# APPENDIX G

## : USER'S MANUAL

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**EUT Type: LED LCD TV/Monitor**

**FCC ID.: BEJ26LS3500UD**

# LG

**Life's Good**

OWNER'S MANUAL

# LCD TV

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

| | | | |
|---|---|---|---|
| 26CS460 | 32CS560 | 32LS3400 | 22LS3500 |
| 32CS460 | 37CS560 | 42LS3400 | 26LS3500 |
| 42CS530 | 42CS560 | | 32LS3500 |

www.lg.com

# LICENSES

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

# IMPORTANT SAFETY INSTRUCTIONS

Always comply with the following precautions to avoid dangerous situations and ensure peak performance of your product.

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## WARNING / CAUTION

### RISK OF ELECTRIC SHOCK DO NOT OPEN

TO REDUCE THE RISK OF ELECTRIC SHOCK DO NOT REMOVE COVER (OR BACK). NO USER SERVICEABLE PARTS INSIDE. REFER TO QUALIFIED SERVICE PERSONNEL.

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

### WARNING/CAUTION

- TO REDUCE THE RISK OF FIRE AND ELECTRIC SHOCK, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE.

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Read these instructions.
Keep these instructions.
Heed all warnings.
Follow all instructions.

- Do not use this apparatus near water.

- Clean only with a dry cloth.

- Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.

- Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.

- Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet (Can differ by country).

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**ENGLISH**

- Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.

- Only use attachments/accessories specified by the manufacturer.

- Use only with a cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.

S3125A

- Unplug this apparatus during lightning storms or when unused for long periods of time.

- Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

- Never touch this apparatus or antenna during a thunder or lightning storm.

- When mounting a TV on the wall, make sure not to install the TV by hanging the power and signal cables on the back of the TV.

- Do not allow an impact shock or any objects to fall into the product, and do not drop anything onto the screen.

- CAUTION concerning the Power Cord (Can differ by country):
  It is recommended that appliances be placed upon a dedicated circuit; that is, a single outlet circuit which powers only that appliance and has no additional outlets or branch circuits. Check the specification page of this owner's manual to be certain. Do not connect too many appliances to the same AC power outlet as this could result in fire or electric shock. Do not overload wall outlets. Overloaded wall outlets, loose or damaged wall outlets, extension cords, frayed power cords, or damaged or cracked wire insulation are dangerous. Any of these conditions could result in electric shock or fire. Periodically examine the cord of your appliance, and if its appearance indicates damage or deterioration, unplug it, discontinue use of the appliance, and have the cord replaced with an exact replacement part by an authorized service. Protect the power cord from physical or mechanical abuse, such as being twisted, kinked, pinched, closed in a door, or walked upon. Pay particular attention to plugs, wall outlets, and the point where the cord exits the appliance. Do not move the TV with the power cord plugged in. Do not use a damaged or loose power cord. Be sure do grasp the plug when unplugging the power cord. Do not pull on the power cord to unplug the TV.

- **Warning** - To reduce the risk of fire or electrical shock, do not expose this product to rain, moisture or other liquids. Do not touch the TV with wet hands. Do not install this product near flammable objects such as gasoline or candles, or expose the TV to direct air conditioning.

- Do not expose to dripping or splashing and do not place objects filled with liquids, such as vases, cups, etc. on or over the apparatus (e.g. on shelves above the unit).

- **Grounding**
  Ensure that you connect the earth ground wire to prevent possible electric shock. If grounding methods are not possible, have a qualified electrician install a separate circuit breaker. Do not try to ground the unit by connecting it to telephone wires, lightening rods, or gas pipes.

  Power Supply
  Short-circuit Breaker
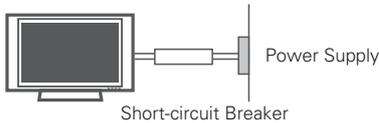
- **DISCONNECTING DEVICE FROM THE MAIN POWER**
  The power outlet must remain readily accessed in the event the device needs to be unplugged.

- As long as this unit is connected to the AC wall outlet, it is not disconnected from the AC power source even if the unit is turned off.

- Do not attempt to modify this product in any way without written authorization from LG Electronics. Unauthorized modification could void the user's authority to operate this product.
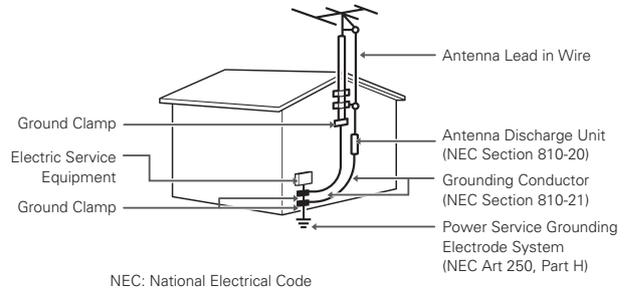
- **ANTENNAS Outdoor antenna grounding** (Can differ by country):
  If an outdoor antenna is installed, follow the precautions below. An outdoor antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits, or where it can come in contact with such power lines or circuits as death or serious injury can occur. Be sure the antenna system is grounded so as to provide some protection against voltage surges and built-up static charges. Section 810 of the National Electrical Code (NEC) in the U.S.A. provides information with respect to proper grounding of the mast and supporting structure, grounding of the lead-in wire to

an antenna discharge unit, size of grounding conductors, location of antenna discharge unit, connection to grounding electrodes and requirements for the grounding electrode. **Antenna grounding according to the National Electrical Code, ANSI/NFPA 70**

Antenna Lead in Wire
Ground Clamp
Electric Service Equipment
Ground Clamp
Antenna Discharge Unit (NEC Section 810-20)
Grounding Conductor (NEC Section 810-21)
Power Service Grounding Electrode System (NEC Art 250, Part H)
NEC: National Electrical Code

- **Cleaning**
  When cleaning, unplug the power cord and wipe gently with a soft cloth to prevent scratching. Do not spray water or other liquids directly on the TV as electric shock may occur. Do not clean with chemicals such as alcohol, thinners or benzine.

- **Moving**
  Make sure the product is turned off, unplugged and all cables have been removed. It may take 2 or more people to carry larger TVs. Do not press or put stress on the front panel of the TV.

- **Ventilation**
  Install your TV where there is proper ventilation. Do not install in a confined space such as a bookcase. Do not cover the product with cloth or other materials while plugged. Do not install in excessively dusty places.

- If you smell smoke or other odours coming from the TV, unplug the power cord contact an authorized service center.

- Do not press strongly upon the panel with hand or sharp object such as nail, pencil or pen, or make a scratch on it.

- Keep the product away from direct sunlight.

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- **Dot Defect**
The Plasma or LCD panel is a high technology product with resolution of two million to six million pixels. In a very few cases, you could see fine dots on the screen while you're viewing the TV. Those dots are deactivated pixels and do not affect the performance and reliability of the TV.

- **Generated Sound**
"Cracking" noise: A cracking noise that occurs when watching or turning off the TV is generated by plastic thermal contraction due to temperature and humidity. This noise is common for products where thermal deformation is required.
Electrical circuit humming/panel buzzing: A low level noise is generated from a high-speed switching circuit, which supplies a large amount of current to operate a product. It varies depending on the product. This generated sound does not affect the performance and reliability of the product.

- Take care not to touch the ventilation openings. When watching the TV for a long period, the ventilation openings may become hot. This does not affect the performance of the product or cause defects in the product.

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

**DISPOSAL (Hg lamp only used in LCD TVs)**

The fluorescent lamp used in this product contains a small amount of mercury. Do not dispose of this product with general household waste. Disposal of this product must be carried out in accordance to the regulations of your local authority.

**For USA and Canada**

**FCC NOTICE**

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
  - Reorient or relocate the receiving antenna.
  - Increase the separation between the equipment and the receiver.
  - Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
  - Consult the dealer or an experienced radio/TV technician for help.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference and (2) this device must accept any interference received, including interference that may cause undesired operation of the device. Any changes or modifications in construction of this device which are not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

**NOTE TO CABLE/TV INSTALLER**

This reminder is provided to call the CATV system installer's attention to Article 820-40 of the National Electric Code (U.S.A.). The code provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of the cable entry as practical.

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# INSTALLATION PROCEDURE

1 Open the package and make sure all the accessories are included.

2 Attach the stand to the TV set.

3 Connect an external device to the TV set.

# 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.

For CS530 series
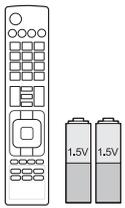


**Remote control, Batteries (AAA)**
(See p.19)



**Owner's manual**
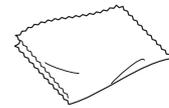


**Polishing cloth**
Gently wipe the spots on the cabinet with the polishing cloth.



**Screws for assembly**
8 EA, M4 x 20
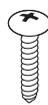


**Screw for fixing**
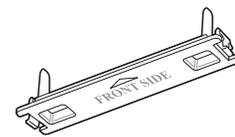


**Protection cover**
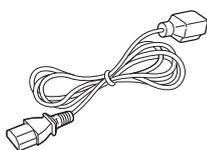


**Power Cord**

⚠ **CAUTION**

- Do not use any unapproved items to ensure the safety and product life span.
- Any damages or injuries by using unapproved items are not covered by the warranty.
- In case of some model, the thin film on screen is a part of TV, So don't take it off.

🛈 **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.
- For an optimal connection, HDMI cables and USB devices should have bezels less than 10 mm (0.39 inches) thick and 18 mm (0.7 inches) 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.
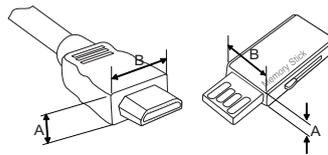
*A≦ 10 mm (0.39 inches)
*B≦ 18 mm (0.7 inches)

# Parts and buttons

Screen

Side Connection panel

USB input

USB IN

SERVICE ONLY

SERVICE ONLY

Remote control and Intelligent sensors[1]

Power indicator

Speakers

Touch buttons[2]

∨  ∧  −  +    OK ◉    SETTINGS  INPUT    ⏻/I

AV IN
VIDEO            L/MONO AUDIO R

HƎMI IN    1    2

Y  P_B  P_R
VIDEO
COMPONENT IN

L  R
AUDIO

ANTENNA/ CABLE IN

Rear Connection panel (See p.44)

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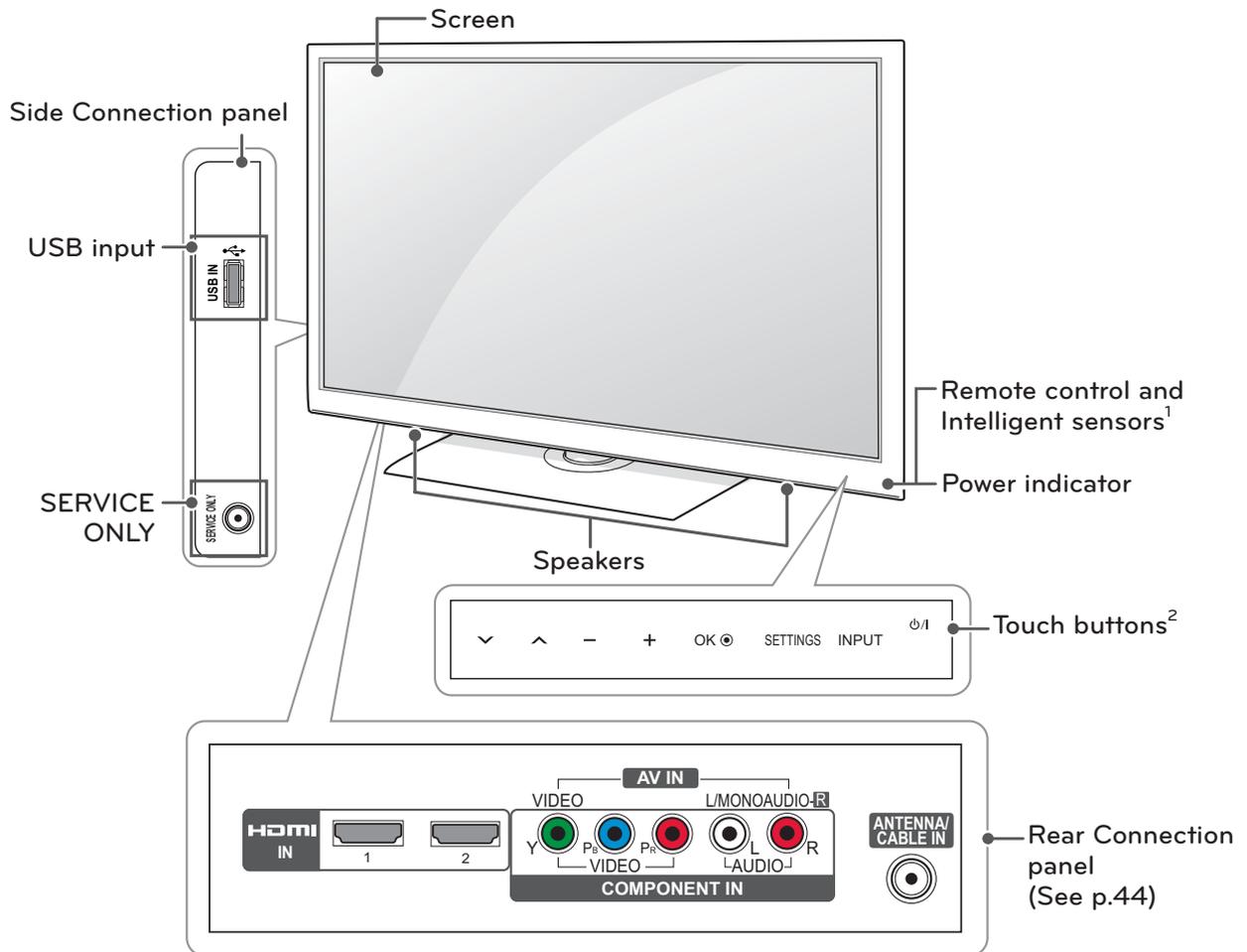
| Touch button[2] | Description |
|---|---|
| ⏻ / I | Turns the power on or off. |
| INPUT | Changes the input source. |
| SETTINGS | Accesses the main menus, or saves your input and exits the menus. |
| OK ◉ | Selects the highlighted menu option or confirms an input. |
| -   + | Adjusts the volume level. |
| ∨   ∧ | Scrolls through the saved channels. |

1 Intelligent sensor - Adjusts the image quality and brightness based on the surrounding environment.

2 All of the buttons are touch sensitive and can be operated through simple touch with your finger.

## Lifting and moving the TV

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

⚠ CAUTION
- Avoid touching the screen at all times, as this may result in damage 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 avoid damage.



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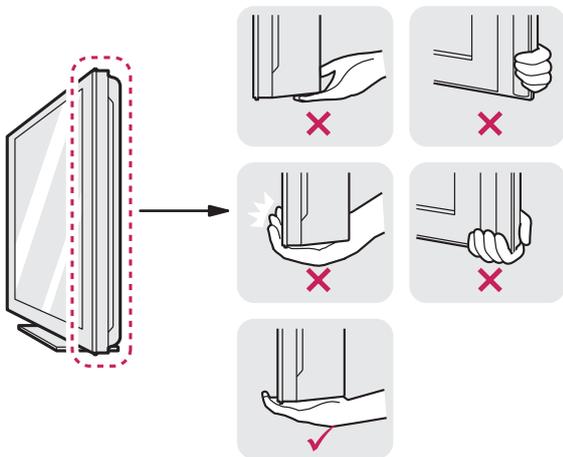


- When transporting a large TV, there should be at least 2 people.
- When transporting the TV by hand, hold the TV as shown in the following illustration.
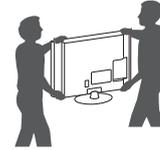


- When transporting the TV, do not expose the TV to jolts or excessive vibration.
- When transporting the TV, keep the TV upright, never turn the TV on its side or tilt towards the left or right.

# Setting up the TV

Put your TV on a pedestal stand and mount the TV on a table or wall.

## Attaching the stand

If you are not mounting the TV to a wall, use the following instructions to attach the stand.

**1**
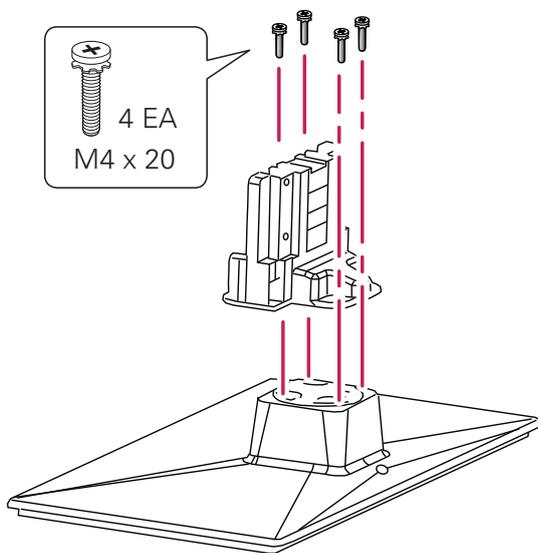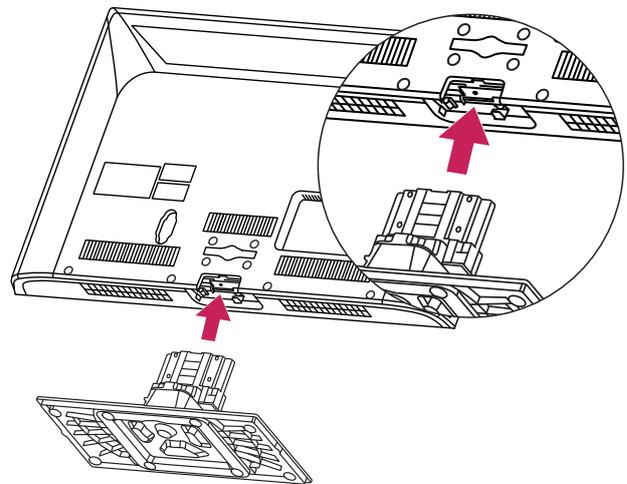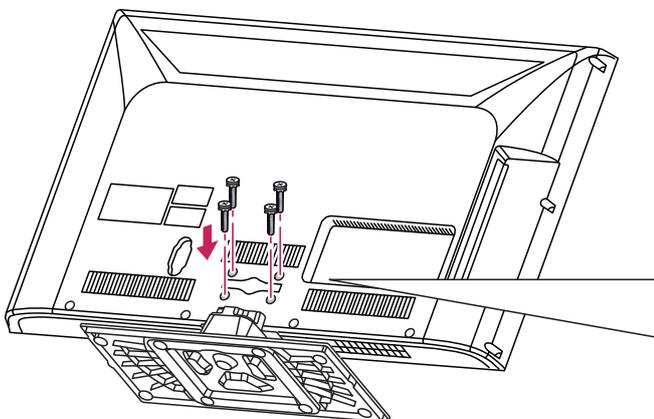


4 EA
M4 x 20

**2**



⚠ 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.

**3**



4 EA

M4 x 20

🛈 NOTE
- Remove the stand before installing the TV on a wall mount by performing the stand attachment in reverse.

