the external device and the TV set with the euro scart cable.

(Only MT47D, MT47V, MT57D, MT57V, MT77D, MT77V, MT47T, MT48D, MT47U)

Current input mode \ Output Type	AV1 (TV Out <sup>1</sup> )
Digital TV	Digital TV
Analogue TV	Analogue TV
Component, AV, HDMI, RGB	

(Only MT47DC)

Current input mode \ Output Type	AV (TV Out <sup>1</sup> )
Digital TV	Digital TV
Analogue TV	Analogue TV
HDMI, AV	

1 TV Out : Outputs Analogue TV or Digital TV signals.

## ! NOTE

- Any Euro scart cable used must be signal shielded.

## Other connections

Connect your TV to external devices. For the best picture and audio quality, connect the external device and the TV with the HDMI cable. Some separate cable is not provided.

- USB port supports 0.5 A electric current. If you need more electric current in case of HDD, use the separate power adaptor.

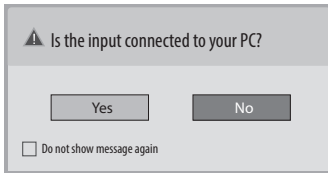
## Connecting to a PC

Your TV supports the Plug & Play\* feature and has the built-in speakers with Virtual Surround that reproduces sound clearly with a rich bass.

\* Plug & Play: The function when a PC recognizes a connected device that users connect to a PC and turn on, without device configuration or user intervention.

## ! NOTE

- If you want to use HDMI-PC mode, you must set the **Input Label** to **PC mode**.
- The **OSD (On Screen Display)** is displayed on the screen as shown below.
  - » When turning the product on in **HDMI** input.
  - » When switching to **HDMI** input.



- If you select **"Yes"** the size and image quality are optimised for your PC.
- If you select **"No"** the size and image quality are optimised for the AV device (DVD player, set-top box).
- If you select **"Do not show message again"** this message does not appear until the TV is reset. You can change the set value in **SETTINGS ► INPUT ► Input Label**.
- The values set for HDMI1/HDMI2 are saved independently. (Only MT57\*, MT77\*)

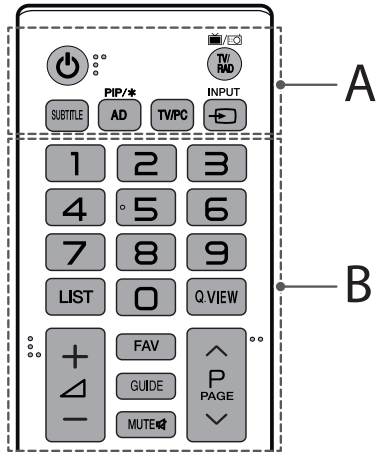
## Remote control

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 ⊕ and ⊖ 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.
- The remote control will not be included for all sales market.

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



### A

**⏻ (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.

**PIP/\*** Turns the PIP mode on or off. (Depending on model)

**TV/PC** Selects TV or PC mode.

**INPUT** Changes the input source.

### B

**Number buttons** Enters numbers.

**LIST** Accesses the saved programme list.

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

**+ ▽ -** Adjusts the volume level.

**FAV** Accesses your favourite programme list.

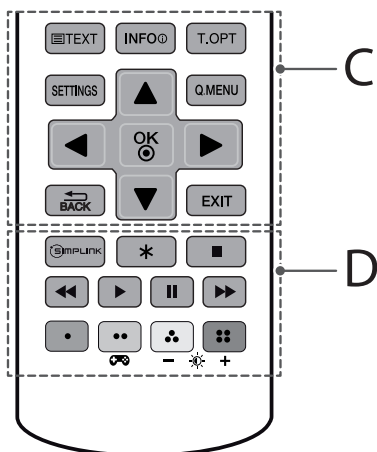
**GUIDE** Shows programme guide.

**MUTE** Mutes all sounds.

**^ P** Scrolls through the saved programmes.

**^ PAGE** Moves to the previous or next screen.





## C

**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.

**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 on-screen displays and returns to TV viewing.

## D

**SIMPLINK** Accesses the AV devices connected with the HDMI cable through HDMI-CEC. Opens the SIMPLINK menu.

\* Not functional.

**Control buttons** (■, ◀, ▶, ||, ▶▶) Controls the MY MEDIA menu, or the SIMPLINK compatible devices (USB, SIMPLINK).

**Colour buttons** These access special functions in some menus.

⬇ : Red, ⬆ : Green, ⬇ : Yellow, ⬆ : Blue

**⊕ ⊖ (Gaming mode)** Turns the gaming mode on or off.

**⊖ ⊕ (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.

# Settings

## Automatically Setting Up Programme

**SETTINGS** ⇨ **SETUP** ⇨ **Auto Tuning**

Automatically tunes the programmes.

- 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 select Picture Mode

**SETTINGS** ⇨ **PICTURE** ⇨ **Picture Mode**

Select the picture mode optimized for the viewing environment or the programme.

- Vivid** : Heightens contrast, brightness and sharpness to display vivid images.
- Standard** : Displays images in standard levels of contrast, brightness and sharpness.
- Eco/APS**: [Depending on model]  
The Energy Saver feature changes settings on the TV to reduce power consumption.
- Cinema/Game** : Displays the optimum picture for movie, game.
- Sport** : Optimizes the video image for high and dynamic actions by emphasizing primary colours such as white, grass, or sky blue.
- ISF Expert 1,2** : 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
  - Depending on input signal, available range of picture modes may differ.
- ISF 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.
- The ISF function is only available on some models.

## 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.

- 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** : [Depending on model]  
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.
- Depending on input signal or other picture settings, the range of detailed items for adjustment may differ.

## To set additional picture options

### SETTINGS ⇨ PICTURE ⇨ Picture Mode ⇨ Picture Option

Adjusts detailed setting for images.

- **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** : Saves power consumption by adjusting the brightness corresponding to the movement of the image on the screen.
- Depending on input signal or other picture settings, the range of detailed items for adjustment may differ.


## To use Gaming Mode

### SETTINGS ⇨ PICTURE ⇨ Gaming Mode

[Available only for RGB/HDMI-PC]

This mode allows you to optimize the picture quality for games.

- **DAS Mode** : [Depending on model]  
This mode minimizes the time taken to display the video signal received from the input device to ensure faster gameplay. (The screen will flicker when turning **DAS Mode On or Off.**)  
- DAS : Dynamic Action Sync

- **Black Stabilizer** : Objects can be seen more clearly on a dark screen by adjusting the black levels. Increasing the **Black Stabilizer** value brightens the low gray levels on the screen. (You can easily distinguish objects on a dark game screen.) Reducing the **Black Stabilizer** value darkens the low gray levels and increases the dynamic contrast on the screen.
  - You can configure the detailed settings for **Gaming Mode** using the  key on the remote control.
  - When you set the **Gaming Mode to On, Picture Mode** is set to **Game**, and you cannot change it to a different **Picture Mode**.
  - You can set **DAS Mode** only when the frequency for vertical input is 50Hz/60Hz
  - When PIP is turned on, the **DAS Mode** is unavailable.

## To use Energy Saving feature

### SETTINGS ⇨ PICTURE ⇨ Energy Saving

Reduces power consumption by adjusting screen brightness.

- **Off** : Turns off the Energy Saving mode.
- **Minimum / Medium / Maximum** : Applies the pre-set Energy Saving mode.
- **Screen Off** : Screen is turned off and only sound is played. Press any button except Power button on the remote control to turn the screen back on.

## To use TV speaker

### SETTINGS ⇨ AUDIO ⇨ Sound Out ⇨ TV Speaker

[Depending on model]

Sound is output through the TV speaker.

## To use Headphone

### SETTINGS ⇨ AUDIO ⇨ Sound Out ⇨ Headphone

[Depending on model]

Sound is output through the headphone connected to the earphone/headphone port.

## 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) to the screen image.

## To use SIMPLINK

SIMPLINK is a feature that enables you to control and manage various multimedia devices conveniently via the SIMPLINK menu.

- 1 Connect the TV's **HDMI IN** terminal and the SIMPLINK device's HDMI output terminal using an HDMI cable.
- 2 Select **INPUT ⇨ SimpLink**.  
SIMPLINK menu window appears.
- 3 In SIMPLINK Setting window, set SIMPLINK function to **ON**.

4 In SIMPLINK menu window, selects the device you want to control.

- This function is only compatible with devices with the SIMPLINK logo.
- To use the SIMPLINK function, you need to use a high-speed HDMI® cable (with CEC (Consumer Electronics Control) feature added). High-speed HDMI® cables have the No. 13 pin connected for information exchange between devices.
- If you switch to another input, the SIMPLINK device will stop.
- If a third-party device with the HDMI-CEC function is also used, the SIMPLINK device may not work normally.
- If you select or play media from the device with a home theatre function, the **HT Speaker(Speaker)** is automatically connected.