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

To detach the stand,

**1**
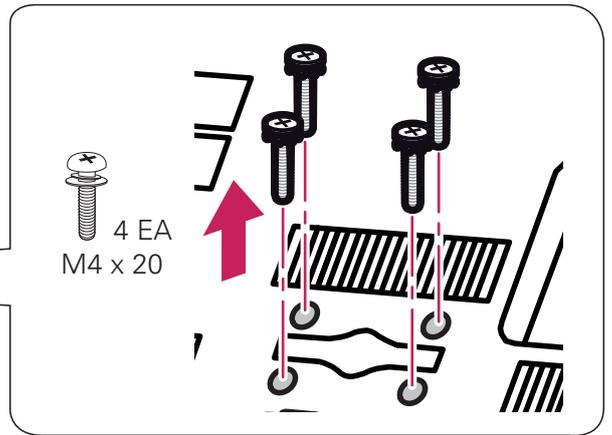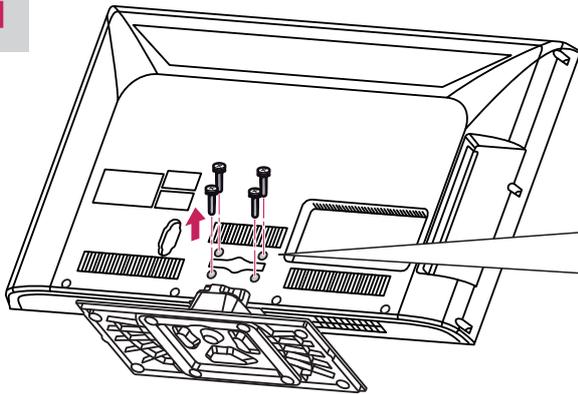


4 EA
M4 x 20

⚠ 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**



**3**
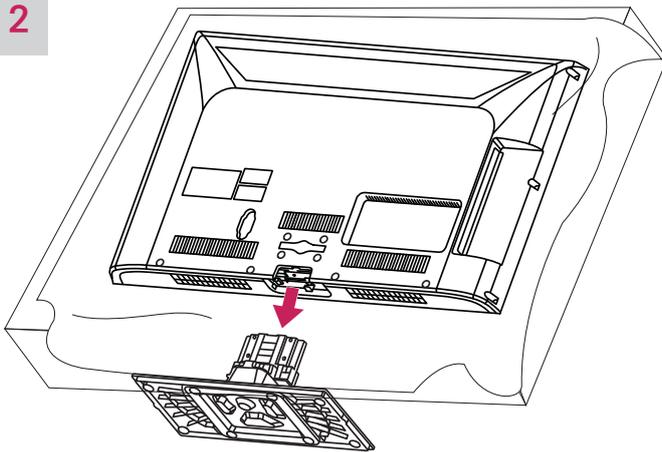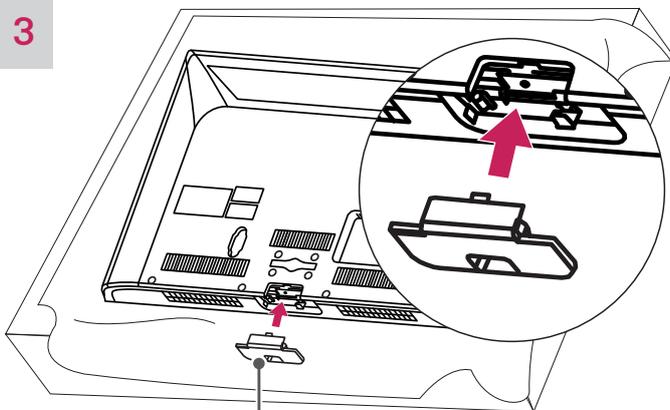


❗ NOTE

• This will protect the opening from accumulating dust and dirt.
• When installing the wall mounting bracket, use the Protection cover.

Protection cover

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## Mounting on a table

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

- Leave a 10 cm (4 inch) (minimum) space from the wall for proper ventilation.
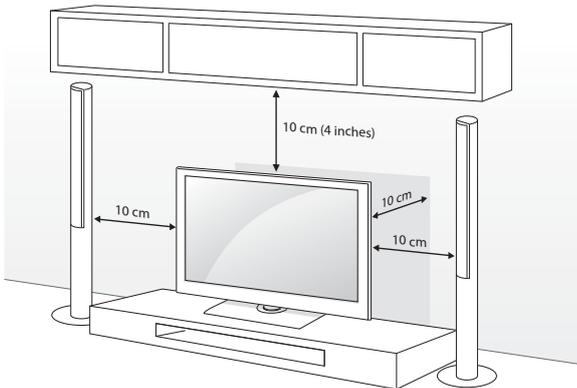


2   Connect the power cord to a wall outlet.

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

### Securing the TV to a table

Fix the TV to a table to prevent from tilting forward, damage, and potential injury.
Mount the TV on a table, and then insert and tighten the supplied screw on the rear of the stand.
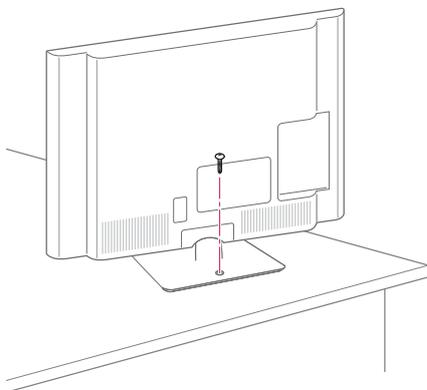


⚠ WARNING
- To prevent TV from falling over, the TV should be securely attached to the floor/ wall per installation instructions. Tipping, shaking, or rocking the TV may cause injury.

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

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



20°                    20°
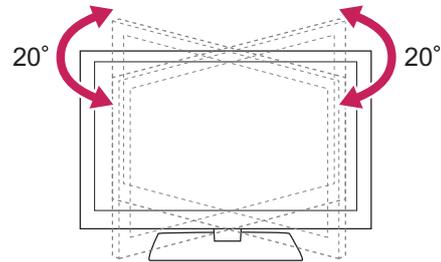
🛈 NOTE
- When adjusting the angle of the TV, watch out for your fingers.



<Rear>            <Front>

ENGLISH
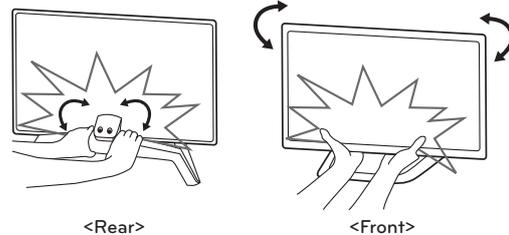
### Securing the TV to a wall (optional)
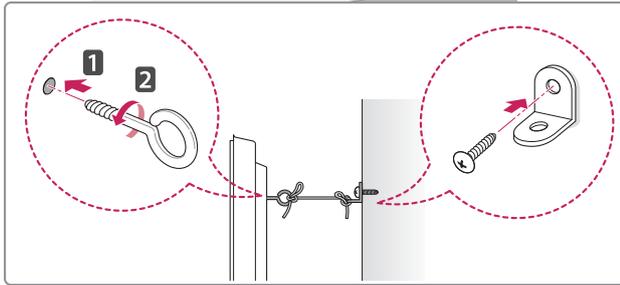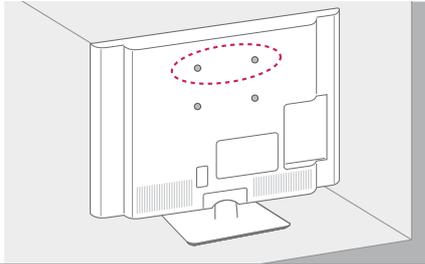


1 Insert and tighten the eye-bolts, or TV brackets and bolts on the back of the TV.

   - If there are bolts inserted at the eye-bolts position, remove the bolts first.

2 Mount the wall brackets with the bolts to the wall.

   Match the location of the wall bracket and the eye-bolts on the rear of the TV.

3 Connect the eye-bolts and wall brackets tightly with a sturdy rope.

   Make sure to keep the rope horizontal with the flat surface.

⚠ CAUTION

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

🛈 NOTE

• Use a platform or cabinet that is strong and large enough to support the TV securely.
• Brackets, bolts and ropes are optional. You can obtain additional accessories from your local dealer.

### Using the Kensington security system (optional)

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.
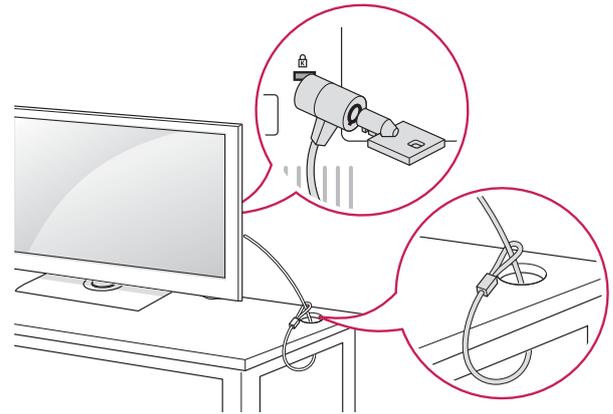


🛈 NOTE

• The Kensington security system is optional. You can obtain additional accessories from your local dealer.

## Mounting on a wall

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

We recommend that you use an LG brand wall mount when mounting the TV to a wall.
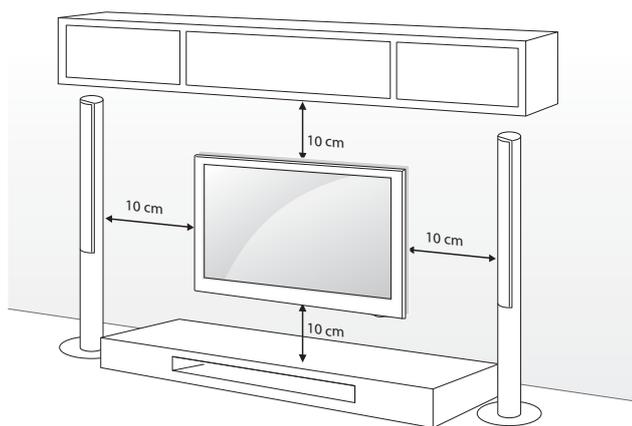


Make sure to use screws and wall mounts that meet the VESA standard. Standard dimensions for the wall mount kits are described in the following table.

| Model | 22/26LS3500 | 32CS560<br>32LS3500 |
|---|---|---|
| VESA | 100 x 100 | 200 x 100 |
| Standard screw | M4 | M4 |
| Number of screws | 4 | 4 |
| Wall mount bracket (optional) | LSW100B,<br>LSW100BG | LSW100B,<br>LSW100BG |

| Model | 42CS530<br>37/42CS560 |
|---|---|
| VESA | 200 x 200 |
| Standard screw | M6 |
| Number of screws | 4 |
| Wall mount bracket (optional) | LSW200B, LSW200BG |
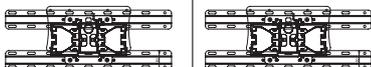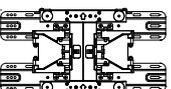
⚠ **CAUTION**

- 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.

🔘 **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. Make sure to use the proper length.
- For more information, refer to the manual supplied with the wall mount.

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## Tidying cables

1  Gather and bind the cables with the cable management clip.

2  Fix the cable management clip firmly to the TV.
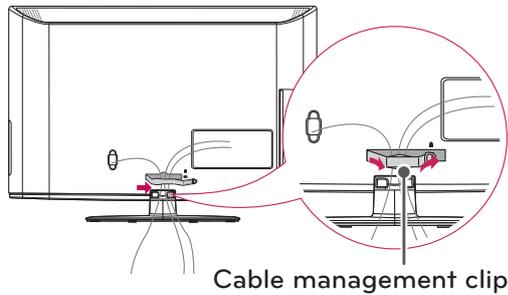


**Cable management clip**

> ⚠ **CAUTION**
> • Do not move the TV by holding the cable holder and power cord holder, as the cable holders may break, and injuries and damage to the TV may occur.

ENGLISH

# 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.
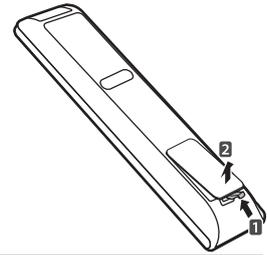
⚠ CAUTION

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

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

ENGLISH
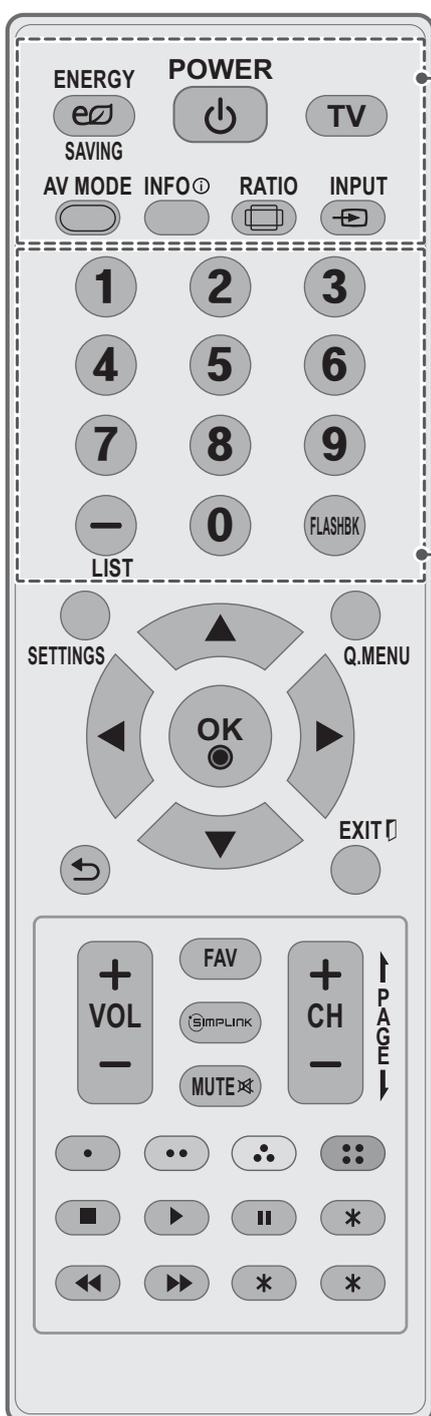
ⓞ **POWER**
  Turns the TV on or off.

e⌀ **ENERGY SAVING** (See p.36)
  Adjusts the Energy Saving settings.

**TV**
  Returns to the last TV channel.

**AV MODE** (See p.27)
  Selects an AV mode.

**INFO**ⓘ (See p.25)
  Views the information of the current program and screen.

▭**RATIO** (See p.26)
  Resizes an image.

⊸**INPUT** (See p.27)
  Rotates through inputs.
  Also switches the TV on from standby.

**Number button**
  Enters numbers.

**LIST** (See p.24)
  Accesses the saved channel list.
**- (Dash)**
  Inserts a dash between numbers such as 2-1 and 2-2.

**FLASHBK**
  Alternates between the two last channels selected (pressing repeatedly).
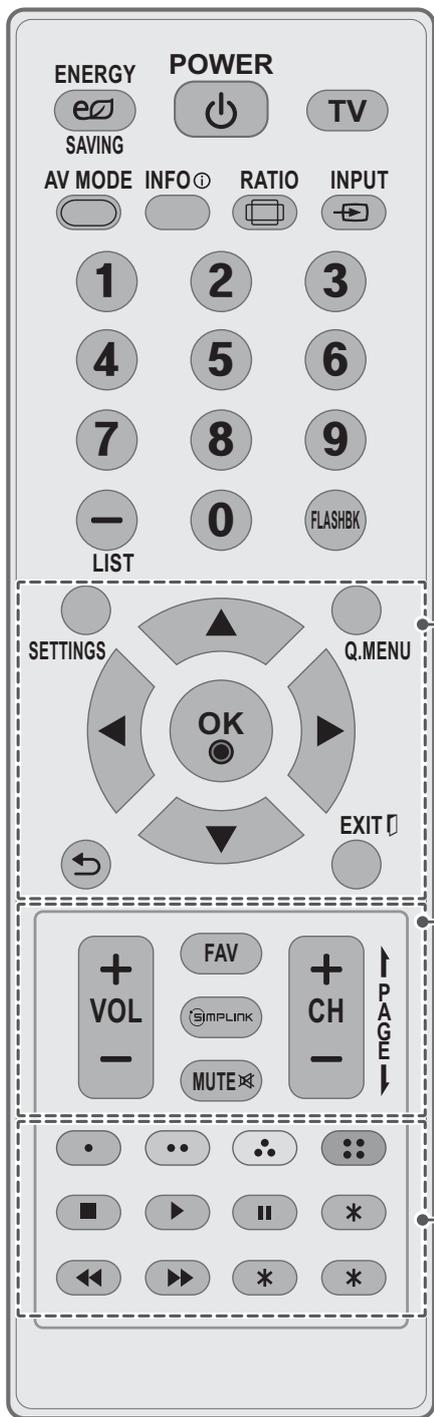
**SETTINGS**
Accesses the main menu.

●.MENU (See p.28)
Accesses the quick menu.

**Navigation buttons** (up/down/left/right)
Scrolls through menus or options.

**OK** ◉
Selects menus or options and confirms your input.

**⇔(BACK)**
Returns to the previous level.

**EXIT ⬮**
Clears all on-screen displays and returns to TV viewing.

**＋ VOL −**
Adjusts the volume level.

**FAV** (See p.24)
Accesses your favorite channel list.

**ⓈimpLink** (See p.51)
Accesses the AV devices connected to the TV;
Opens the SIMPLINK menu.

**MUTE** ⋈
Mutes all sounds.

**＋ CH −, PAGE** ⸗
CH: Scrolls through the saved channels.
PAGE: Moves to the previous or next screen.

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

**Control buttons**
Controls the SIMPLINK compatible devices (USB,SIMPLINK).

# WATCHING TV

## Connecting to an antenna or cable

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

VHF Antenna

UHF Antenna

Antenna

ANTENNA/
CABLE IN

Coaxial (75Ω)

Terminal
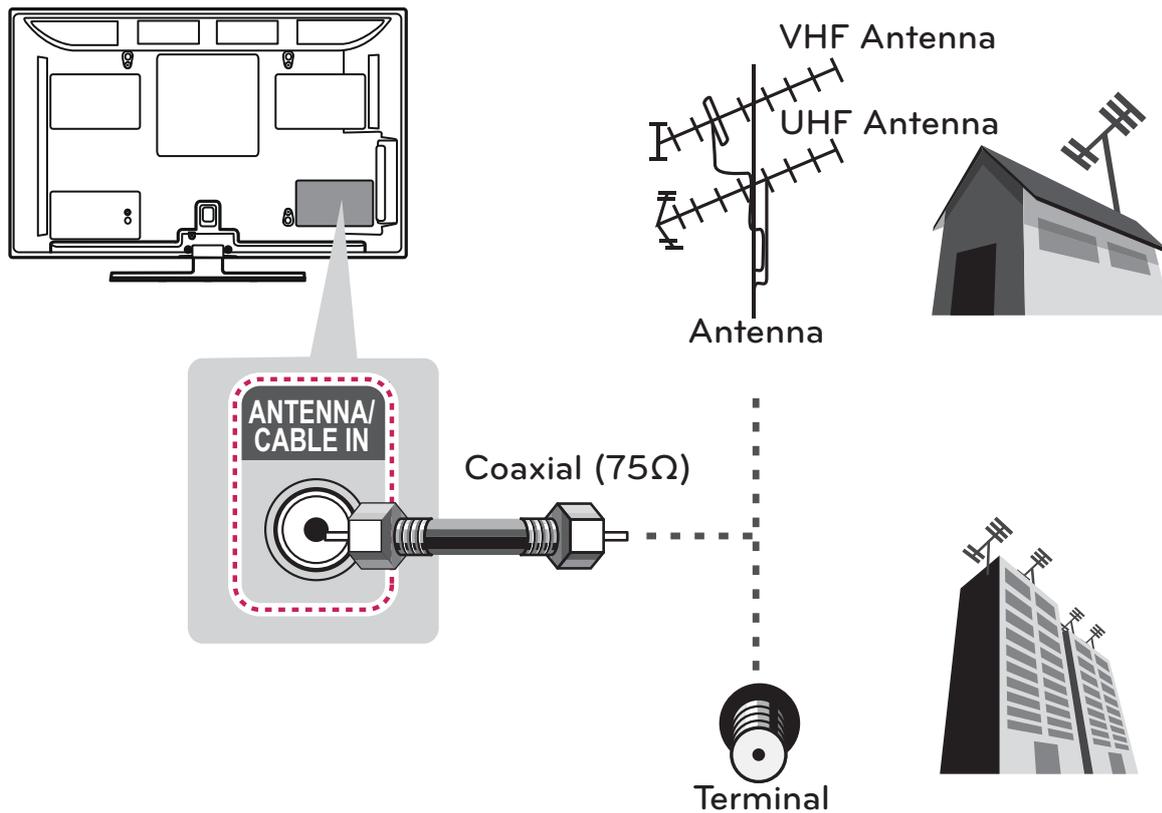
⚠ CAUTION

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

Copper wire
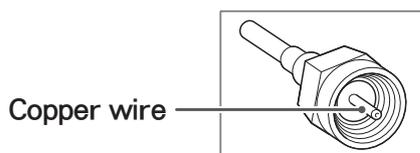
• Complete all connections between devices, and then connect the power cord to the power outlet to prevent damage to your TV.