## SIMPLINK function description

- **Direct Play** : Plays the multimedia device on the TV instantly.
- **Select multimedia device** : Selects the desired device via the SIMPLINK menu to control it from the TV screen instantly.
- **Disc playback** : Manages the multimedia device with the TV remote control.
- **Power off all devices** : When you power off the TV, all connected devices are turned off.
- **Sync Power on** : When the equipment with SIMPLINK function connected HDMI terminal starts to play, the TV will automatically turn on.

## To set password

### SETTINGS ⇔ LOCK ⇔ Set Password

Sets or changes the TV password.  
The initial password is set to '0000'.

- When France is selected for Country, password is not '0000' but '1234'.
- When France is selected for Country, password cannot be set to '0000'.

## To return Factory Reset

### SETTINGS ⇔ OPTION ⇔ Factory Reset

All stored information is deleted and TV settings are reset.  
The 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 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 reconnect 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 2 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.

## My Media supporting file

- Maximum data transfer rate : 20 Mbps (Mega bit per second)
  - External supported subtitle formats : \*.srt (SubRip), \*.smi (SAMI), \*.sub (SubViewer, MicroDVD, DVDsubtitleSystem, SubIdx(Vobsub)), \*.ass/\*.ssa (SubStation Alpha), \*.txt (TMplayer), \*.psb (PowerDivX)
  - Internal supported subtitle formats: \*.dat/\* .mpg/\* .mpeg/\* .vob (DVD Subtitle), \*.ts/\* .tp/\* .m2ts/ (DVB Subtitle), \*.mp4 (DVD Subtitle, UTF-8 Plain Text), \*.mkv (ASS, SSA, UTF-8 Plain Text, Universal Subtitle Format, VobSub, DVD Subtitle), \*.divx/\* .avi (XSUB<sup>1</sup>, XSUB+)
- XSUB<sup>1</sup>** Supports internal subtitles generated from DivX6

## Supported Video Formats

- Maximum: 1920 x 1080 @ 30p (only Motion JPEG 640 x 480 @ 30p)
- .asf, .wmv  
[Video] MPEG-2, MPEG-4 Part2, DivX3.11, DivX4, DivX5, DivX6, XVID, H.264/AVC, VC1(WMV3, WV1), MP43  
[Audio] WMA Standard, WMA9(Pro), MP3, AAC, AC3, MP3, 3D WMV Single Stream.
- divx, .avi  
[Video] MPEG-2, MPEG-4 Part2, DivX3.11, DivX4, DivX5, DivX6, XVID, H.264/AVC  
[Audio] HE-AAC, LPCM, ADPCM, MPEG-1 Layer I, MPEG-1 Layer II, Dolby Digital, MPEG-1 Layer III (MP3)
- .ts, .trp, .tp, .mts, .m2ts  
[Video] H.264/AVC, MPEG-2, AVS, VC1  
[Audio] MPEG-1 Layer I, MPEG-1 Layer II, MPEG-1 Layer III (MP3), Dolby Digital, Dolby Digital Plus, AAC, HE-AAC
- .vob  
[Video] MPEG-1, MPEG-2  
[Audio] Dolby Digital, MPEG-1 Layer I, MPEG-1 Layer II, DVD-LPCM

- mp4, .m4v, .mov  
[Video] MPEG-2, MPEG-4 Part2, DivX3.11, DivX4, DivX5, DivX6, XVID, H.264/AVC  
[Audio] AAC, MPEG-1 Layer III (MP3)
- .mkv  
[Video] MPEG-2, MPEG-4 Part2, DivX3.11, DivX4, DivX5, DivX6, XVID, H.264/AVC  
[Audio] HE-AAC, Dolby Digital, MPEG-1 Layer III (MP3), LPCM
- motion JPEG  
[Video] MJPEG  
[Audio] LPCM, ADPCM
- .mpg, .mpeg, .mpe  
[Video] MPEG-1, MPEG-2  
[Audio] MPEG-1 Layer I, MPEG-1 Layer II, Dolby Digital, LPCM
- dat  
[Video] MPEG-1, MPEG-2  
[Audio] MP2
- flv  
[Video] Sorenson H.263, H.264/AVC  
[Audio] MP3, AAC, HE-AAC
- \*rm, \*rmvb  
[Video] RV30, RV40  
[Audio] Dolby Digital, AAC, HE-AAC, RA6(Cook)
- 3gp, 3gp2  
[Video] H.264/AVC, MPEG-4 Part2  
[Audio] AAC, AMR(NB/WB)
- \*rm / \*rmvb : Depending on model

## Supported Audio Formats

- File type : mp3  
[Bit rate] 32 Kbps - 320 Kbps  
[Sample freq.] 16 kHz - 48 kHz  
[Support] MPEG1, MPEG2, Layer2, Layer3
- File Type : AAC  
[Bit rate] Free Format  
[Sample freq.] 8 kHz ~ 48 kHz  
[Support] ADIF, ADTS
- File Type : M4A  
[Bit rate] Free Format  
[Sample freq.] 8 kHz ~ 48 kHz  
[Support] MPEG-4
- File Type : WMA  
[Bit rate] 128 Kbps ~ 320 Kbps  
[Sample freq.] 8 kHz ~ 48 kHz  
[Support] WMA7, WMA8, WMA9 Standard
- File Type : WMA 10 Pro  
[Bit rate] ~ 768 Kbps  
[Channel / Sample freq.]  
M0 : up to 2 Channel @ 48 kHz  
(Except LBR mode),  
M1 : up to 5.1 Channel @ 48 kHz,  
M2 : up to 5.1 Channel @ 96 kHz  
[Support] WMA 10 Pro

- File Type : OGG  
[Bit rate] Free Format  
[Sample freq.] 8kHz ~ 48 kHz  
[Support] OGG Vorbis

## Supported Photo Formats

- Category : 2D (jpeg, jpg, jpe)  
[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)
- Category : BMP  
[Photo size] Minimum : 64 x 64, Maximum : 9600 x 6400
- Category : 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.

## To see web manual

To obtain detailed User Guide information, please visit [www.lg.com](http://www.lg.com).

# Maintenance

## Cleaning your TV

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

- 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, frame, cabinet and stand

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

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

- Avoid touching the screen at all times, as this may result in damage to the screen.
- Do not push, rub, or hit the screen surface with your fingernail or a sharp object, as this may result in scratches and image distortions.
- Do not use any chemicals as this may damage the product.
- Do not spray liquid onto the surface. If water enters the TV, it may result in fire, electric shock, or malfunction.

## 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

Cannot control the TV with the remote control.

- Check the remote control sensor on the product and try again.
- Check if there is any obstacle between the product and the remote control.
- Check if the batteries are still working and properly installed (⊕ to ⊕, ⊖ to ⊖).

No image display and no sound is produced.

- Check if the product is turned on.
- Check if the power cord is connected to a wall outlet.
- Check if there is a problem in the wall outlet by connecting other products.

The TV turns off suddenly.

- Check the power control settings. The power supply may be interrupted.
- Check if the **Automatic Standby** (Depending on model) / **Sleep Timer / Off Time** feature is activated in the **TIME** settings.
- If there is no signal while the TV is on, the TV will turn off automatically after 15 minutes of inactivity.

When connecting to the PC (HDMI/RGB), ‘No signal’ or ‘Invalid Format’ is displayed.

- Turn the TV off/on using the remote control.
- Reconnect the HDMI/RGB cable.
- Restart the PC with the TV on.

If TV is turned off automatically.

- If **On Time** is enabled, the TV will be turned on at the specified time. If you do not operate the TV for two hours, the TV will be turned off automatically.
- To disable this function, use your remote control to go to **SETTINGS** ⇒ **TIME** ⇒ **Auto Off(On Time)** ⇒ **Off**.