❗ NOTE

• Use a signal splitter to use more than 2 TVs.
• Visit http://lgknowledgebase.com for more information about the antenna and cable connection. Search for antenna.

ENGLISH

# Turning the TV on for the first time

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

1   Connect the power cord to a power outlet. The Power indicator turns red and the TV switches to Standby mode.

2   In Standby mode, press the power button on the remote control to turn the TV on.
The Initial setting screen appears if you turn the TV on for the first time.

> ⓘ NOTE
>
> • You can also access **Initial Setting** by accessing **OPTION** in the main menu.

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

| Language | Selects a language to display. |
|---|---|

⇩

| Mode Setting | Selects **Home Use** for the home environment. |
|---|---|

⇩

| Time Setting | Selects the time zone and daylight saving. |
|---|---|

⇩

| Auto Tuning | Scans and saves available channels automatically. |
|---|---|
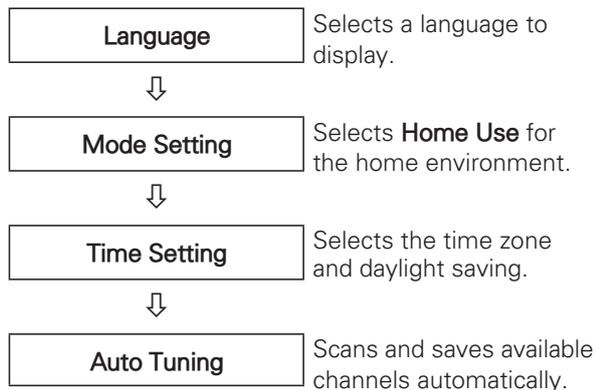
> ⓘ NOTE
>
> • To display images in the best quality for your home environment, select **Home Use**.
> • **Store Demo** is suitable for the retail environment.
> • If you select **Store Demo**, any customized settings will switch back to the default settings of **Store Demo** in 5 minutes.

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

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

5   To turn the TV off, press the power button on the remote control.

# Watching TV

1 In Standby mode, press the power button on the remote control to turn the TV on.

2 Press **INPUT** and select TV.

3 Control the TV using the following buttons while you are watching TV.

| Button | Description |
|---|---|
| CH (+, -) | Scrolls through saved channels. |
| LIST | Selects a channel on the saved channel list. |
| 0 - 9 | Selects a channel by entering numbers. |
| VOL (+, -) | Adjusts the volume level. |
| MUTE | Mutes all sounds. |
| AV MODE[1] | Selects an AV mode (See p.27). |
| ●.MENU | Accesses the quick menus (See p.28). |
| FLASHBK | Alternates between the last two channels selected. |
| RATIO | Resizes an image (See p.26). |

1 Each **AV mode** has the optimized image and sound settings. If you select **Off**, the image and sound settings will be restored to the previously customized settings.

4 To turn the TV off, press the power button on the remote control.
The TV switches to Standby mode.

# Managing channels

## Setting up channels

**Storing channels**

To store channels automatically,

1 Press **SETTINGS** to access the main menus.

2 Press the Navigation buttons to scroll to **CHANNEL** and press **OK**.

3 Press the Navigation buttons to scroll to **Auto Tuning** and press **OK**.

4 Select **Yes** to start automatic tuning. The TV scans and saves available channels automatically.

> ⓘ NOTE
> • If the TV scans and saves channels, the previously saved channels will be overwritten.

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

To store channels manually,

1 Press **SETTINGS** to access the main menus.

2 Press the Navigation buttons to scroll **CHANNEL** and press **OK**.

3 Press the Navigation buttons to scroll to **Manual Tuning** and press **OK**.

4 Scroll through the channel types, and then add or delete channels.

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

> ⓘ NOTE
> • If the TV scans a blocked channel, you will be prompted to enter your password to keep the channel scanned.
> • You can store up to 800 channels. The number of channels that you can store differs depending on the broadcasting signal environment.
> • The channels are stored in the order of **DTV**, **TV, Cable DTV** and **Cable TV**.

ENGLISH

### Editing your channel list

1 Press **SETTINGS** to access the main menus.

2 Press the Navigation buttons to scroll to **CHANNEL** and press **OK**.

3 Press the Navigation buttons to scroll to **Channel Edit** and press **OK**.

4 Edit channels using the following buttons.

| Button | Description |
|---|---|
| ∧ | Highlights the channel type. |
| ∧, ∨, <, > | Scrolls through channel types or channels. |
| OK ◉ | Selects the highlighted channel to view. |
| CH (+, -) | Moves to the previous or next page. |
| Blue button | Adds or deletes a channel. The deleted channel displays in blue. |

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

### Selecting a channel on the channel list

1 Press **LIST** to access the channel list.
  - To move to the previous or next page, press **CH** (**+**, **-**).
  - To tune to the "**CHANNEL** menu - **Channel Edit**", press **Blue** button.

2 Select a channel you want and press **OK**.

## Using favorite channels

Add the channels that you watch frequently to the favorite list.

### Setting up your favorite list

1 Select a channel to add to the favorite list.

2 Press **FAV**.

3 Press the Navigation buttons to select your desired favorite channel group.

4 Press the Navigation buttons to scroll to **Favorite**.

5 Press **OK** to add the selected channel to the favorite list.

6 When you are finished, press **EXIT**.

> ⓘ **NOTE**
> - You can also setup Favorite List in the **CHANNEL** menu - **Channel Edit**.

### Selecting a channel on the favorite list

1h Press **FAV** to access the favorite list.
  - To move to the previous or next page, press **CH** (**+**, **-**).

2 Select a channel you want and press **OK**.

ENGLISH

# Checking current program info

Press **OK** to view the information of the currently program while you are watching.
The following information appears at the top of the screen.

Banner information    Program title                                    Current time

| DTV **8**-1 | Brief Info Title Test... | Sun, Feb 21, 2010 10: 40 AM |
| DOLBY DIGITAL HD | | ◎ Multilingual DⅅD CC Caption 16:9 1080i 🔒 TV-PG D L S V |
| CNN | Next - 11:40 AM    News | |

| Icon | | Description |
|---|---|---|
| Multilingual | ◎ | The program contains two or more audio language services. You can change the audio language using the quick menu. |
| Dolby Digital | DⅅD | The program contains a Dolby Digital audio signal in TV and HDMI input sources. |
| Caption | CC | The program contains one or more language caption services. You can change the caption language using the quick menu. |
| Aspect ratio | 4:3 16:9 | The original aspect ratio of the video is 4:3. The original aspect ratio of the video is 16:9 (wide). |
| Resolution | 480i 480p 720p 1080i 1080p | The video resolution is 720 x 480i. The video resolution is 720 x 480p. The video resolution is 1280 x 720p. The video resolution is 1920 x 1080i. The video resolution is 1920 x 1080p. |
| Rating | 🔒 | The program contains Rating information. See "LOCK Settings" on p.42. |

| DTV **8**-1 CNN | ⇕ Ch. Change ▶ Next ◉ Watch |

Brief Info Title Test...
10:10 AM ▭▭▭▭▭ 11:40 AM ◎ Multilingual DⅅD CC Caption 16:9 1080i 🔒 14 TV-PG D L S V

No information
Sarah Bradley, Steve Gray and Brendon Pongia present the latest in fashion, the arts, entertainment, lifestyle and cooking, with regular and special guests.                                                                          Up
Sarah Bradley, Steve Gray and Brendon Pongia present the latest in fashion, the arts, entertainment, lifestyle and cooking,    Down
▼

| Button | Description |
|---|---|
| INFO | Shows current channel information. |
| ∧ or ∨ | Changes a channel. |

# Using additional options

## Adjusting aspect ratio

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

> ⓘ **NOTE**
> • You can also change the image size by pressing ●.**MENU** or accessing **Aspect Ratio** in the **PICTURE** menu.
> • The available ratio varies depending on the input source.
>   - The input sources: HDMI-PC support 4:3 and 16:9.

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



-   **Just Scan**: Displays video images in the original size without cutting off the edges.
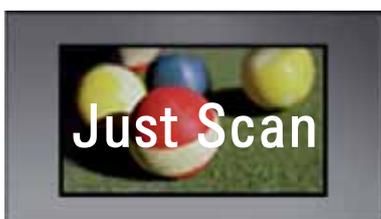


> ⓘ **NOTE**
> • If you select **Just Scan**, you may see image noises at the edge or edges of the screen.
> • The input sources: DTV, Component, and HDMI-DTV (720p/1080i/1080p) support Just Scan.

-   **Set By Program**: Displays images in the same aspect ratio as the original image.

(4:3 ➝ 4:3 )



(16:9 ➝ 16:9 )



-   **4:3**: Resizes images to the previous standard 4:3.



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

- **Cinema Zoom1**: Formats an image to the cinemascope ratio, 2.35:1.
  - To change the ratio of the cinema zoom, press **<** or **>** and its range is from 1 to 16.



> 🛈 **NOTE**
> - If you enlarge or reduce an image, the image may be distorted.

## Changing AV modes

Each **AV mode** has optimized image and sound settings.

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

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

## Using the input list

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

> 🛈 **NOTE**
> - You can also access the input source list by selecting **INPUT** in the **SETTINGS** menu.

2  Press the Navigation buttons to scroll to one of the input sources and press **OK**.
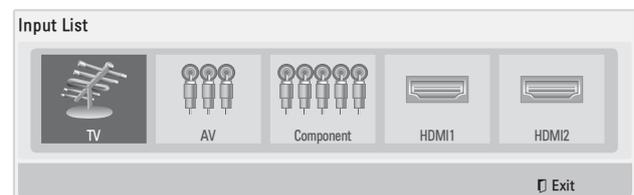


| Input source | Description |
|--------------|-------------|
| TV | Watch TV over the air, cable, and digital cable broadcast. |
| AV | Watch video from a VCR or other external devices. |
| Component | Watch video from a DVD or other external devices, or through a digital set-top box. |
| HDMI | Watches video from a HTS or other high definition devices. |

The disconnected input sources will be gray.

- To add an input label, press the **Blue** button. You can easily identify a device connected to each input source.
- If you connect a new external device to the TV, a pop-up window appears. Select Yes on the pop-up window to switch to that input source.

### Adding an Input label

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

| AV | ◄    V C R    ► |
|---|---|
| Component | |
| HDMI1 | |
| HDMI2 | |
| Close | |
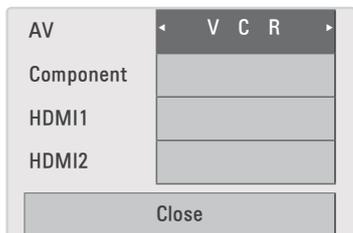
1  Press **INPUT** to access the input sources.

2  Press the Navigation buttons to scroll to one of the input sources.

3  Press the **Blue** button.

4  Press the Navigation buttons to scroll to one of the input labels and press **OK**.

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

# Using the quick menu

Customize frequently used menus.

1  Press ●.MENU to access the quick menus.

2  Press the Navigation buttons to scroll through the following menus and press **OK**.

| Menu | Description |
|---|---|
| ⬌ Aspect Ratio | Changes the image size. |
| 👁 Picture Mode | Changes the image mode. |
| 🎜 Sound Mode | Changes the sound mode. |
| ⊟ Caption | Activates or deactivate the subtitles. |
| ⦿ Multi Audio (Digital signal) | Changes the audio language . |
| ⦿ SAP (Analog signal) | Changes the MTS sound. |
| ♂ᶻ Sleep Timer | Sets the length of time until the TV to turns off. |
| ⁀CH Del/Add/Fav | Edits the channels to add or delete the channel. |
| ⏏ Eject USB | Eject a USB device. The menu is displayed only when the USB device is connected. |

> ⓘ **NOTE**
> • The available menus and options may differ from the input source that you are using.

3  Press the Navigation buttons to scroll to the option you want.

4  When you are finished, press ●.MENU.

# ENTERTAINMENT

## Connecting USB storage devices

Connect USB storage devices such as a USB flash drive or external hard drive to the TV and use multimedia features (See "Browsing files" on p. 30).

Connect a USB flash drive or USB memory card reader to the TV as shown in the following illustration.
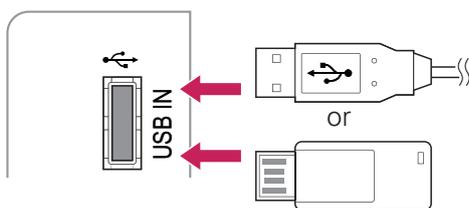


To disconnect a USB storage device, make sure to end the connection properly to prevent damages to the TV or files.

1   Press ●.MENU to access the quick menus.

2   Press the Navigation buttons to scroll to **Eject USB** and press **OK**.

3   Disconnect the USB storage device only when the message says that it is safe to remove.

### ⚠ CAUTION

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

### Tips for using USB storage devices

- The TV recognizes only a USB storage device.
- If you connect a USB storage device to the TV through a USB hub, your TV may not recognize the USB storage device.
- The TV may not recognize a USB storage device that requires a special driver.
- The recognition speed of a USB storage device may differ depending on the device.
- Only use a USB storage device which has normal music or image files.
- Use only USB storage devices that are formatted as a FAT 32 or NTFS file system.
- You may need to connect a USB storage device to an external power supply with a power adapter.
- If the TV does not recognize a connected USB storage device, replace the cable and try again. Do not use an excessively long cable.
- The TV does not support some USB storage devices properly.
- You can use a multi-partition (up to 4) USB storage device.
- You can use up to 4 USB storage devices at a time by using a USB multi-card reader.
- The file alignment method of a USB storage device is similar to the one of Window XP.
- You cannot create or delete a folder saved in a USB storage device directly on the TV.
- The number of characters for a file name is up to 100 English characters.
- If there are too many folders and files in one folder, it may not operate properly.
- The recommended capacity for a USB external hard disk is 1 TB or less and for a USB storage device is 32 GB or less.
- If a USB external hard disk with the Energy Saving feature does not work, turn the USB external hard disk off and on again to make it work properly. For more information, refer to the user manual of the USB external hard disk.
- The electrostatic can cause USB device's malfunction. In this case, USB Device has to be plugged again.

ENGLISH

## Browsing files

Access the photo or music lists and browse files.

1 Connect a USB storage device.

2 Press Navigation buttons to scroll to **Photo List** or **Music List** and press **OK**.

Photo List    Music List

3 Select **DriveA** to access the connected USB storage device.

6 Press the Navigation buttons to Select a folder/file you want.
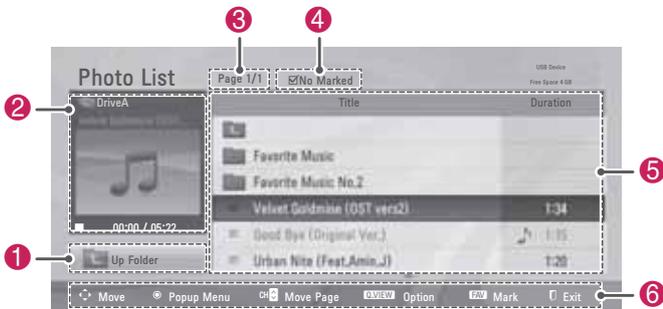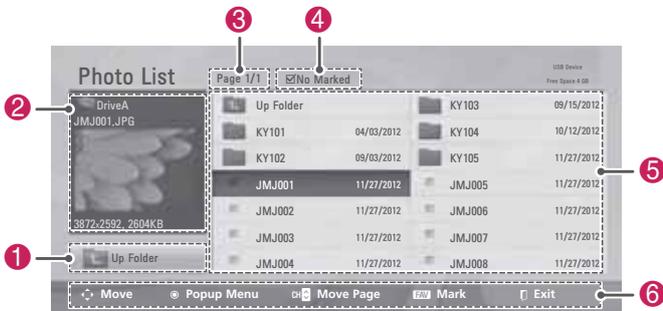
| No. | Description |
|---|---|
| ❶ | Moves to the upper level folder. |
| ❷ | Preview: Displays the thumbnail/folder name of the file in the selected folder. |
| ❸ | Current page/Total pages |
| ❹ | Total number of marked photos |
| ❺ | Contents under the folder focused on ❶ |
| ❻ | Available buttons on the remote control |

| Type | Supported File Formats |
|---|---|
| Photo | • JPG<br>• Available size<br>Baseline: 64 pixel (W) x 64 pixel (H) - 15360 pixel (W) x 8640 pixel (H)<br>Progressive: 64 pixel (W) x 64 pixel (H) - 1024 pixel (W) x 768 pixel (H)<br>* Do not use the progressive option when saving JPG files on your PC.<br>• It may take some time to open high-resolution images in full screen. |
| Music | • MP3<br>• Bit rate range 32 Kbps - 320 Kbps<br>• Sampling rate (Sampling Frequency)<br>MPEG1 layer 3: 32 kHz, 44.1 kHz, 48 kHz<br>MPEG2 layer 3: 16 kHz, 22.05 kHz, 24 kHz<br>MPEG2.5 layer 3: 8 kHz, 11.025 kHz, 12 kHz<br>* A copy-protected file will not play. |

ENGLISH

## Viewing Photos

You can view image files saved on a USB storage device. The displays on the screen may differ based on the model.

1 Press **SETTINGS** to access the main menus.

2 Press the Navigation buttons to scroll to **USB** and press **OK**.

3 Press the Navigation buttons to scroll to **Photo List** and press **OK**.

4 Select **DriveA** to access the connected USB storage device.

5 Press the Navigation buttons to scroll to a folder/file you want and press **OK**.

6 View photos by using the following menus/buttons.



| Button | Description |
|---|---|
| Navigation button | Scrolls the file. |
| **OK** | Views the highlighted file or enters the mark mode. |
| **CH (+, -)** | Moves to the previous or next page. |
| **FAV** | Enters the mark mode. |
| **Menu** | **Description** |
| **View** | Views the selected photo. |
| **Mark All** | Selects all files |
| **Unmark All** | Clears all of your selections. |
| **Close** | Exits the Mark Mode. |



**NOTE**

- ▪ : Abnormal files are displayed using this graphic.
- ▪ : Non-supported files are displayed using this graphic.

7 The following options are available while viewing photos.



| Option | Description |
|---|---|
| Slideshow | • Starts or stops a slideshow with selected photos.<br>• If there are no selected photos, all photos saved in the current folder display during a slideshow.<br>• To set a slideshow speed, select Option. |
| BGM (Background Music) | • Turns the background music on or off. To set the background music folder, select Option.<br><br>**NOTE**<br>• You can't change or set-up the BGM while viewing the *.mpo files (3D camera file). |
| ↻ (Rotate) | Rotates photos clockwise (90°, 180°, 270°, 360°).<br><br>**NOTE**<br>• The supported photo size is limited. You cannot rotate a photo if the resolution of the rotated width is larger than the supported resolution size. |
| Exit | Moves to the previous menu screen. |

ENGLISH

> **NOTE**
> - Option values changed in Photo List do not affect Music List.
> - Option values changed in Photo List or Music List are changed likewise in Photo List and Music List.

**Q.MENU options for photo list**

1 Press ●.MENU.
   A pop-up window will appears.

2 Press the Navigation buttons to scroll to **Set photo view.** and press **OK**.

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

**Set photo view.**

| Option | Description |
|---|---|
| **Slide Speed** | Selects a slideshow speed (Fast, Normal, Slow). |
| **Music Folder** | Selects a music folder for the background music. <br> > **NOTE** <br> - You can't change the music folder while the background music is playing. |

**Set video.**

Allows you to change Video presets. (Refer to "PICTURE Settings" on p.36).

**Set audio.**

Allows you to change Audio presets. (Refer to "AUDIO Settings" on p.38).

## Listening to music

1 Press **SETTINGS** to access the main menus.

2 Press the Navigation buttons to scroll to **USB** and press **OK**.

3 Press the Navigation buttons to scroll to **Music List** and press **OK**.

4 Select **DriveA** to access the connected USB storage device.

5 Press the Navigation buttons to scroll to a folder/file you want and press **OK**.

6 Play music by using the following menus/buttons.

| Button | Description |
|---|---|
| Navigation button | Scrolls through the files. |
| **OK** | Plays the highlighted file or enters the mark mode. |
| **CH (+, -)** | Moves to the previous or next page. |
| **MARK** | Enters the mark mode. |
| Menu | Description |
| **Play** | Plays the selected music file. |
| **Play with Photo** | Displays photos during playback. |
| **Mark All** | Selects all files. |
| **Unmark All** | Clears all of your selections. |
| **Close** | Exits the Mark Mode. |

NOTE

- ⊙ : Abnormal files are displayed using this graphic.
- ⊙ : Non-supported files are displayed using this graphic.

7  Control playback by using the following buttons.

| Button | Description |
|---|---|
| ■ | Stops playback. |
| ▶ | Plays a music file. |
| ❚❚ | Pauses or resumes playback. |
| ◀◀ | Skips to the previous file. |
| ▶▶ | Skips to the next file. |
| Play with Photo | Displays photos during playback. |
| e⃝ (ENERGY SAVING) | Increases or deceases the brightness of your screen. |
| Option | Shows the Option menu (See p.33). |
| Hide | Hides the option window. To display the options, press OK. |
| Exit | Moves to the previous menu screen. |

Q.MENU options for music list

1  Press ●.MENU.
   A pop-up window will appears.

2  Press the Navigation buttons to scroll to music list option and press OK.

3  Press the Navigation buttons to scroll to one of the following options and press OK.

NOTE

- Option value changed in Photo List and Music List are changed likewise in Photo List and Music List.

Set Audio.

Allows you to change Audio presets. (Refer to "AUDIO Settings" on p.38).

NOTE

- The TV will not play copy protected files.
- If the TV is not in use for some time during playback, the information box as a screensaver will appear to prevent image burn.
  To return to the Music list screen, press OK, ↰.

File name

Time elapsed /Duration
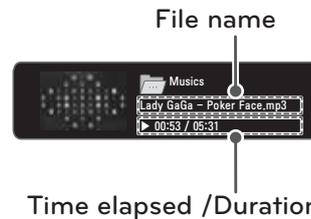
# CUSTOMIZING TV SETTINGS

## The Main Menus

1   Press **SETT**INGS 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**.

**PICTURE** (See p.36)
Adjusts the image size, quality, or effect.

**AUDIO** (See p.38)
Adjusts the sound quality, effect, or volume level.

**CHANNEL** (See p.35)
Sets up and edit channels.

**TIME** (See p.39)
Sets the time, date, or Timer feature.

| CHANNEL | PICTURE | AUDIO | TIME |

**OPTION** (See p.40)
Customizes the general settings.

**USB** (See p.29)
Displays photo and play music content stored on your USB.

| OPTION | LOCK | INPUT | USB |

**LOCK** (See p.42)
Locks or unlocks channels and programs.

**INPUT** (See p.27)
Views the input sources with their labels.

**ENGLISH**

# Customizing Settings

## CHANNEL Settings

1   Press **SETTINGS** to access the main menus.

2   Press the Navigation buttons to scroll to **CHANNEL** and press **OK**.

3   Press the Navigation buttons to scroll to the setting or option you want and press **OK**.
    - To return to the previous level, press ⤺.

4   When you are finished, press **EXIT**.
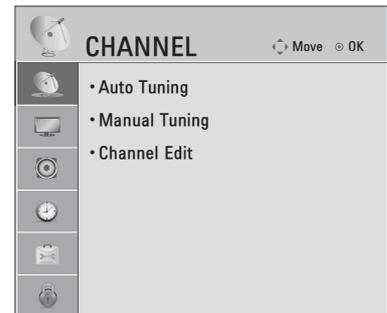
The available channel settings are described in the following.

| Setting | Description |
|---------|-------------|
| Auto Tuning | Tunes and stores all available channels through antennas or cable inputs (See p.23). |
| Manual Tuning | Tunes and stores the channels you want manually (See p.23). |
| Channel Edit | Adds or deletes channels on the channel (See p.24). |

ENGLISH

## PICTURE Settings

1 Press **SETTINGS** to access the main menus.

2 Press the Navigation buttons to scroll to **PICTURE** and press **OK**.

3 Press the Navigation buttons to scroll to the setting or option you want and press **OK**.
   - To return to the previous level, press ⅁.

4 When you are finished, press **EXIT**.

The available picture settings are described in the following.

| PICTURE | ⟨⟩ Move ⊙ OK |
|---|---|
| Aspect Ratio | : 16:9 |
| Picture Wizard | |
| Energy Saving | : Off |
| Picture Mode | : Standard |
| • BackLight | 70 |
| • Contrast | 90 |
| • Brightness | 50 |
| • Sharpness | 70 |
| • Color | 60 |
| • Tint | 0 |
| • Color Temp. | 0 |
| • Advenced Color | |
| • Reset | |

| Setting | Description |
|---|---|
| **Aspect Ratio** | Changes the image size to view images at its optimal size (See p.26). |
| **Picture Wizard** | Adjusts the image quality and calibrates the screen.<br>The customized options will be saved as **Expert1** in the **Picture Mode**.<br><br>🛈 **NOTE**<br>• If you use **Picture Wizard**, the **Energy saving** feature will turn off automatically.<br>• To reset changes made by **Picture Wizard**, operate **Picture Reset** when **Picture Mode** is on **Expert1**. |

| Energy Saving | Reduces the power consumption by adjusting the screen brightness.<br><br>🛈 **NOTE**<br>• When selecting **Auto** or **Maximum**, **Backlight** will not work. |
|---|---|
| | **Option** |
| | **Auto** — The backlight is adjusted automatically corresponding to the surroundings when selecting **Auto** using the **Intelligent sensor** feature. |
| | **Off** — Select if this feature is not necessary. |
| | **Minimum/Medium/Maximum** — Selects the brightness level. |
| | **Screen off** — The screen turns off in 3 seconds.<br>Pressing any button of the remote control will turn on the screen again. |

| Setting | Description |
|---|---|
| Picture Mode | Selects one of the preset image or customizes options in each mode for the best TV screen performance. You are also able to customize advanced options of each mode. The available preset picture modes vary depending on the TV. |

| Mode | |
|---|---|
| Intelligent Sensor | Sets the TV to adjust the image settings, such as contrast, brightness, sharpness, color, or tint, automatically corresponding to the surrounding environments. |
| Vivid | Adjusts the video image for the retail environment by enhancing the contrast, brightness, color, and sharpness. |
| Standard | Adjusts the image for the normal environment. |
| Cinema | Optimizes the video image for a cinematic look to enjoy movies as if you are in a movie theater. |
| Sport | Optimizes video images for high and dynamic actions by emphasizing primary colors such as white, grass, or sky blue. |
| Game | Optimizes the video image for a fast gaming screen such as PCs or games. |
| Expert | Adjusts the detailed video image settings for video experts as well as general viewers. |

> **NOTE**
> • If you select **Intelligent Sensor**, the option of the **Energy saving** feature will switch to **Auto** automatically.

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### Basic Image Options

| Setting | Description |
|---|---|
| Backlight | Adjusts the brightness of the screen by controlling the LCD backlight. If you decrease the brightness level, the screen becomes darker and the power consumption will be reduced without any video signal loss. <br><br> **NOTE** <br> • If you use the "**Energy saving** - **Off**, **Minimum**, **Medium**", **Backlight** will be available. |
| Contrast | Increases or decreases the amplitude of the video signal. You may use Contrast when the bright part of the picture is saturated. |
| Brightness | Adjusts the base level of the signal in the picture. |
| Sharpness | Adjusts the level of crispness in the edges between the light and dark areas of the picture. The lower the level, the softer the image. |
| Color | Adjusts intensity of all colors. |
| Tint | Adjusts the balance between red and green levels. |
| Color Temperature | Sets to warm to enhance hotter colors such as red, or set to cool to enhance cooler colors such as blue. |
| Advanced Control | Customizes the advanced options. |
| Reset | Restores the options of each mode to the factory default. |

## AUDIO Settings

1 Press **SETTINGS** to access the main menus.

2 Press the Navigation buttons to scroll to **AUDIO** and press **OK**.

3 Press the Navigation buttons to scroll to the setting or option you want and press **OK**.
- To return to the previous level, press ⏎.
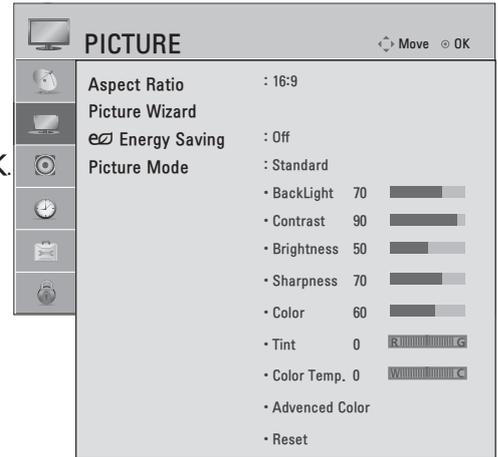
4 When you are finished, press **EXIT**.

| AUDIO | ⟵⟶ Move ⊙ OK |
|---|---|
| Auto Volume | : On |
| Clear Voice II | : Off |
| Balance | L ▭▭▭▭▭ R |
| Sound Mode | : Standard |
| • Infinite Sound | : Off |
| • Treble | 50 |
| • Bass | 50 |
| • Reset | |
| TV Speaker | : On |
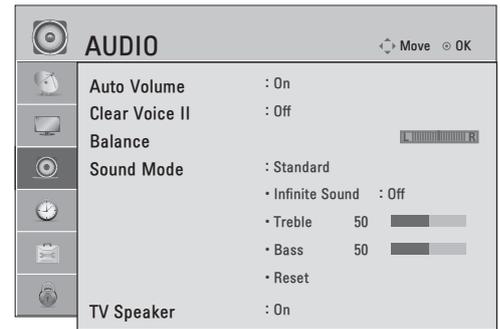
The available audio settings are described in the following.

| Setting | Description | |
|---|---|---|
| **Auto Volume** | Activates the Auto Volume feature to keep the volume level consistent whenever you change channels. The volume level may not be consistent due to different signal conditions of broadcasting stations. | |
| **Clear Voice II** | Sets whether to enhance human voice clarity. You can adjust the level of clarity when you set this feature on. | |
| **Balance** | Adjusts balance between the left and right speakers according to your room environment. | |
| **Sound Mode** | Selects one of the preset sound modes or customizes options in each mode. | |
| | **Mode** | |
| | Standard | Select when you want standard-quality sound. |
| | Music | Select when you listen to music. |
| | Cinema | Select when you watch movies. |
| | Sport | Select when you watch sports events. |
| | Game | Select when you play games. |
| | **🛈 NOTE**<br>• If sound quality or volume is not at the level you want, it is recommended to use a separate home theater system or amplifier to cope with different user environments.<br>• If the Clear Voice II feature is on, **Infinite Surround** will not be activated. | |
| | **Option** | |
| | Infinite Surround | Infinite Surround is a patented LG proprietary sound processing technology that strives immersive 5.1 surround sound with just two front speakers. |
| | Treble | Controls the dominant sounds in the output. When you turn up the treble, it will increase the output to the higher frequency range. |
| | Bass | Controls the softer sounds in the output. When you turn up the bass, it will increase the output to the lower frequency range. |
| | Reset | Resets the sound mode to the default setting. |
| **TV Speaker** | Turns on the internal speaker of the TV when using an external Hi-Fi system. You can use the TV speaker as an audio output device even if there is no video input. | |

ENGLISH

# TIME Settings

1 Press **SETTINGS** to access the main menus.

2 Press the Navigation buttons to scroll to **TIME** and press **OK**.

3 Press the Navigation buttons to scroll to the setting or option you want and press **OK**.
  - To return to the previous level, press ↰.

4 When you are finished, press **EXIT**.

| | TIME | ‹⌖› Move ⊙ OK |
|---|---|---|
| | Clock | |
| | Off Time | : Off |
| | On TIme | : Off |
| | Sleep Timer | : Off |

The available time settings are described in the following

| Setting | Description |
|---|---|
| **Clock** | Sets the time, date, time zone, and daylight-saving time feature.<br>The time will be set automatically according to a digital channel signal which includes time information provided by the broadcasting station. If not, set the time and date manually. |
| **Off Time/On Time** | Sets the time to turn on or off the TV automatically. To use this function, you should set the current time and date in advance.<br><br>❗ **NOTE**<br>• If you do not press any button within 2 hours after the TV turns on by the On Time feature, the TV enters the Standby mode automatically.<br>• If you set both Off time and On time features to the same time, the Off time feature overrides the On time feature. |
| **Sleep Timer** | Sets the length of time until the TV to turns off. When you turn the TV off and turn it on again, the Sleep timer feature will be set to off. |

**ENGLISH**

## OPTION Settings

1 Press **SETTINGS** to access the main menus.

2 Press the Navigation buttons to scroll to **OPTION** and press **OK**.

3 Press the Navigation buttons to scroll to the setting or option you want and press **OK**.
   - To return to the previous level, press ↰.
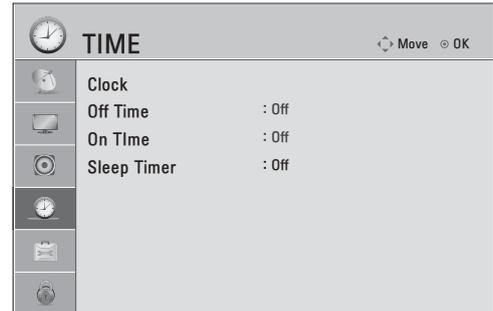
4 When you are finished, press **EXIT**.

| OPTION | ⬦ Move ⊙ OK |
|---|---|
| Language | |
| Input Label | |
| SIMPLINK | : On |
| Caption | : Service1 |
| Demo Mode | : Off |
| Initial Setting | : Home |
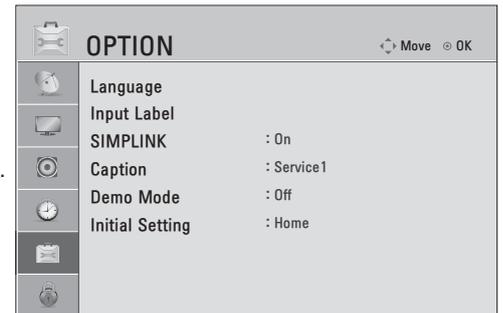
The available general settings are described in the following.

| Setting | Description | |
|---|---|---|
| **Language** | Selects a desired language. | |
| | **Option** | |
| | Menu | Selects a language for the display text. |
| | Audio | Selects an audio language for your program. This feature operates only in the DTV or CADTV mode. |
| **Input Label** | Indicates which device is connected to which input port. | |
| **SIMPLINK** | Allows you to control and play other AV devices connected with HDMI cable without additional cables and settings. | |
| **Caption** | Sets whether to display captions and customize your option in each mode. | |
| | **Mode** | |
| | CC 1-4 (Closed Captioning) | Displays the audio portion of a TV program as text on the TV screen. CC1 is the most common mode in use. |
| | Text 1-4 | - Field 1 data channels: two Captions (CC1, CC2) and two Text (T1, T2). - Field 2 data channels: two Captions (CC3, CC4) and two Text (T1, T2). |
| | Service 1-6 | This is only available for the digital broadcasting system. |
| | **Digital Option** (For DTV, CADTV) | |
| | Size | Selects the word size. |
| | Font | Selects a typeface for the text. |
| | Text Color | Selects a color for the text. |
| | Text Opacity | Adjusts the opacity for the text color. |
| | Bg Color | Selects a background color. |
| | Bg Opacity | Adjusts the opacity for the background color. |
| | Edge Type | Selects an edge type. |
| | Edge Color | Selects a color for the edges. |
| **Demo Mode** | Sets to show special features of the TV. You can cancel the demo mode by pressing any buttons. | |

ENGLISH

| Setting | Description |
|---|---|
| **Initial Setting** | Customizes the TV settings to suit your preference. The initial setup screen will appear when you turn on the TV for the first time.<br><br>🛈 **NOTE**<br>• When selecting "Lock System - On"in the LOCK menu, the message to enter the password appears.<br>• If you forget your password, press "0-3-2-5" on the remote control. |

| **Setting** | |
|---|---|
| Language | Selects a desired language. |
| Mode Setting | Selects **Home Use** for the home environment.<br>Selects **Store Demo** for the retail environment.<br>Selects **Demo Mode** to set to show special features of the TV. You can cancel the demo mode by pressing any buttons.<br><br>🛈 **NOTE**<br>• When selecting Store Demo, Demo Mode will be activated. |
| Time Setting | Sets the time zone and daylight saving. |
| Auto Tuning | Scans and saves available channels automatically. |

## LOCK Settings

1 Press **SETTINGS** to access the main menus.

2 Press the Navigation buttons to scroll to **LOCK** and press **OK**.

3 Press the Navigation buttons to scroll to the setting or option you want and press **OK**.
 - To return to the previous level, press ↰.

4 When you are finished, press **EXIT**.

| | LOCK | ⬧ Move ⊙ OK |
|---|---|---|
| | Lock System | : Off |
| | Set Password | |
| | Block Channel | |
| | Movie Rating | |
| | TV Rating–Chileren | |
| | TV Rating–General | |
| | Downloadable Rating | |
| | Input Block | |
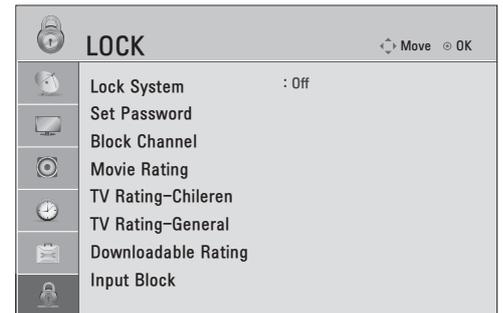
The available lock settings are described in the following.

| Setting | Description | |
|---|---|---|
| **Lock System** | Activates or deactivates the lock system. | |
| **Set Password** | Changes the 4-digit password. The default PIN is "0 0 0 0". If you forget your password, press "0-3-2-5" on the remote control. | |
| **Block Channel** | Blocks the channels that contain inappropriate contents for children by pressing the **Blue** button. The Lock icon appears in front of the blocked channels. The channels can be selected but the screen blank and the audio is muted. | |
| **Movie Rating** | Blocks the movies that are only broadcasted on the TV and contain inappropriate contents, based on the Motion Picture Association of America (MPAA) rating. | |
| | **Rating** | |
| | G | General audiences – All ages admitted |
| | PG | Parental guidance suggested – Some material may not be suitable for children |
| | PG-13 | Patents strongly cautioned – Some material may be inappropriate for children under 13 |
| | R | Restricted – Under 17 requires accompanying parent or adult guardian |
| | NC-17 | No one 17 and under admitted |
| | X | Adults only |
| | Blocking Off | Permits all programs |
| **TV Rating-Children** | Blocks the children's TV programs that parents do not want their children to watch. To block other TV programs, you should set the TV Rating-General feature. | |
| | **Rating** | |
| | Age | TV-Y (All children, including children from ages 2-6) TV-Y7 (Directed to older children, suitable for children age 6 and above) |
| | Fantasy Violence | TY-Y7 (Directed to older children – Fantasy violence, suitable for children age 6 and above, containing more intense or combative fantasy violence) |

**ENGLISH**

| Setting | Description | |
|---|---|---|
| **TV Rating-General** | Blocks the TV programs that you want based on the ratings by using the Parental Control Function (V-Chip). | |
| | 🛈 **NOTE**<br>• The V-Chip electronically reads TV program ratings and allows parents to block program that are unsuitable for children. | |
| | **Rating** | |
| | Age | TV-G (General audience, suitable for all ages)<br>TV-PG (Parental guidance suggested, containing material that are unsuitable for younger children)<br>TV-14 (Parents strongly cautioned, containing material that are unsuitable for children age 14 and under)<br>TV-MA (Mature audience only, unsuitable for children age under 17) |
| | Dialog (suggestive dialogue) | TV-PG or TV-14 |
| | Language (coarse language) | TV-PG, TV-14, or TV-MA |
| | Sex (sexual situation) | TV-PG, TV-14, or TV-MA |
| | Violence | TV-PG, TV-14, or TV-MA |
| **Downloadable Rating** | This function operates only when TV has received Region5 Rating data.<br>The name of the rating option may differ.<br><br>🛈 **NOTE**<br>• This feature is available only for digital channels. | |
| **Input Block** | Blocks the input sources. | |

# MAKING CONNECTIONS

Connect various external devices to the TV and switch input modes to select an external device.
For more information of external device's connection, refer to the manual provided with each device.
Available external devices are: HD receivers, DVD players, VCRs, audio systems, USB storage devices, PC, gaming devices, and other external devices.