# Specifications

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

ENGLISH

Models	Dimensions (W x H x D) (mm)		Weight (kg)		Power consumption (Outgoing condition)	Power requirement
	With stand	Without stand	With stand	Without stand		
<b>22MT57D</b> <b>22MT57V</b>	507.6 x 410.5 x 198.2	507.6 x 316.5 x 75.5	3.1	2.8	26 W	19 V --- 1.6 A
<b>24MT57D</b> <b>24MT57V</b>	554.9 x 437.2 x 198.2	554.9 x 343.3 x 74.8	3.8	3.6	28 W	19 V --- 2.0 A
<b>27MT57D</b> <b>27MT57V</b>	642.0 x 488.5 x 222.7	642.0 x 394.5 x 75.0	5.0	4.7	32 W	19 V --- 2.0 A
<b>23MT77D</b> <b>23MT77V</b>	533.0 x 423.7 x 198.2	533.0 x 328.3 x 68.4	3.6	3.4	29 W	19 V --- 2.0 A
<b>24MT77D</b>	541.0 x 426.8 x 197.2	541.0 x 329.4 x 68.2	3.5	3.2	27 W	19 V --- 2.0 A
<b>27MT77D</b>	622.7 x 473.3 x 222.7	622.7 x 377.9 x 73.6	4.9	4.6	33 W	19 V --- 2.0 A
<b>22MT47V</b> <b>22MT47D</b>	507.6 x 365.4 x 158.7	507.6 x 316.5 x 52.7	2.9	2.75	26 W	19 V --- 1.6 A
<b>24MT47V</b> <b>24MT47D</b> <b>24MT47U</b>	556.0 x 393.8 x 158.7	556.0 x 345.2 x 53.1	3.6	3.4	28 W	19 V --- 1.6 A
<b>28MT47V</b> <b>28MT47D</b> <b>28MT47U</b>	641.5 x 445.4 x 171.0	641.5 x 396.3 x 57.5	4.7	4.5	33 W	19 V --- 2.0 A
<b>28MT47T</b>	641.5 x 428.7 x 159.2	641.5 x 396.3 x 57.5	4.6	4.5	33 W	19 V --- 2.0 A
<b>28MT48D</b>	641.5 x 435.4 x 170.0	641.5 x 396.3 x 57.5	4.7	4.5	33 W	19 V --- 2.0 A
<b>29MT47V</b> <b>29MT47D</b>	665.8 x 453.5 x 171.0	665.8 x 405.5 x 61.4	5.3	5.1	40 W	19 V --- 2.4 A
<b>22MT47DC</b>	507.6 x 359.7 x 135.8	507.6 x 316.5 x 52.7	3.1	2.9	26 W	19 V --- 1.6 A
<b>24MT47DC</b> <b>24MT47VC</b>	556.0 x 388.0 x 135.8	556.0 x 345.2 x 53.1	3.4	3.2	28 W	19 V --- 1.6 A
<b>28MT47DC</b>	641.5 x 445.4 x 171.0	641.5 x 396.3 x 57.5	4.7	4.5	28 W	19 V --- 1.6 A
<b>24MT57VC</b>	554.9 x 383.1 x 140.6	554.9 x 343.3 x 55.5	3.2	3.0	26 W	19 V --- 1.6 A

## AC/DC Adapter

24MT57D, 24MT57V, 27MT57*, 23/24/27MT77*, 28MT47D, 28MT47V, 28MT47U, 28MT47T, 28MT48*	22MT57*, 22/24MT47*, 28MT47DC, 24MT57VC	29MT47*
Manufacturer : Lien Chang Model : LCAP16B-E, LCAP21C Manufacturer : Honor Model : ADS-45FSN-19 19040GPG, ADS-45SN-19-3 19040G	Manufacturer : Lien Chang Model : LCAP16A-E, LCAP21A Manufacturer : Honor Model : ADS-40FSG-19 19032GPG, ADS-40SG-19-3 19032G	Manufacturer : APD Model : DA-48F19 Manufacturer : Honor Model : LCAP35 Manufacturer : Lite-On Model : PA-1650-43
In : AC 100 – 240 V ~ 50/60 Hz Out : DC 19 V --- 2.1 A	In : AC 100 – 240 V ~ 50/60 Hz Out : DC 19 V --- 1.7 A	In : AC 100 – 240 V ~ 50/60 Hz Out : DC 19 V --- 2.53 A

## CI module

CI module Size (W x H x D) : 100.0 mm x 55.0 mm x 5.0 mm

## Environment condition

Operating Temperature : 0 °C to 40 °C

Operating Humidity : Less than 80 %

Storage Temperature : -20 °C to 60 °C

Storage Humidity : Less than 85 %

	Satellite digital TV	Digital TV	Analogue TV*
Television system	DVB-T/T2, DVB-C, DVB-S/S2	DVB-T, DVB-C	PAL/SECAM B/G/I/D/K, SECAM L/L'
Programme coverage	VHF, UHF, C-Band, Ku-Band	VHF, UHF	VHF: E2 to E12, UHF: E21 to E69, CATV: S1 to S20, HYPER: S21 to S47
Maximum number of storable programmes	6,000	1,500	
External antenna impedance	75 Ω		