> **⚠ NOTE**
>
> - 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 of recording, refer to the manual provided 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.

# Connection Overview

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

1   Find an external device you want to connect to your TV as shown on the following illustration.

2   Check the connection type of the external device.

3   Go to the appropriate illustration and check the connection details.

**HD Receiver**

**VCR**

**DVD**

**USB**

**PC**

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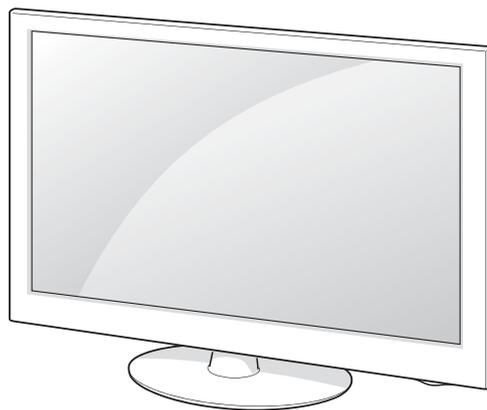
> **NOTE**
> • If you connect a gaming device to the TV, use the cable supplied with the gaming device.
> • Refer to the external equipment's manual for operating instructions.

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

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

## HDMI Connection

### 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 in the following illustration.

> **NOTE**
> - Use the latest High Speed HDMI™ Cable with CEC (Customer Electronics Control) function.
> - High Speed HDMI™ Cables are tested to carry an HD signal up to 1080p and higher.

Choose any HDMI input port to connect.
It does not matter which port you use.



HDMI IN 1 2

(*Not Provided)

HDMI

DVD/ Blu-Ray / HD Cable Box / HD STB
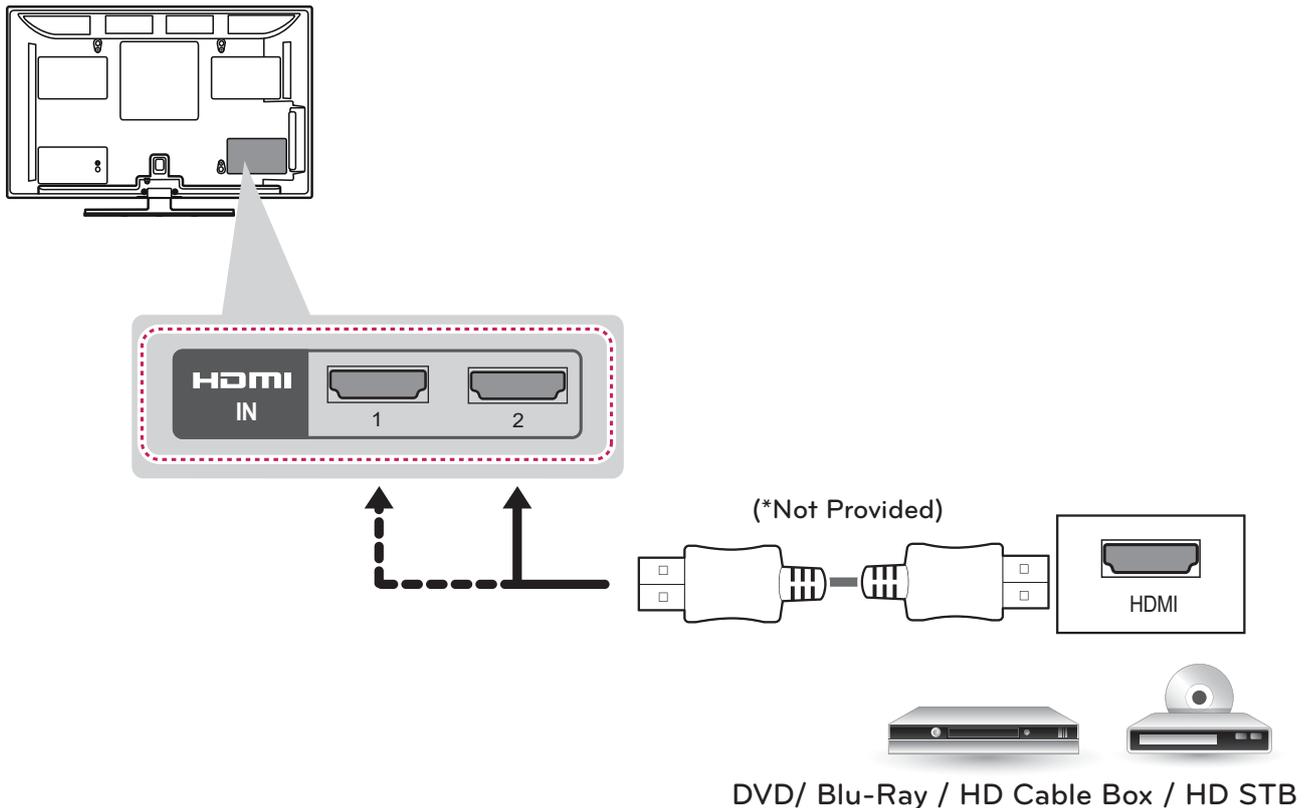
## Component Connection

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

> **ⓘ NOTE**
> - If cables are installed incorrectly, it could case the image to display in black and white or with distorted color.
> - **Check to ensure the cable are matched with the corresponding color connection.**



DVD/ Blu-Ray / HD Cable Box
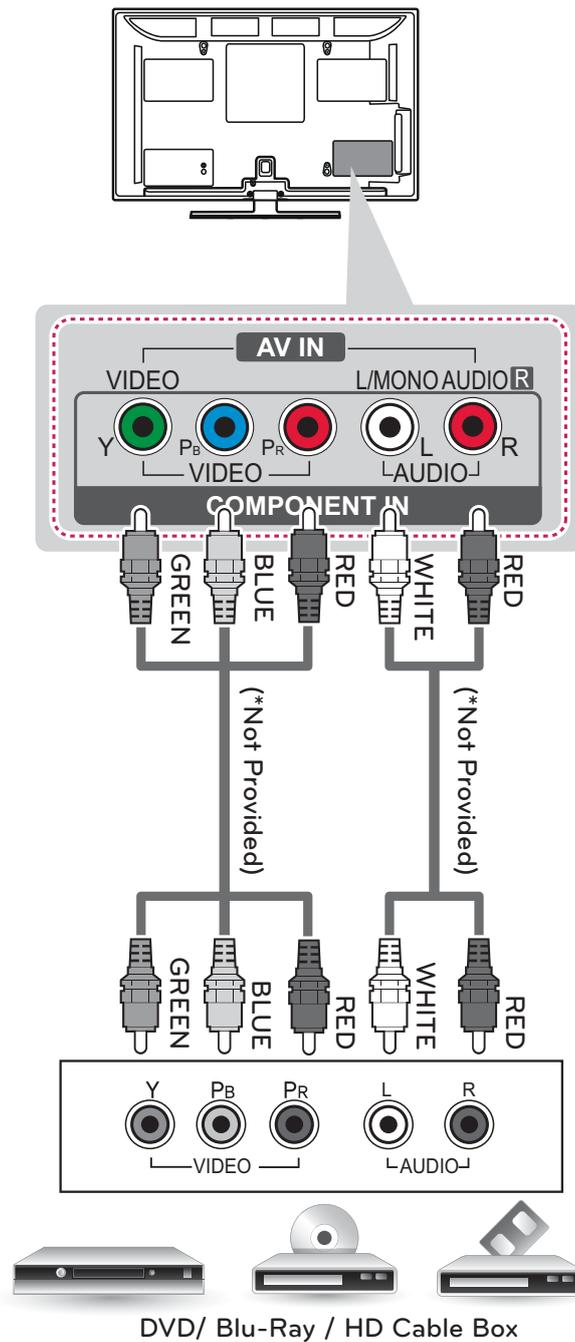
## Composite Connection

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

> **NOTE**
>
> - If you have a mono VCR, connect the audio cable from the VCR to the AUDIO L/MONO jack of the TV.
> - **Check to ensure the cable are matched with the corresponding color connection.**

VCR / DVD/ Blu-Ray / HD Cable Box
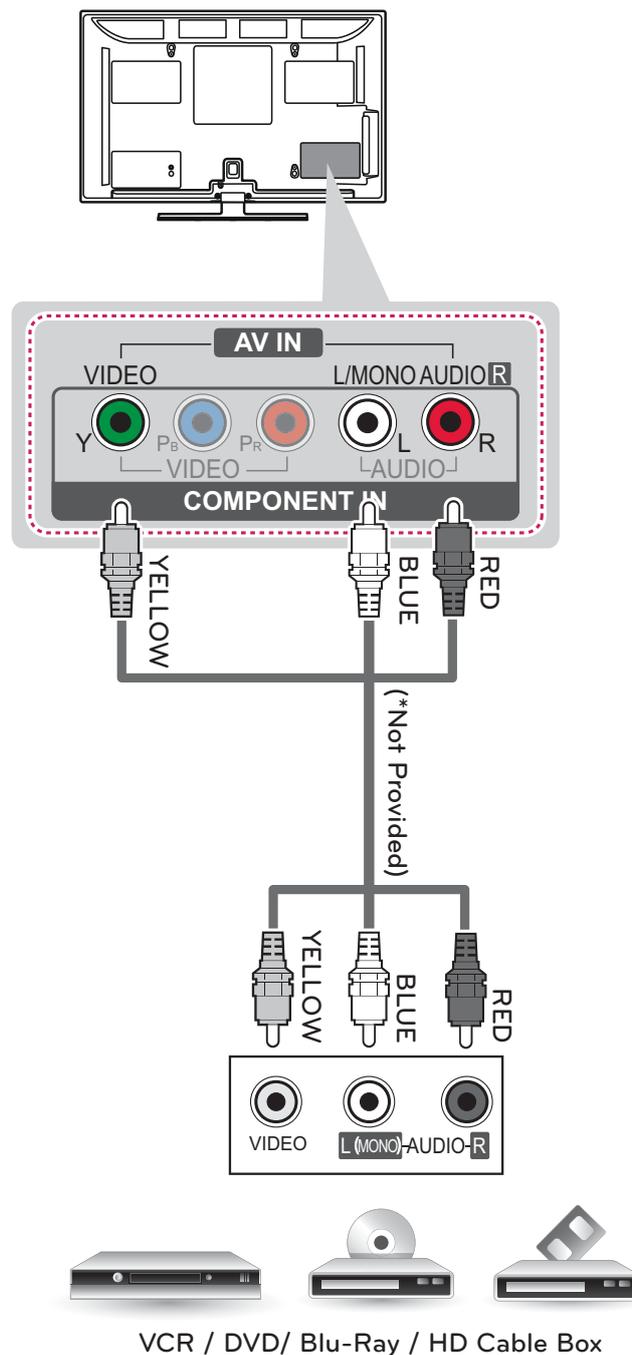
# Connecting to a PC

> 🛈 **NOTE**
>
> • It is recommended to use the TV with the HDMI connection for the best image quality.
> • Depending on the graphics card, DOS mode may not work if a HDMI to DVI Cable is in use.
> • 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.
> • The synchronization input form for Horizontal and Vertical frequencies is separate.
> • Depending on the graphics card, some resolution settings may not allow the image to be positioned on the screen properly.

## HDMI Connection

**Choose any HDMI input port to connect. It does not matter which port you use.**

HDMI IN 1 2

(*Not Provided)

HDMI

PC
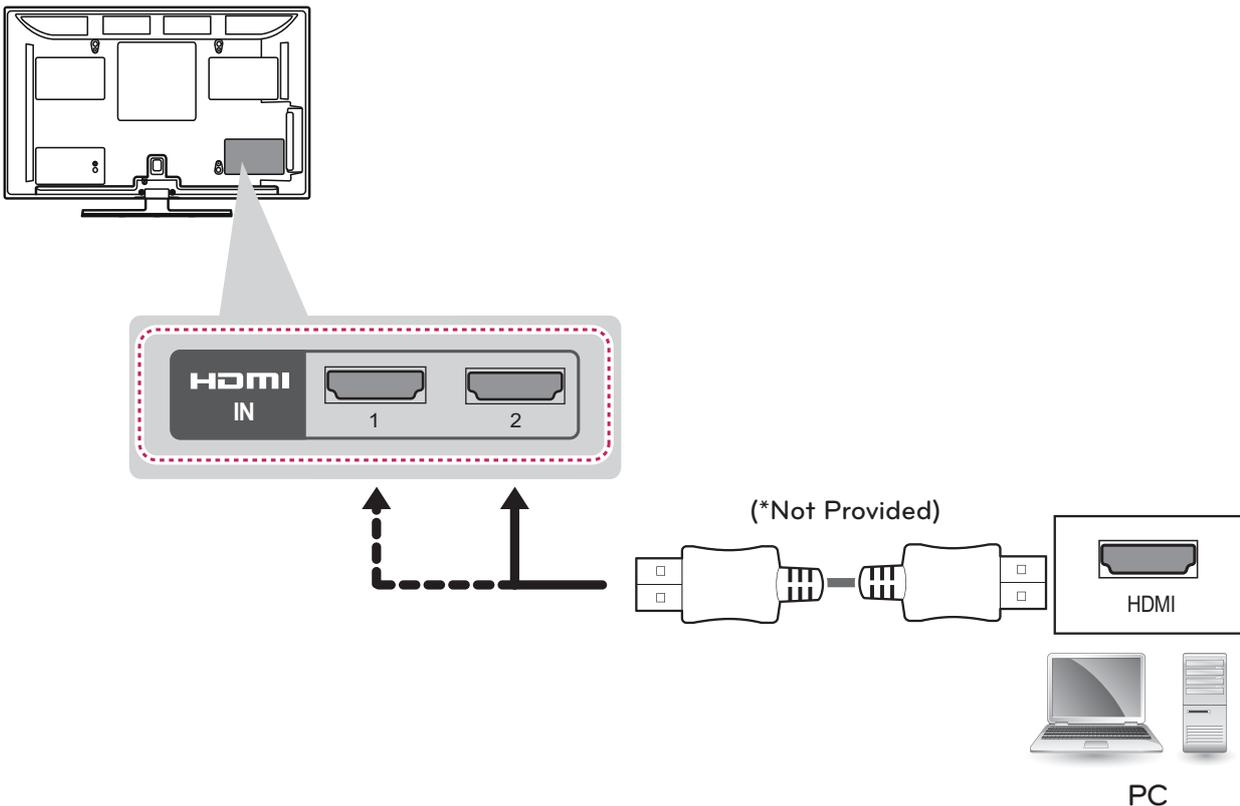
## Connecting to a USB

Connect a USB storage device such as a USB flash memory, external hard drive, or a USB memory card reader to the TV.
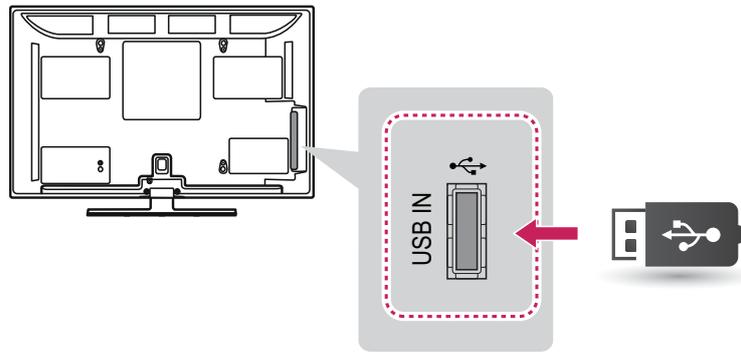
# SIMPLINK Connection

Use the TV remote control to play and control the AV device connected with the HDMI cable through HDMI-CEC. Your TV only works with the devices that support HDMI-CEC. But only devices with the (SiMPLINK) logo are supported.

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

> **NOTE**
> - If the connected device does not support HDMI-CEC, the SIMPLINK feature is unavailable.
> - To operate SIMPLINK, you should use an High Speed HDMI cable with the CEC (Consumer Electronics Control) function.
> - SIMPLINK may not work properly if you a third-party device that has an HDMI-CEC function.

## Activating and Using the SIMPLINK menus

1 Press **SIMPLINK** to access the SIMPLINK menus.

2 Press the Navigation buttons to select to **On**.

3 Press the Navigation buttons to scroll to one of the devices and press **OK**.
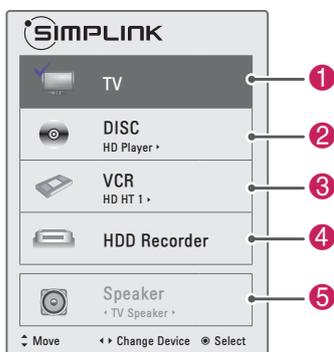


| No. | Description |
|---|---|
| ❶ | Displays the previously viewed TV channel. |
| ❷ | Plays discs. When multiple discs are available, the title of the disc appears at the bottom of the screen. |
| ❸ | Controls the connected VCR. |
| ❹ | HDD recordings playback: Controls the recording stored in HDD. |
| ❺ | Changes the audio output between Home theater speaker and TV speaker for the connected HTS only. |

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

4 Control the selected AV device.
- Direct Play: After connecting AV devices to the TV, you can directly control the devices and play media without additional settings.
- Select AV device: Enables you to select one of the AV devices connected to the TV.
- Disc playback: Control connected AV devices by pressing the Navigation buttons, **OK**, ▶, ■, ❙❙, ◀◀ and ▶▶.
- Power off all devices: When you power off the TV, all connected devices are turned off.
- Switch audio-out: Offers an easy way to switch audio-out. (HTS only)
- Sync Power on: When the equipment with SIMPLINK function connected HDMI terminal starts to play, The TV will automatically turn on.

> **NOTE**
> - If you change the input source by pressing **INPUT**, the progressing function of the SIMPLINK device will stop.
> - If you select a device that has the home theater feature, the sound output automatically switches to the home theater speaker and the TV speaker turns off.

ENGLISH

# MAINTENANCE

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

## Cleaning Your TV

⚠ **CAUTION**

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

### Screen, 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.

⚠ **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 discoloration.
- 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
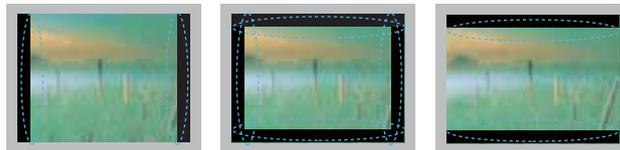
- If a fixed image displays on the TV screen for a long period of time, it will be imprinted and become a permanent disfigurement on the screen. This is "image burn" or "burn-in" and not covered by the warranty.
- If the aspect ratio of the TV is set to 4:3 for a long period of time, image burn may occur 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, 1 or more hours for the Plasma TV) to prevent image burn.

ENGLISH

# TROUBLESHOOTING

General

| Problem | Resolution |
|---------|------------|
| Cannot control the TV with the remote control. | • Check the remote control sensor on the product and try again.<br>• Check if there is any obstacle between the product and the remote control.<br>• Check if the batteries are still working and properly installed (⊕ to ⊕, ⊖ to ⊖).<br>• Check if the appropriate input mode such as TV or VCR is set for using the remote control. |
| No image display and no sound is produced. | • Check if the product is turned on.<br>• Check if the power cord is connected to a wall outlet.<br>• Check if there is a problem in the wall outlet by connecting other products. |
| Image appears slowly when the TV turns on. | • The image is muted during the product startup process. This is normal. If the image does not appear in a few minutes, unplug the TV for 30 seconds and try again. If the image still does not appear, contact the authorized service center in your local area. |
| Cannot connect external devices. | • Refer to the "Connection Overview" and connect an external device. |
| The TV turns off suddenly. | • Check the power control settings. The power supply may be interrupted.<br>• Check if the Auto sleep feature is activated in the Time settings. Refer to the "Sleep Timer".<br>• If there is no signal while the TV is on, the TV will turn off automatically after 15 minutes of inactivity. (Depending on model) |

Audio

| Problem | Resolution |
|---------|------------|
| No sound is produced while images are displaying. | • Press **VOL +** or **-** button.<br>• Check if the sound is muted by pressing **MUTE**.<br>• Scroll to other channels. There may a problem with the broadcast.<br>• Check if the TV Speaker feature is activated in the menu option. |
| No output from one of the speakers | • Adjust Balance in the menu option. |
| Unusual sound from inside the TV is produced. | • A change in ambient humidity or temperature may result in an unusual noise when the product turns on or off. There is no problem with your product. |

Video

| Problem | Resolution |
|---------|------------|
| An image displays in black and white or the color quality is poor. | • Adjust the color setting in the menu option.<br>• Keep a sufficient distance between this product and other electronic products.<br>• Scroll to other channels. There may a problem with the broadcast. |
| Horizontal or vertical bars appears or images blur | • Check if there are local interferences such as an electrical appliance or power tool. |
| Lines or streaks appear on images | • Check the antenna or aim the antenna to the proper direction. |
| Afterimages (ghosts) appear when the product turns off | • Pixels may have been damaged from a fixed image displayed for a long time (image burn). Use a screen saver to prevent the pixel damage on the screen. |
| The power is on but the screen appears extremely dark. | • Adjust the brightness and contrast in the menu option. |
| "No Signal" appears on the screen. | • Check if the signal cable is connected between the TV and products properly.<br>• Check the selected input source by pressing **INPUT**. |
| Black spots appear on the screen. | • Several pixels in red, green, white, or black may appear on the screen that can attribute to the characteristics of the panel.<br>• This is normal. |
| The display offset is wrong. | • Adjust the position setting in the Picture menu.<br>• Check if the video card resolution and frequency are supported by the product. If the frequency is out of range, set to the recommended resolution using the display settings on the external device. |
| Thin lines appear in the background of the screen. | • Check the video cable connections. |
| The reception on some channels is poor | • Scroll to other channels. There may a problem with the broadcast.<br>• The station signal may be weak. Aim the antenna to the proper direction.<br>• Check if there is local interferences such as an electrical appliance or power tool. |

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# SPECIFICATIONS

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

| Television System | | NTSC-M, ATSC, 64 & 256 QAM |
|---|---|---|
| Program Coverage | | VHF 2-13, UHF 14-69, CATV 1-135, DTV 2-69, CADTV 1-135 |
| External Antenna Impedance | | 75 Ω |
| Environment condition | Operating Temperature | 0 - 40 °C |
| | Operating Humidity | Less than 80 % |
| | Storage Temperature | -20 - 60 °C |
| | Storage Humidity | Less than 85 % |

| MODELS | | 42CS530 (42CS530-UB) |
|---|---|---|
| Dimensions (W x H x D) | With stand | 1019.0 x 698.0 x 265.0 mm (40.1 x 27.4 x 10.4 inch) |
| | Without stand | 1019.0 x 631.0 x 76.5 mm (40.1 x 24.8 x 3.0 inch) |
| Weight | With stand | 15.1 kg (33.2 lbs) |
| | Without stand | 13.4 kg (29.5 lbs) |
| Current Value / Power consumption | | 1.8 A / 180 W |
| Power requirement | | AC100 - 240 V ~ 50/60 Hz |

| MODELS | | 32CS560 (32CS560-UE) | 37CS560 (37CS560-UE) |
|---|---|---|---|
| Dimensions (W x H x D) | With stand | 795.0 x 568.0 x 207.0 mm (31.2 x 22.3 x 8.1 inch) | 913.0 x 639.0 x 265.0 mm (35.9 x 25.1 x 10.4 inch) |
| | Without stand | 795.0 x 504.0 x 73.5 mm (31.2 x 19.8 x 2.8 inch) | 913.0 x 571.0 x 77.4 mm (35.9 x 22.4 x 3.0 inch) |
| Weight | With stand | 9.2 kg (20.2 lbs) | 12.8 kg (28.2 lbs) |
| | Without stand | 8.1 kg (17.8 lbs) | 11.1 kg (24.4 lbs) |
| Current Value / Power consumption | | A / W | A / W |
| Power requirement | | AC100 - 240 V ~ 50/60 Hz | AC100 - 240 V ~ 50/60 Hz |

| MODELS | | 42CS560 (42CS560-UE) |
|---|---|---|
| Dimensions (W x H x D) | With stand | 1019.0 x 698.0 x 265.0 mm (40.1 x 27.4 x 10.4 inch) |
| | Without stand | 1019.0 x 631.0 x 76.5 mm (40.1 x 24.8 x 3.0 inch) |
| Weight | With stand | 15.1 kg (33.2 lbs) |
| | Without stand | 13.4 kg (29.5 lbs) |
| Current Value / Power consumption | | A / W |
| Power requirement | | AC100 - 240 V ~ 50/60 Hz |

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| MODELS | | 22LS3500<br>(22LS3500-UD) | 26LS3500<br>(26LS3500-UD) |
|---|---|---|---|
| Dimensions<br>(W x H x D) | With stand | 523.0 x 376.0 x 139.5 mm<br>(20.5 x 14.8 x 5.4 inch) | 627.0 x 442.0 x 162.0 mm<br>(24.6 x 17.4 x 6.3 inch) |
| | Without stand | 523.0 x 339.0 x 31.6 mm<br>(20.5 x 13.3 x 1.2 inch) | 627.0 x 402.0 x 30.1 mm<br>(24.6 x 15.8 x 1.1 inch) |
| Weight | With stand | 3.5 kg (7.7 lbs) | 4.5 kg (9.9 lbs) |
| | Without stand | 3.2 kg (7.0 lbs) | 4.2 kg (9.2 lbs) |
| Current Value / Power consumption | | A /　W | A /　W |
| Power requirement | | AC100 - 240 V ~ 50/60 Hz | AC100 - 240 V ~ 50/60 Hz |

| MODELS | | 32LS3500<br>(32LS3500-UD) |
|---|---|---|
| Dimensions<br>(W x H x D) | With stand | 755.0 x 530.0 x 238.8 mm<br>(29.7 x 20.8 x 9.4 inch) |
| | Without stand | 755.0 x 479.0 x 45.8 mm<br>(29.7 x 18.8 x 1.8 inch) |
| Weight | With stand | 8.9 kg (19.6 lbs) |
| | Without stand | 8.1 kg (17.8 lbs) |
| Current Value / Power consumption | | A /　W |
| Power requirement | | AC100 - 240 V ~ 50/60 Hz |

**RF module (BM-LDS201) specification**

For TV By using a 2.4 GHz bandwidth radio frequency(RF).

- Output: 1 dBm or lower
- Maximum Communication Distance: 10 m (30 ft) in an open space
- Bandwidth: 2.4 GHz (2.4035 GHz - 2.4783 GHz)
- Transfer Rate: 250 kbps
- FCC ID of RF module inside TV
  FCC ID: BEJLDS201

CE

## HDMI (PC) supported mode

| Resolution | Horizontal Frequency (KHz) | Vertical Frequency (Hz) |
|---|---|---|
| 720x400 | 31.469 | 70.08 |
| 640x480 | 31.469 | 59.94 |
| 800x600 | 37.879 | 60.31 |
| 1024x768 | 48.363 | 60.00 |
| 1360x768 | 47.712 | 60.015 |
| 1280x1024 | 63.981 | 60.02 |
| 1920x1080 | 67.5 | 60.00 |

## HDMI (DTV) supported mode

| Resolution | Horizontal Frequency (KHz) | Vertical Frequency (Hz) |
|---|---|---|
| 720x480p | 31.47<br>31.50 | 59.94<br>60.00 |
| 1280x720p | 44.96<br>45.00 | 59.94<br>60.00 |
| 1920x1080i | 33.72<br>33.75 | 59.94<br>60.00 |
| 1920x1080p | 26.97<br>27.00<br>33.71<br>33.75<br>67.432<br>67.50 | 23.976<br>24.00<br>29.97<br>30.00<br>59.94<br>60.00 |

## Component port connecting information

| Component ports on the TV | Y | P$_B$ | P$_R$ |
|---|---|---|---|

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

## Component supported mode

| Resolution | Horizontal Frequency (KHz) | Vertical Frequency (Hz) |
|---|---|---|
| 720x480i | 15.73<br>15.73 | 59.94<br>60.00 |
| 720x480p | 31.47<br>31.50 | 59.94<br>60.00 |
| 1280x720p | 44.96<br>45.00 | 59.94<br>60.00 |
| 1920x1080i | 33.72<br>33.75 | 59.94<br>60.00 |
| 1920x1080p | 26.97<br>27.00<br>33.71<br>33.75<br>67.432<br>67.50 | 23.976<br>24.00<br>29.97<br>30.00<br>59.94<br>60.00 |

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# IR CODES
(Depending on model)

| Code (Hexa) | Function | Note | Code (Hexa) | Function | Note |
|---|---|---|---|---|---|
| 08 | POWER | Remote control Button (Power On/Off) | F0 | TV | Remote control Button |
| | | | 5B | EXIT | Remote control Button |
| 45 | Q.MENU | Remote control Button | D6 | TV | Discrete IR Code (TV Input Selection) |
| 43 | SETTINGS | Remote control Button | | | |
| 0B | INPUT | Remote control Button | C4 | POWER ON | Discrete IR Code (Only Power On) |
| 10 - 19 | Number Key 0-9 | Remote control Button | | | |
| 4C | - (Dash)/LIST | Remote control Button | C5 | POWER OFF | Discrete IR Code (Only Power Off) |
| 1A | FLASHBK | Remote control Button | | | |
| 09 | MUTE | Remote control Button | 5A | AV | Discrete IR Code (AV1 Input Selection) |
| 02 | VOL + | Remote control Button | | | |
| 03 | VOL - | Remote control Button | BF | COMPONENT1 | Discrete IR Code (Component1 Input Selection) |
| 00 | CH + | Remote control Button | | | |
| 01 | CH - | Remote control Button | | | |
| 1E | FAV | Remote control Button | D4 | COMPONENT2 | Discrete IR Code (Component2 Input Selection) |
| 40 | ᴧ | Remote control Button | | | |
| 41 | ᴠ | Remote control Button | | | |
| 07 | < | Remote control Button | CE | HDMI1 | Discrete IR Code (HDMI1 Input Selection) |
| 06 | > | Remote control Button | | | |
| 44 | OK | Remote control Button | CC | HDMI2 | Discrete IR Code (HDMI2 Input Selection) |
| 28 | ↰ | Remote control Button | | | |
| 79 | RATIO | Remote control Button | E9 | HDMI3 | Discrete IR Code (HDMI3 Input Selection) |
| 95 | ENERGY SAVING | Remote control Button | | | |
| 7E | SIMPLINK | Remote control Button | 76 | Ratio 4:3 | Discrete IR Code (Only 4:3 Mode) |
| AA | INFO | Remote control Button | | | |
| 30 | AV MODE | Remote control Button | 77 | Ratio 16:9 | Discrete IR Code (Only 16:9 Mode |
| 72 | RED | Remote control Button | | | |
| 71 | GREEN | Remote control Button | AF | Ratio Zoom | Discrete IR Code (Only Zoom Mode) |
| 63 | YELLOW | Remote control Button | | | |
| 61 | BLUE | Remote control Button | | | |
| B1 | ■ | Remote control Button | | | |
| B0 | ▶ | Remote control Button | | | |
| BA | ❚❚ | Remote control Button | | | |
| 8E | ▶▶ | Remote control Button | | | |
| 8F | ◀◀ | Remote control Button | | | |

# EXTERNAL CONTROL DEVICE SETUP

## Communication Parameters

- Baud rate: 9600 bps (UART)
- Data length: 8 bits
- Parity : None

- Stop bit: 1 bit
- Communication code: ASCII code
- Use a crossed (reverse) cable.

## Command reference list

| | COMMAND1 | COMMAND2 | DATA (Hexadecimal) | | COMMAND1 | COMMAND2 | DATA (Hexadecimal) |
|---|---|---|---|---|---|---|---|
| 01. Power | k | a | 00 - 01 | 14. Treble | k | r | 00 - 64 |
| 02. Input Select | x | b | (See p.61) | 15. Bass | k | s | 00 - 64 |
| 03. Aspect Ratio | k | c | (See p.61) | 16. Balance | k | t | 00 - 64 |
| 05. Volume Mute | k | e | 00 - 01 | 17. Color Temperature | x | u | 00 - 64 |
| 08. Brightness | k | h | 00 - 64 | 18. Energy Saving | j | q | (See p.62) |
| 09. Color | k | i | 00 - 64 | 19. Auto Configuration | j | u | (See p.62) |
| 10. Tint | k | j | 00 - 64 | 20. Channel Add/Del | m | b | 00 - 01 |
| 11. Sharpness | k | k | 00 - 64 | 21. Key | m | c | (See p.62) |
| 12. OSD Select | k | l | 00 - 01 | 22. Backlight | m | g | 00 - 64 |
| 13. Remote Control Lock Mode | k | m | 00 - 01 | | | | |

| | COMMAND1 | COMMAND2 | DATA00 (Hexadecimal) | DATA01 (Hexadecimal) | DATA02 (Hexadecimal) | DATA03 (Hexadecimal) | DATA04 (Hexadecimal) | DATA05 (Hexadecimal) |
|---|---|---|---|---|---|---|---|---|
| 23. Channel Tuning | m | a | physical program high | major program low | major low | minor high | minor low | attribute |

# Transmission / Receiving protocol

Transmission

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

[Command 1] : First command to control the set.(j, k, m or x)

[Command 2] : Second command to control the set.

[Set ID] : You can adjust the set ID to choose desired set ID number in Option menu. Adjustment range is 1~ 99. When selecting Set ID '0', every connected the set is controlled. Set ID is indicated as decimal (1~ 99) on menu and as Hexa decimal (0x0~ 0x63) on transmission /receiving protocol.

[DATA] : To transmit the command data.

Transmit the 'FF' data to read status of command.

[Cr] : Carriage Return

ASCII code '0x0D'

[ ] : ASCII code 'space (0x20)'

* In this model, set will not send the status during the standby mode.

OK Acknowledgement

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

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

* In this model, set will not send the status during the standby mode.

* Data Format

[Command 2] : Use as command.

[Set ID] : Use the small character, if set ID is 10, it will send the '0', 'a'.

[DATA] : Use the small character, if data is 0 x ab, it will send the 'a', 'b'.

[OK] : Use the large character.

Error Acknowledgement

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

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

Data1: Illegal Code

Data2: Not supported function

Data3: Wait more time

* In this model, set will not send the status during the standby mode.

* Data Format

[Command 2] : Use as command.

[Set ID] : Use the small character, if set ID is 10, it will send the '0', 'a'.

[DATA] : Use the small character, if data is 0 x ab, it will send the 'a', 'b'.

[NG] : Use the large character

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## 01. Power (Command: k a)

To control Power On/Off of the set.

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

Data 00: Power Off      Data 01: Power On

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

* In a like manner, if other functions transmit 'FF' data based on this format, Acknowledgement data feedback presents status about each function.
* Note: In this model, set will send the Acknowledge after power on processing completion.
  There might be a time delay between command and acknowledge.

## 02. Input Select (Command: x b)

To select input source for set.

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

Data 00: DTV (Antenna)   Data 01: DTV (Cable)
Data 10: Analog (Antenna) Data 11: Analog (Cable)
Data 20: AV or AV1       Data 21: AV2
Data 40: Component or Component1
Data 41: Component2
Data 90: HDMI1           Data 91: HDMI2
Data 92: HDMI3           Data 93: HDMI4

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

* Use the feature depending on your model.

## 03. Aspect Ratio (Command: k c)

To adjust the screen format.

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

Data 01: 4:3             Data: 09: Just scan
Data 02: 16:9           Data: 10: Cinema Zoom 1
Data 04: Zoom                 ⋮
Data 06: Set by program   Data 1F: Cinema Zoom16

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

## 04. Screen Mute (Command: k d)

To select screen mute on/off.

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

Data 00: Screen mute off (Picture on), Video-out Mute off
Data 01: Screen mute on (Picture off)
Data 10: Video-out Mute on

Acknowledgement [d][ ][Set ID][ ][OK/NG][Data][x]

* In case of Video-out Mute on only, TV will display On Screen Display (OSD). But, in case of screen mute on, TV will not display On Screen Display (OSD).

## 05. Volume Mute (Command: k e)

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

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

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

Acknowledgement [e][ ][Set ID][ ][OK/NG][Data][x]

## 06. Volume Control (Command: k f)

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

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

Data Min: 00 ~ Max: 64 (*transmit by Hexadecimal code)
*Refer to "Real data mapping".

Acknowledgement [f][ ][Set ID][ ][OK/NG][Data][x]

## 07. Contrast (Command: k g)

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

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

Data Min: 00 ~ Max: 64 (*transmit by Hexadecimal code)
*Refer to "Real data mapping".

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

## 08. Brightness (Command: k h)

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

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

Data Min: 00 ~ Max: 64 (*transmit by Hexadecimal code)
*Refer to "Real data mapping".

Acknowledgement [h][ ][Set ID][ ][OK/NG][Data][x]

## 09. Color (Command: k i)

To adjust screen color.
You can also adjust color in the PICTURE menu.

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

Data Min: 00 ~ Max: 64 (*transmit by Hexadecimal code)
*Refer to "Real data mapping".

Acknowledgement [i][ ][Set ID][ ][OK/NG][Data][x]

## 10. Tint (Command: k j)

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

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

Data Red: 00 ~ Green: 64 (*transmit by Hexadecimal code)
*Refer to "Real data mapping".

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

## 11. Sharpness (Command: k k)

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

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

Data Min: 00 ~ Max: 64 (*transmit by Hexadecimal code)
*Refer to "Real data mapping".

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

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

To select OSD (On Screen Display) on/off.

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

Data 00: OSD off          Data 01: OSD on

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

### 13. Remote Control Lock Mode (Command: k m)

To lock the remote control and the front panel controls on the set.

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

Data 00: Lock off          Data 01: Lock on

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

If you're not using the remote control and front panel controls on the Monitor set, use this mode. When main power is on/off, remote control lock is released. If Key Lock is on in the standby mode, TV will not turn on by POWER button of remote control and on the TV.

### 14. Treble (Command: k r)

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

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

Data Min: 00 ~ Max: 64 (*transmit by Hexadecimal code)
*Refer to "Real data mapping".

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

### 15. Bass (Command: k s)

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

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

Data Min: 00 ~ Max: 64 (*transmit by Hexadecimal code)
*Refer to "Real data mapping".
Acknowledgement [s][ ][Set ID][ ][OK/NG][Data][x]

### 16. Balance (Command: k t)

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

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

Data Min: 00 ~ Max: 64 (*transmit by Hexadecimal code)
*Refer to "Real data mapping".

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

### 17. Color Temperature (Command: x u)

To adjust color temperature.
You can also adjust color temperature in the PICTURE menu.

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

Data Min: 00 ~ Max: 64 (*transmit by Hexadecimal code)
*Refer to "Real data mapping".

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

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

To control the energy saving function.

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

Data 00: off
     01: Minimum
     02: Medium
     03: Maximum
     04: Auto/Intelligent sensor(depending on model)
     05: Screen off

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

### 19. Auto Configuration (Command: j u)

To adjust picture position and minimize image shaking automatically. Auto configuration only works in RGB-PC mode.

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

Data 01: To set

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

### 20. Channel Add/Del (Command: m b)

To add and delete the channels.

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

Data 00: Channel Delete Data 01: Channel Add

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

### 21. Key (Command: m c)

To send IR remote key code.

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

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

When TV is in the standby mode, TV will turn on by POWER button of remote control only.

### 22. Backlight (Command: m g)

To adjust screen backlight.

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

Data Min:00 ~ Max:64 (*transmit by Hexadecimal code)
*Refer to "Real data mapping".