\* Support all model

## RGB (PC) / HDMI (PC) supported mode

(Only 22/24/27MT57D, 22/24/27MT57V, 23/24/27MT77\*, 22MT47D, 22MT47V)

Resolution	Horizontal frequency(kHz)	Vertical frequency(Hz)
720 x 400	31.468	70.080
640 x 480	31.469	59.940
	37.500	75.000
800 x 600	37.879	60.317
	46.875	75.000
1024 x 768	48.363	60.004
1024 x 768 (Only HDMI(PC))	56.476	70.069
1024 x 768	60.023	75.029
1152 x 864	67.500	75.000
1280 x 720	45.000	60.000
1280 x 800	49.702	59.810
1280 x 1024	63.981	60.020
	79.976	75.025
1400 x 1050	65.317	59.978
1440 x 900	55.935	59.887
1600 x 900	60.000	60.000
1680 x 1050	64.674	59.883
	65.290	59.954
1920 x 1080	67.500	60.000

(Only 24/28/29MT47D, 24/28/29MT47V, 24/28MT47U, 28MT47T, 28MT48D)

Resolution	Horizontal frequency(kHz)	Vertical frequency(Hz)
720 x 400	31.468	70.080
640 x 480	31.469	59.940
	37.500	75.000
800 x 600	37.879	60.317
	46.875	75.000
1024 x 768	48.363	60.004
	60.023	75.029
1280 x 800	49.702	59.810
1366 x 768	47.717	59.790

### ! NOTE

- The optimal display resolution
  - 22/24/27MT57D, 22/24/27MT57V, 23/24/27MT77\*, 22MT47D, 22MT47V: 1920 x 1080 @ 60 Hz.
  - 24/28/29MT47D, 24/28/29MT47V, 24/28MT47U, 28MT47T, 28MT48D: 1366 x 768 @ 60 Hz.
- The optimal timing in each mode is vertical frequency 60 Hz.

## HDMI (PC) supported mode

(Only 22MT47DC, 24MT57VC)

Resolution	Horizontal frequency(kHz)	Vertical frequency(Hz)
720 x 400	31.468	70.080
	31.469	59.940
640 x 480	37.500	75.000
	37.879	60.317
800 x 600	46.875	75.000
	48.363	60.004
1024 x 768	56.476	70.069
	60.023	75.029
1152 x 864	67.500	75.000
1280 x 720	45.000	60.000
1280 x 800	49.702	59.810
1280 x 1024	63.981	60.020
	79.976	75.025
1400 x 1050	65.317	59.978
1440 x 900	55.935	59.887
1600 x 900	60.000	60.000
1680 x 1050	64.674	59.883
	65.290	59.954
1920 x 1080	67.500	60.000

(Only 24/28MT47DC, 24MT47VC)

Resolution	Horizontal frequency(kHz)	Vertical frequency(Hz)
720 x 400	31.468	70.080
640 x 480	31.469	59.940
	37.500	75.000
800 x 600	37.879	60.317
	46.875	75.000
1024 x 768	48.363	60.004
	60.023	75.029
1280 x 800	49.702	59.810
1366 x 768	47.717	59.790

### ! NOTE

- The optimal display resolution
  - 22MT47DC, 24MT57VC: 1920 x 1080 @ 60 Hz.
  - 24/28MT47DC, 24MT47VC: 1366 x 768 @ 60 Hz.
- The optimal timing in each mode is vertical frequency 60 Hz.



## HDMI (DTV) supported mode

Resolution	Horizontal frequency(kHz)	Vertical frequency(Hz)
720 x 480	31.469	59.940
	31.500	60.000
720 x 576	31.250	50.000
	37.500	50.000
1280 x 720	44.960	59.940
	45.000	60.000
	45.000	60.000
1920 x 1080	33.720	59.940
	33.750	60.000
	28.125	50.000
	27.000	24.000
	33.750	30.000
	56.250	50.000
	67.430	59.940
67.500	60.000	

## Component supported mode

(Only MT57\*, MT77\*, MT47D, MT47V, MT47U, MT47T, MT48D, MT47VC)

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

## Component port connecting information

(Only MT57\*, MT77\*, MT47D, MT47V, MT47U, MT47T, MT48D, MT47VC)

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



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 \_\_\_\_\_