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

* Table List (Channel Tuning)

| 7 | Main/Sub Picture | 6 | Two/One Part Channel | 5 | Using Physical Channel | 4 Reserved | 3 | 2 | 1 | 0 | Step |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | Main | 0 | Two | 0 | Use | x | 0 | 0 | 0 | 0 | NTSC Air |
| 1 | Sub | 1 | One | 1 | No Use | x | 0 | 0 | 0 | 1 | NTSC Cable |
| | | | | | | x | 0 | 0 | 1 | 0 | ATSC Air |
| | | | | | | x | 0 | 0 | 1 | 1 | ATSC Cable_std |
| | | | | | | x | 0 | 1 | 0 | 0 | ATSC Cable_hrc |
| | | | | | | x | 0 | 1 | 0 | 1 | ATSC Cable_irc |
| | | | | | | x | 0 | 1 | 1 | 0 | ATSC cable_auto |
| | | | | | | x | 0 | 1 | 1 | 1 | Reserved |
| | | | | | | x | x | x | x | x | ... |
| | | | | | | x | 1 | 1 | 1 | 1 | Reserved |

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| GNU LGPL v2.1 | - directFB<br>- gconv<br>- glibc |
| MPL 1.1 | - nanox |

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Version 2.1, February 1999

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ENGLISH

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**- strace**

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**- xyssl**

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**ENGLISH**

# CHILD SAFETY:

## It Makes A Difference How and Where You Use Your Flat Panel Display

**Congratulations on your purchase! As you enjoy your new product, please keep these safety tips in mind:**



### THE ISSUE

- The home theater entertainment experience is a growing trend and larger flat panel displays are popular purchases. However, flat panel displays are not always supported on the proper stands or installed according to the manufacturer's recommendations.
- Flat panel displays that are inappropriately situated on dressers, bookcases, shelves, desks, speakers, chests or carts may fall over and cause injury.

### THIS MANUFACURER CARES!

- The consumer electronics industry is committed to making home entertainment enjoyable and safe.

### TUNE INTO SAFETY

- One size does NOT fit all. Follow the manufacturer's recommendations for the safe installation and use of your flat panel display.
- Carefully read and understand all enclosed instructions for proper use of this product.
- Don't allow children to climb on or play with furniture and television sets.
- Don't allow place flat panel displays on furniture that can easily be used as steps, such as a chest of drawers.
- Remember that children can become excited while watching a program, especially on a "larger than life" flat panel display. Care should be taken to place or install the display where it cannot be pushed, pulled over, or knocked down.
- Care should be taken to route all cords and cables connected to the flat panel display so that they cannot be pulled or grabbed by curious children.

### WALL MOUNTING: IF YOU DECIDE TO WALL MOUNT YOUR FLAT PANEL DISPLAY, ALWAYS:

- Use a mount that has been recommended by the display manufacturer and/or listed by an independent laboratory (such as UL, CSA, ETL).
- Follow all instructions supplied by the display and wall mount manufacturers.
- If you have any doubts about your ability to safely install your flat panel display, contact your retailer about professional installation.
- Make sure that the wall where you are mounting the display is appropriate. Some wall mounts are not designed to be mounted to walls with steel studs or old cinder block construction. If you are unsure, contact a professional installer.
- A minimum of two people are required for installation. Flat panel displays can be heavy





**CEA**
Consumer Electronics Association

**www.CE.org/safety**

# LG

## Life's Good

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 _____

## :: FCC Compliance Statement

This equipment has been tested and found to comply within the limits of a Class B digital device pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses, and can radiate radio frequency energy and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception (which can be determined by turning the equipment on and off), the user is encouraged to try to correct the interference by using one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Caution: Changes or modifications not expressly approved by the party responsible for compliance could void the user's (or your) authority to operate the equipment. Only peripherals (digital input/output devices, terminals, printers, etc.) certified to comply with the Class B limits may be attached to this monitor. Operation with non-certified peripherals is likely to result in interference to radio and TV reception. Only shielded signal cables may be used with this System.

NOTICE
The regulations are applied only to the products with the ID LABEL indicating specific requirements.

## :: Canadian DOC Notice

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations. Cet appareil numérique de la classe B respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

NOTICE
The regulations are applied only to the products with the ID LABEL indicating specific requirements.

## :: CE Conformity Notice (for Europe)

Products with the "CE" Marking comply with the EMC Directive(89/336/EEC) and LOW VOLTAGE Directive (73/23/EEC) issued by the Commission of the European Community.
Compiance with these directives implies conformity to the following European Norms :

- EN 55022          ; Radio Frequency Interference
- EN 55024          ; Electromagnetic Immunity
- EN 61000-3-2     ; Power Line Harmonics
- EN 61000-3-3     ; Voltage Fluctuations
- EN 60950-1       ; Product Safety

NOTICE
The regulations are applied only to the products with the ID LABEL indicating specific requirements.

## :: Low Radiation Compliance (MPR II)

This monitor meets one of the strictest guidelines available today for low radiation emissions, offering the user extra shielding and an antistatic screen coating. These guidelines, set forth by a government agency in Sweden, limit the amount of emission allowed in the Extremely Low Frequency (ELF) and Very Low Frequency (VLF) electromagnetic range.

## :: TCO'99 (TCO'99 applied model only)



**Congratulations!**
You have just purchased a TCO'99 approved and labelled product! Your choice has provided you with a product developed for professional use. Your purchase has also contributed to reducing the burden on the environment and also to the further development of environmentally adapted electronics products.

**Why do we have environmentally labelled computers?**
In many countries, environmental labelling has become an established method for encouraging the adaptation of goods and services to the environment. With the growing manufacture and usage of electronic equipment throughout the world, there is a recognized concern for the materials and substances used by electronic products with regards to their eventual recycling and disposal. By proper selection of these materials and substances, the impact on the environment can be minimized.

There are also other characteristics of a computer, such as energy consumption levels, that are important from the viewpoints of both the work (internal) and natural (external) environments. Electronic equipment in offices is often left running continuously, resulting in unnecessary consumption of large amounts of energy and additional power generation. From the standpoint of carbon dioxide emissions alone, it is vital to save energy.

**What does labelling involve?**
The product meets the requirements for the TCO'99 scheme which provides for international and environmental labelling of personal computers and/or displays.
The labelling scheme was developed as a joint effort by the TCO (The Swedish Confederation of Professional Employees), Svenska Naturskyddsforeningen
(The Swedish Society for Nature Conservation) and Statens Energimyndighet (The Swedish National Energy Administration).
Approval requirements cover a wide range of issues: ecology, ergonomics, emission of electrical and magnetical fields, energy consumption and electrical safety.

Ecological criteria impose restrictions on the presence and use of heavy metals, brominated and chlorinated flame retardants, and other substances. The product must be prepared for recycling and the manufacturing site(s) shall be certified according to ISO14001 or EMAS registered.

Energy requirements include a demand that the system unit and/or display, after a certain period of inactivity, shall reduce its power consumption to a lower level in one or more stages. The length of time to reactivate the system unit shall be reasonable for the user.

Labelled products must meet strict environmental demands, for example, in respect of the reduction of electrical and magnetical fields as well as work load and visual ergonomics.

Below you will find a brief summary of the ecological requirements met by this product. The complete ecological criteria document can be found at TCO Development's website http://www.tcodevelopment.com or may be ordered from:

**TCO Development**
SE-114 94 STOCKHOLM, Sweden
Fax: +46 8 782 92 07
Email : development@tco.se
Information regarding TCO'99 approved and labelled products may also be obtained at
http://www.tcodevelopment.com

**Ecological requirements**
Flame retardants
Flame retardants may be present in printed wiring board laminates, cables, and housings. Their purpose is to prevent, or at least to delay the spread of fire. Up to 30% by weight of the plastic in a computer casing can consist of flame retardant substances. Many flame retardants contain bromine or chlorine, and these flame retardants are chemically related to PCBs (polychlorinated biphenyls). Both the flame retardants containing bromine or chlorine and the PCBs are suspected of giving rise to health effects, including reproductive damage in fish-eating birds and mammals, due to the bio-accumulative* processes when not disposed of in accordance with strict standards for disposal.

TCO'99 requires that plastic components weighing more than 25 grams shall not contain flame retardants with organically bound bromine or chlorine. Flame retardants are allowed in the printed wiring board laminates due to the lack of commercially available alternatives.

Cadmium**
Cadmium is present in rechargeable batteries and in the colour-generating layers of certain computer displays. TCO'99 requires that batteries, the colour-generating layers of display screens, and the electrical or electronics components shall not contain any cadmium.

Mercury**
Mercury is sometimes found in batteries, relays and switches. TCO'99 requires that batteries shall not contain any mercury. It also demands that mercury is not present in any of the electrical or electronics components associated with the labelled unit. There is however one

exception. Mercury is, for the time being, permitted in the back light system of flat panel monitors as there today is no commercially available alternative. TCO aims on removing this exception when a mercury free alternative is available.

Lead**

Lead can be found in picture tubes, display screens, solders and capacitors. TCO'99 permits the use of lead due to the lack of commercially available alternatives, but in future requirements TCO Development aims at restricting the use of lead.

_____

*  Bio-accumulative is defined as substances which accumulate in living organisms.
** Lead, Cadmium and Mercury are heavy metals which are bio-accumulative.

## :: TCO'03 (TCO'03 applied model only)

**Congratulations!**

The display you have just purchased carries the TCO'03 Displays label.

This means that your display is designed,manufactured and tested according to some of the strictest quality and environmental requirements in the world. This makes for a high performance product, designed with the user in focus that also minimizes the impact on our natural environment. Some of the features of the TCO'03 Display requirements:

**Ergonomics**

- Good visual ergonomics and image quality in order to improve the working environment for the user and to reduce sight and strain problems. Important parameters are luminance, contrast, resolution, reflectance, colour rendition and image stability.

**Energy**

- Energy-saving mode after a certain time – beneficial both for the user and the environment
- Electrical safety

**Emissions**

- Electromagnetic fields

- Noise emissions

**Ecology**

- The product must be prepared for recycling and the manufacturer must have a certified environmental management system such as EMAS or ISO 14 001
- Restrictions on
  - chlorinated and brominated flame retardants and polymers
  - heavy metals such as cadmium, mercury and lead.

The requirements included in this label have been developed by TCO Development in co-operation with scientists, experts, users as well as manufacturers all over the world. Since the end of the 1980s TCO has been involved in influencing the development of IT equipment in a more user-friendly direction. Our labelling system started with displays in 1992 and is now requested by users and IT-manufacturers all over the world.

For more information, please visit
**www.tcodevelopment.com**

### ■ English

**Information for Environmental Preservation**

LGE. announced the 'LG Declaration for a Cleaner Environment' in 1994, and this ideal has served as a guiding managerial principle ever since. The Declaration is a foundation that has allowed us to undertake environmentally friendly activities in careful consideration of economic, environmental, and social aspects.

We promote activities for environmental preservation, and we specifically develop our products to embrace the concept of environment-friendly.

We minimize the hazardous materials contained in our products. For example, there is no cadmium to be found in our monitors.

**Information for recycling**

This monitor may contain parts which could be hazardous to the environment. It is important that this monitor be recycled after use.

LGE. handles all waste monitors through an environmentally acceptable recycling method. There are several take-back and recycling systems currently in

operation worldwide. Many parts will be reused and recycled, while harmful substances and heavy metals are treated by an environmentally friendly method.
If you want to find out more information about our recycling program, please contact your local LG vendor or a corporate representative of LG.

We set our vision and policies on a cleaner world by selecting the issue of the global environment as a task for corporate improvement. Please visit our website for more information about our 'green' policies.
http://www.lge.com/about/environment/html/Recycling.jsp

### ▪▪ Deutsch

**Informationen zur Erhaltung der Umwelt**
Im Jahr 1994 verkündete LGE die 'LG Declaration for a Cleaner Environment' (LG Erklärung für eine sauberere Umwelt). Seitdem dient dieses Ideal als führendes Prinzip des Unternehmens. Diese Erklärung war die Basis für die Durchführung von
umweltfreundlichen Aktivitäten, wobei wirtschaftliche, umweltbezogene und soziale Aspekte in die
Überlegungen mit einbezogen wurden.
Wir fördern Aktivitäten zum Schutz der Umwelt und die Entwicklung unserer Produkte ist darauf ausgerichtet, unserem Konzept bezüglich Umweltfreundlichkeit gerecht zu werden.
Wir sind darauf bedacht, den Anteil der in unseren Produkten enthaltenen schädlichen Materialien zu minimieren. So ist in unseren Monitoren beispielsweise kein Kadmium zu finden.

**Informationen zum Thema Recycling**
Dieser Monitor enthält Teile, die umweltschädlich sein können. Es ist unbedingt erforderlich, dass der Monitor recycelt wird, nachdem er außer Dienst gestellt wurde.

Bei LGE. werden alle ausrangierten Monitore in einem unter umweltbezogenen Aspekten geeigneten Verfahren recycelt. Augenblicklich sind weltweit mehrere Rücknahme- und Recyclingsysteme im Einsatz. Viele Teile werden wieder verwendet und recycelt. Schädliche Substanzen und Schwermetalle werden durch umweltverträgliche Verfahren behandelt.
Falls Sie mehr über unser Recyclingprogramm erfahren möchten, wenden Sie sich bitte an Ihren lokalen LG-Händler oder einen Unternehmensvertreter von LG.

Wir richten unsere Firmenpolitik auf eine sauberere Umwelt hin aus, indem wir umweltspezifische Aspekte als wichtigen Punkt in die Weiterentwicklung unseres Unternehmens einfließen lassen. Zusätzliche
Informationen über unsere 'grüne' Firmenpolitik erhalten Sie auf unserer Website.
http://www.lge.com/about/environment/html/Recycling.jsp

### ▪▪ Français

**Information sur la protection de l'environnement**
LGE. a publié sa 'Déclaration en faveur d'un environnement plus propre' en 1994 et celle-ci est restée, depuis lors, un principe directeur de notre entreprise. Cette déclaration a servi de base à notre réflexion et nous a permis de prendre en compte à la fois les aspects économiques et sociaux de nos activités, tout en respectant l'environnement.

Nous encourageons les activités en faveur de la préservation de l'environnement et c'est dans cet esprit que nous développons nos produits : nous réduisons au minimum les matières dangereuses qui entrent dans leur composition et l'on ne trouve pas de cadmium, par exemple, dans nos moniteurs.

**Information sur le recyclage**
Ce moniteur peut contenir des composants qui présentent un risque pour l'environnement. Il est donc important que celui-ci soit recyclé après usage.

LGE. traite les moniteurs en fin de cycle conformément à une méthode de recyclage respectueuse de l'environnement. Nous reprenons nos produits et les recyclons dans plusieurs sites répartis dans le monde entier. De nombreux composants sont réutilisés et recyclés, et les matières dangereuses, ainsi que les métaux lourds, sont traités selon un procédé écologique.
Si vous souhaitez plus de renseignements sur notre programme de recyclage, veuillez contacter votre revendeur LG ou un l'un de nos représentants.

Nous voulons agir pour un monde plus propre et croyons au rôle de notre entreprise dans l'amélioration de l'environnement. Pour plus de renseignements sur notre politique "verte", rendez visite à notre site :
http://www.lge.com/about/environment/html/Recycling.jsp

## ■■ Italiano

### Informazioni per la tutela dell'ambiente

La LGE. ha annunciato nel 1994 la cosiddetta 'LG Declaration for a Cleaner Environment' (Dichiarazione di LG a favore di un ambiente più pulito), un ideale che da allora funge da principio ispiratore della gestione aziendale. La dichiarazione rappresenta il fondamento che consente di intraprendere attività a favore dell'ambiente tenendo conto degli aspetti economici, ambientali e sociali.Noi della LG, promuoviamo attività a favore della tutela dell'ambiente sviluppando appositamente i nostri prodotti per cogliere il concetto del rispetto dell'ambiente riducendo i materiali dannosi presenti nei nostri prodotti. Ad esempio nei nostri monitor non è presente il cadmio.

### Informazioni per il riciclaggio

Il monitor può presentare componenti che potrebbero risultare eventualmente dannosi per l'ambiente. È importante che il monitor sia riciclato al termine del suo utilizzo.

La LGE. gestisce tutti i monitor di rifiuto con un metodo di riciclaggio soddisfacente dal punto di vista ambientale. In tutto il mondo sono attualmente in funzione numerosi sistemi di riciclaggio e recupero. I diversi componenti sono riutilizzati e riciclati, mentre le sostanze dannose e i metalli pesanti vengono trattati con un metodo rispettoso dell'ambiente.
Se si desiderano maggiori informazioni in merito al programma di riciclaggio, è consigliabile rivolgersi al proprio rivenditore LG o ad un rappresentante aziendale della LG.

Noi della LG impostiamo la nostra visione e le nostre politiche a favore di un mondo più pulito ponendo la questione dell'ambiente dal punto di vista globale come una mansione rivolta al miglioramento della nostra azienda. Vi invitiamo a visitare il nostro sito internet per ulteriori informazioni sulla nostra politica "verde".
http://www.lge.com/about/environment/html/Recycling.jsp

## ■■ Espanõl

### Información para la conservación medioambiental

LGE. presentó la 'Declaración para un entorno más limpio de LG' en 1994 y este ideal ha servido para guiar nuestros principios empresariales desde entonces. La Declaración es la base que nos ha permitido llevar a cabo tareas que respetan el medio ambiente siempre teniendo en cuenta aspectos sociales,
económicos y medioambientales.

Promocionamos actividades orientadas a la conservación del medio ambiente y desarrollamos nuestros productos específicamente para que se ajusten a la filosofía que protege el entorno.
Reducimos al máximo el uso de materiales de riesgo en nuestros productos. Un ejemplo de ello es la ausencia total de cadmio en nuestros monitores.

### Información para el reciclaje

Este monitor puede contener piezas que entrañen riesgos medioambientales. Es importante reciclar este monitor después de su utilización.
LGE. trata todos los monitores usados siguiendo un método de reciclaje que no daña al entorno. Contamos con diversos sistemas de recuperación y reciclaje que funcionan a nivel mundial en la actualidad. Es posible reciclar y reutilizar muchas de las piezas, mientras que las sustancias dañinas y los metales pesados se tratan siguiendo un método que no perjudique al medio ambiente. Si desea obtener más información acerca del programa de reciclaje, póngase en contacto con su proveedor local de LG o con un representante empresarial de nuestra marca.

Basamos nuestra visión y nuestras políticas en un mundo más limpio y para ellos optamos por un entorno global como tarea principal de nuestra evolución como empresa. Visite nuestra página Web para obtener más información sobre nuestras políticas ecológicas.
http://www.lge.com/about/environment/html/Recycling.jsp

## ■■ Português

### Informações relacionadas à preservação ambiental

A LGE. anunciou a 'LG Declaration for a Cleaner Environment' (Declaração da LG para um ambiente mais limpo) em 1994 e esse ideal tem servido desde então como um princípio administrativo de orientação. A Declaração é a base que nos tem permitido realizar atividades favoráveis ao ambiente com consideração atenta aos aspectos econômicos, ambientais e sociais.

Promovemos atividades de preservação ambiental e desenvolvemos nossos produtos para englobar

especificamente o conceito de favorável ao ambiente. Reduzimos os materiais perigosos contidos em nossos produtos. Por exemplo, não há cádmio em nossos monitores.

### Informações relacionadas à reciclagem

Este monitor pode conter peças que podem representar riscos ao ambiente. É importante que ele seja reciclado após o uso.

A LGE. cuida de todos os monitores descartados através de um método de reciclagem agradável ao ambiente. Há vários sistemas de devolução e reciclagem atualmente em operação no mundo. Muitas peças serão reutilizadas e recicladas e as substâncias nocivas e os metais pesados passarão por tratamento através de um método favorável ao ambiente.

Para obter mais informações sobre nosso programa de reciclagem, entre em contato com seu fornecedor LG local ou com um representante corporativo da LG.

Definimos nossa visão e nossas políticas relacionadas a um mundo mais limpo selecionando a questão do ambiente global como uma tarefa de aprimoramento corporativo. Visite nosso site para obter mais informações sobre nossas políticas de meio ambiente.
http://www.lge.com/about/environment/html/Recycling.jsp

### ▦ Nederlands

### Informatie met betrekking tot het behoud van het milieu

LGE. publiceerde in 1994 de 'LG Declaration for a Cleaner Environment' (de LG-verklaring met betrekking tot een schoner milieu). Deze verklaring en het ideaal van een schoner milieu fungeren sindsdien als een bestuurlijke leidraad voor onze onderneming. Op basis van deze verklaring ontplooien wij milieuvriendelijke activiteiten, waarbij er zowel met sociale en economische aspecten, als met milieuaspecten zorgvuldig rekening wordt gehouden.

Wij ondersteunen activiteiten die zijn gericht op het behoud van het milieu en wij houden bij het ontwikkelen onze producten specifiek rekening met de milieuvriendelijkheid van onze producten.
Wij minimaliseren het gebruik van schadelijke stoffen in onze producten. Er wordt bijvoorbeeld geen cadmium verwerkt in onze monitors.

### Informatie met betrekking tot recycling

Deze monitor bevat materialen die schadelijk zouden kunnen zijn voor het milieu. Het is belangrijk dat deze monitor aan het einde van zijn levensduur wordt gerecycled.

LGE. verwerkt alle afvalmonitors via een milieuvriendelijke recyclingmethode. Hiervoor worden er momenteel wereldwijd verscheidene inname- en recyclingsystemen gehanteerd. Een groot aantal onderdelen wordt opnieuw gebruikt en gerecycled, waarbij schadelijke stoffen en zware metalen volgens een milieuvriendelijke methode worden verwerkt.
Voor meer informatie over ons recyclingprogramma kunt u contact opnemen met uw plaatselijke LG-vertegenwoordiger of een LG-vestiging.

Onze visie en ons beleid met betrekking tot een schonere wereld vloeien voort uit het feit dat wij het milieu hebben aangemerkt als een onderwerp dat speciale aandacht verdient binnen onze onderneming. Bezoek onze website voor meer informatie over ons 'groene' beleid.
http://www.lge.com/about/environment/html/Recycling.jsp

### ▦ Russian

### Информация по охране окружающей среды

В 1994 году корпорация LGE опубликовала 'Декларацию LG по охране окружающей среды', которая с тех пор служит основным принципом управления. На основе этой декларации мы смогли предпринять действия, обеспечивающие безопасность окружающей среды, уделяя при этом должное внимание экономическим, экологическим и социальным аспектам.

Мы стимулируем деятельность по охране окружающей среды, уделяя особое внимание разработке нашей продукции в соответствии с концепцией экологической безопасности.
Мы сводим к минимуму содержание опасных веществ в нашей продукции. Например, в наших мониторах вы не найдете кадмия.

### Информация по утилизации отходов

Этот монитор может содержать компоненты, которые могут нанести ущерб окружающей среде.

Необходимо утилизировать монитор после использования.

Корпорация LGE перерабатывает все бракованные мониторы с помощью экологически приемлемого метода утилизации отходов. По всему миру действуют системы утилизации отходов и возврата использованной продукции. Многие компоненты будут вторично использованы и утилизированы, в то время как вредные вещества и тяжелые металлы будут обработаны с помощью экологически приемлемого метода.

За более подробной информацией по нашей программе утилизации отходов обращайтесь к местному поставщику или представителю

корпорации LG.

Мы ориентируемся на обеспечение экологической безопасности, ставя себе целью глобальную защиту окружающей среды. Дополнительную информацию о нашей политике по охране окружающей среды вы можете найти на нашем сайте:
http://www.lge.com/about/environment/html/Recycling.jsp

### 한국어

#### 환경 보존 정보

LG 전자는 1994년 'LG 환경 선언문'을 발표한 후 현재까지 이를 기업 경영의 이념으로 삼아왔습니다. 이 선언문을 바탕으로 LG 전자는 모든 경영 활동에서 경제성뿐만 아니라 환경성 및 사회성을 주요 의사 결정의 기준으로 삼음으로써 지속적으로 환경 친화적인 경영을 전개하고 있습니다.

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또한 제품에 포함되는 환경 위해 요소를 최소화하는 데에도 노력을 게을리하지 않고 있습니다. LG 전자 모니터의 경우 카드뮴을 전혀 사용하지 않는 것에서도 이러한 노력을 알 수 있습니다.

#### 재활용 정보

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여러 가지가 있습니다. 대부분의 부품의 경우 재사용 또는 재활용되지만 환경 위해 물질과 중금속은 환경 친화적 방법으로 처리됩니다.
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LG 전자는 기업 개선 정책의 하나로 지구 환경 문제를 채택함으로써 보다 나은 환경을 만들어 나가기 위한 비전과 정책을 수립했습니다. 본사의 친환경 정책에 대한 자세한 정보를 보시려면 아래의 웹 사이트를 방문하십시오.
http://www.lge.co.kr/cokr/about/environ/purity__02.jsp

#### ::EPA (EPA applied model only)

ENERGY STAR is a set of power-saving guidelines issued by the U.S. Environmental Protection Agency(EPA).



As an ENERGY STAR Partner LGE U. S. A.,Inc. has determined that this product meets the ENERGY STAR guidelines for energy efficiency.

#### ::NOM MARK (Mexico only)

## :: **WEEE** (for Europe )



### ▦ English

**Disposal of your old appliance**

1. When this crossed-out wheeled bin symbol is attached to a product it means the product is covered by the European Directive 2002/96/EC.
2. All electrical and electronic products should be disposed of separately from the municipal waste stream via designated collection facilities appointed by the government or the local authorities.
3. The correct disposal of your old appliance will help prevent potential negative consequences for the environment and human health.
4. For more detailed information about disposal of your old appliance, please contact your city office, waste disposal service or the shop where you purchased the product.

### ▦ French

**Élimination de votre ancien appareil**

1. Ce symbole, représentant une poubelle sur roulettes barrée d'une croix, signifie que le produit est couvert par la directive européenne 2002/96/EC.
2. Les éléments électriques et électroniques doivent être jetés séparément, dans les vide-ordures prévus à cet effet par votre municipalité.
3. Une élimination conforme aux instructions aidera à réduire les conséquences négatives et risques éventuels pour l'environnement et la santé humaine.
4. Pour plus d'information concernant l'élimination de votre ancien appareil, veuillez contacter votre mairie, le service des ordures ménagères ou encore la magasin où vous avez acheté ce produit.

### ▦ Italian

**Smaltimento delle apparecchiature obsolete**

1. Quando su un prodotto è riportato il simbolo di un bidone della spazzatura barrato da una croce significa che il prodotto è coperto dalla direttiva europea 2002/96/EC.
2. Tutti i prodotti elettrici ed elettronici dovrebbero essere smaltiti separatamente rispetto alla raccolta differenziata municipale, mediante impianti di raccolta specifici designati dal governo o dalle autorità locali.
3. Il corretto smaltimento delle apparecchiature obsolete contribuisce a prevenire possibili conseguenze negative sulla salute umana e sull'ambiente.
4. Per informazioni più dettagliate sullo smaltimento delle apparecchiature obsolete, contattare il comune, il servizio di smaltimento rifiuti o il negozio in cui è stato acquistato il prodotto.

### ▦ Swedish

**Kassering av din gamla apparat**

1. När den här symbolen med en överkryssad soptunna på hjul sitter på en produkt innebär det att den regleras av European Directive 2002/96/EC.
2. Alla elektriska och elektroniska produkter bör kasseras via andra vägar än de som finns för hushållsavfall, helst via för ändamålet avsedda uppsamlingsanläggningar som myndigheterna utser.
3. Om du kasserar din gamla apparat på rätt sätt så bidrar du till att förhindra negativa konsekvenser för miljön och människors hälsa.
4. Mer detaljerad information om kassering av din gamla apparat kan får av kommunen, renhållningsverket eller den butik där du köpte produkten.

### ▦ Dutch

**Uw oude toestel wegdoen**

1. Als het symbool met de doorgekruiste verrijdbare afvalbak op een product staat, betekent dit dat het product valt onder de Europese Richtlijn 2002/96/EC.
2. Elektrische en elektronische producten mogen niet worden meegegeven met het huishoudelijk afval, maar moeten worden ingeleverd bij speciale inzamelingspunten die door de lokale of landelijke overheid zijn aangewezen.
3. De correcte verwijdering van uw oude toestel helpt negatieve gevolgen voor het milieu en de menselijke gezondheid voorkomen.

4. Wilt u meer informatie over de verwijdering van uw oude toestel? Neem dan contact op met uw gemeente, de afvalophaaldienst of de winkel waar u het product hebt gekocht.

## Finnish

**Vanhojen laitteiden hävittäminen**

1. Tämä merkki tuotteessa tarkoittaa, että tuote kuuluu sähkö- ja elektroniikkalaiteromusta annetun EU-direktiivin 2002/96/EY soveltamisalaan.
2. Kaikki elektroniset laitteet ovat ongelmajätettä, joten ne on toimitettava paikalliseen keräyspisteeseen.
3. Vanhan laitteen asianmukainen hävittäminen ehkäisee mahdollisia ympäristöön ja terveyteen kohdistuvia haittavaikutuksia.
4. Lisätietoa vanhan laitteen hävittämisestä saat ottamalla yhteyden paikallisiin viranomaisiin, kierrätyskeskukseen tai myymälään, josta ostit laitteen.

## German

**Entsorgung von Altgeräten**

1. Wenn dieses Symbol eines durchgestrichenen Abfalleimers auf einem Produkt angebracht ist, unterliegt dieses Produkt der europäischen Richtlinie 2002/96/EC.
2. Alle Elektro- und Elektronik-Altgeräte müssen getrennt vom Hausmüll über dafür staatlich vorgesehenen Stellen entsorgt werden.
3. Mit der ordnungsgemäßen Entsorgung des alten Geräts vermeiden Sie Umweltschäden und eine Gefährdung der persönlichen Gesundheit.
4. Weitere Informationen zur Entsorgung des alten Geräts erhalten Sie bei der Stadtverwaltung, beim Entsorgungsamt oder in dem Geschäft, wo Sie das Produkt erworben haben.

## Danish

**Sådan smider du dit gamle apparat ud**

1. Når der er et tegn med et kryds over en skraldespand, betyder det, at produktet er omfattet af EU-direktiv 2002/96/EC.
2. Alle elektriske og elektroniske produkter skal smides ud et andet sted end gennem den kommunale affaldsordning ved hjælp af specielle indsamlingsfaciliteter, der er organiseret af staten eller de lokale myndigheder.
3. Korrekt bortskaffelse af dit gamle apparat er med til at forhindre mulige skadevirkninger på miljøet og menneskelig sundhed.
4. Mere detaljerede oplysninger om bortskaffelse af dit gamle apparat kan fås ved at kontakte dit lokale kommunekontor, renovationsselskab eller den butik, hvor du købte produktet.

## Greek

**Απόρριψη της παλιάς σας συσκευής**

1. Όταν ένα προϊόν διαθέτει το δύμβολο ενός διαγραμμένου κάλαθου απορριμμάτων, τότε το προϊόν καλύπτεται από την Ευρωπαϊκή Οδηγία 2002/96/EOK.
2. Η απόρριψη όλων των ηλεκτρικών και ηλεκτρονικών προϊόντων πρέπει να γίνεται χωριστά από τα γενικά οικιακά απορρίμματα μέσω καθορισμένων εγκαταστάσεων συλλογής απορριμμάτων, οι οποίες έχουν δημιουργηθεί είτε από την κυβέρνηση ή από τις τοπικές αρχές.
3. Η σωστή απόρριψη της παλιάς σας συσκευής θα βοηθήσει στην αποτροπή πιθανών αρνητικών συνπειών ως προς το περιβάλλον και την υγεία του ανθρώπου.
4. Για πιο λεπτομερείς πληροφορίες σχετικά με την απόρριψη της παλιάς σας συσκευής, επικοινωνήστε με το αρμόδιο τοπικό γραφείο, υπηρεσία διάθεσης οικιακών απορριμμάτων ή το μαγαξί από το οποίο αγοράσατε το προϊόν.

## Spanish

**Cómo deshacerse de aparatos eléctricos y electrónicos viejos**

1. Si en un producto aparece el símbolo de un contenedor de basura tachado, significa que éste se acoge a la Directiva 2002/96/CE.
2. Todos los aparatos eléctricos o electrónicos se deben desechar de forma distinta del servicio municipal de recogida de basura, a través de puntos de recogida designados por el gobierno o las autoridades locales.
3. La correcta recogida y tratamiento de los dispositivos inservibles contribuye a evitar riesgos potenciales para el medio ambiente y la salud pública.
4. Para obtener más información sobre cómo deshacerse de sus aparatos eléctricos y electrónicos viejos, póngase en contacto con su ayuntamiento, el servicio de recogida de basuras o el establecimiento donde adquirió el producto.

## Portuguese

**Eliminação do seu antigo aparelho**

1. Quando este símbolo de latão cruzado estiver afixado a um produto, significa que o produto é abrangido pela Directiva Europeia 2002/96/EC.
2. Todos os produtos eléctricos e electrónicos devem ser eliminados separadamente do lixo doméstico através de pontos de recolha designados, facilitados pelo governo ou autoridades locais.
3. A eliminação correcta do seu aparelho antigo ajuda a evitar potenciais consequências negativas para o ambiente e para a saúde humana.
4. Para obter informaçõs mais detalhadas acerca da eliminação do seu aparelho antigo, contacte as autoridades locais, um serviço de eliminação de resíduos ou a loja onde comprou o produto.

## Slovak

**Likvidácia váš ho starého prístroja**

1. Keď sa na produkte nachádza tento symbol prečiarknutej smetnej nádoby s kolieskami, znamená to, že daný produkt vyhovuje európskej Smernici č. 2002/96/EC.
2. Všetky elektrické a elektronické produkty by mali byť zlikvidované oddelene od komunálneho odpadu prostredníctvom na to určených zberných zariadení, ktoré boli ustanovené vládou alebo orgánmi miestnej správy.
3. Správnou likvidáciou starých zariadení pomôžete predchádzať potenciálnym negatívnym následkom pre prostredie a ľudské zdravie.
4. Podrobnejšie informácie o likvidácii starých zariadení nájdete na miestnom úrade, v službe na likvidáciu odpadu alebo u predajcu, kde ste tento produkt zakúpili.

## Czech

**Likvidace starých spotřebičů**

1. Pokud je u výrobku uveden symbol pojízdného kontejneru v přeškrtnutém poli, znamená to, že na výrobek se vztahuje směrnice Evropské unie číslo 2002/96/EC.
2. Všchny elektrické a elektronické výrobky by měly být likvidovány odděleně od běžného komunálního odpadu prostřednictvím sběrných zařízení zřízených za tímto účelem vládou nebo místní samosprávou.
3. Správný způsob likvidace starého elektrického spotřebiče pomáhá zamezit možným negativním dopadům na životní prostředí a zdraví.
4. Bližší informace o likvidaci starého spotřebiče získáte u místní samosprávy, ve sběrném zařízení nebo v obchodě, ve kterém jste výrobek zakoupili.

## Croatian

**Uklanjanje starog aparata**

1. Ako se na proizvodu nalazi simbol prekrižene kante za smeće, to znači da je proizvod pokriven europskom direk-

tivom 2002/96/EC.
2. Električni i elektronski proizvodi ne smiju se odlagati zajedno s komunalnim otpadom, već u posebna odlagališta koja je odredila vlada ili lokalne vlasti.
3. Pravilno odlaganje starog proizvoda sprečit če potenci jalne negativne posljedice po okoliš i zdravlje ljudi.
4. Podrobnije informacije o odlaganju starog proizvoda potražite u gradskom uredu, službi za odlaganje otpada ili u trgovini u kojoj ste kupili proizvod.

## Hungarian

Régi eszközök ártalmatlanítása

1. A termékhez csatolt áthúzott, kerekes szeméttároló jel jelöli, hogy a termék a 2002/96/EC EU-direktíva hatálya alá esik.
2. Minden elektromos és elektronikai terméket a lakossági hulladéktól elkülönítve kell begyüjteni, a kormány vagy az önkormányzatok által kijelölt begyüjtö eszközök használatával.
3. Régi eszközeinek megfelelö ártalmatlanítása segíthet megelözni az esetleges egészségre vagy környezetre ártalmas hatásokat.
4. Ha több információra van szüksége régi eszközeinek ártalmatlanításával kapcsolatban, tanulmányozza a vonatkozó környezetvédelmi szabályokat, vagy lépjen kapcsolatba az üzlettel, ahol a terméket vásárolta.

## Polish

**Utylizacja starych urządzeń**

1. Kiedy do produktu dołączony jest niniejszy przekreślony symbol kołowego pojemnika na śmieci, oznacza to, że produkt jest objęty dyrektywą 2002/96/EC.
2. Wszystkie elektryczne i elektroniczne produkty powinny być utylizowane niezależnie od odpadów miejskich, z wykorzystaniem przeznaczonych do tego miejsc składowania wskazanych przez rząd lub miejscowe władze.
3. Właściwy sposób utylizacji starego urządzenia pomoże zapobiec potencjalnie negatywnemu wpływowi na zdrowie i środowisko.
4. Aby uzyskać więcej informacji o sposobach utylizacji starych urządzeń, należy skontaktować się z władzami lokalnymi, przedsiębiorstwem zajmującym się utylizacją odpadów lub sklepem, w którym produkt został kupiony.

## Estonian

**Kasutuskõlbmatu seadme käitlemise kord**

1. Kui seade on märgistatud selle elektri- ja elek-
troonikaseadmete lahuskogumist märgistava
tähisega (ratastega prügikonteineri kujutis, millele on
rist peale tõmmatud), tuleb toodet käidelda vastavalt
Eurodirektiivile 2002/96/EÜ.
2. Elektri- ja elektroonikaseadmeid ei tohi visata
tavalise prügi hulka. Nad kuuluvad lahuskogumisele
selleks määratud kogumispunktides.
3. Kasutuskõlbmatu tervikseadme käitlemine
tavaprügist lahus on korraldatud selleks, et vältida
negatiivseid tagajärgi, mida põhjustaksid seadme
osade purunemisel vabaneda võivad ohtlikud
jäätmed loodusele või inimorganismile.
4. Täpsemat informatsiooni selle kohta, kuhu ja millal
saab ära anda oma kasutamiskõlbmatu elektri- ja
elektroonikaseadme, küsige kohalikult omavalit-
suselt, prügifirmalt või kaupluselt, kust seadme ost-
site.

## Latvian

**Vecās elektroierīces nodošana**

1. Ja uz produkta ir simbols ar pārsvītrotu atkritu-
mu tvertni, tas nozīmē, ka produkts ir iekļauts
Eiropas direktīvā 2002/96/EC.
2. Visi elektriskie un elektroniskie produkti ir
jāutilizē, nododot pašvaldības īpaši noteiktās
pieņemšanas vietās. Tos nedrīkst izmest
parastās municipalitātes atkritumu urnās.
3. Ievērojot prasības veco elektroierīču
utilizēšanā, jūs pasargāsiet apkārtējo vidi un
cilvēku veselību no iespējami nelabvēlīgajām
sekām, kādas varētu rasties, ierīcēm sadaloties
nepiemērotā vietā.
4. Lai gūtu plašāku informāciju par veco ierīču uti-
lizēšanas iespējām, sazinieties ar pilsētas
pašvaldību, atkritumu savākšanas saimniecību
vai veikalu, kurā ierīci iegādājāties.

## Lithuanian

**Senos įrangos atliekų tvarkymas**

1. Užbrauktas konteinerio simbolis pritvirtintas ant
prekės reiškia, kad įrangą saugo Europos direktyva
20002/96/EC.
2. Visos elektros ir elektroninės įrangos atliekos turi
būti renkamos atskirai ir neišmetamos į atliekų
konteinerį kartu su kitomis komunalinėmis
atliekomis, taikant specialią atliekų surinkimo sis-
temą, patvirtintą vyriausybės ar vietos valdžios.
3. Teisingas senos įrangos atliekų tvarkymas, padės
išvengti neigiamų pasekmių aplinkai ir žmonių
sveikatai.
4. Dėl išsamesnės informacijos apie senos įrangos
tvarkymą, prašome kreiptis į miesto valdžią,
atliekų perdirbimo tarnybą arba parduotuvę, kurio-
je pirkote įrangą.