

# APPENDIX G : USER'S MANUAL



# OWNER'S MANUAL LED LCD TV / LCD TV / PLASMA TV

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

LED LCD TV MODELS 
 LCD TV M

 19LV2500 32LV3400
 42LW5000 26LK330

 22LV2500 32LV3500
 47LW5000 32LK330

 26LV2500 37LV3500
 55LW5000 32LK330
 LCD TV MODELS PLASMA TV MODELS 32LK450 42PW340 42PW350U 37LK450 50PW340 50PW350U 42LK450 42PW350 42PW350R 32LV2500 42LV3500 42LW5300 42LK430 47LK450 50PW350 26LV2520 47LV3500 47LW5300 42LK451C 42LK520 50PZ200 47LK450 50PW350 50PW350R 55LW5300 47LK451C 47LK520 60PZ200 42LV355B 32LK453C 55LK520 32LV2520 55LV3500 22LV255C 32LV3520 42LV355B 26LV255C 42LV3520 47LV355B 32LV255C 55LV5300 55LV355B 42LW505C 42LV355C 47LV355B 37LK453C 42LK453C 55LV355C www.lg.com P/NO : SAC34134216 (1111-REV17)

# LICENSES

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- V 🛛 👜 : LED LCD TV, LCD TV
- 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.





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. Read these instructions. Keep these instructions. Heed all warning. Follow all instruction.



• Do not use this apparatus near water.



• Clean only with 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)



 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.



 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: 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.

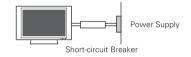


 Do not expose to dripping or splashing and do not place objects filled with liquids, such as vases, cups, etc. on or over the apparatus (e.g. on shelves above the unit).



#### Grounding

Ensure that you connect the earth ground wire to prevent possible electric shock (i.e. a TV with a three-prong grounded AC plug must be connected to a three-prong grounded AC outlet). 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.



### DISCONNECTING DEVICE FROM THE MAIN POWER

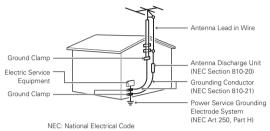
The power outlet must remain readily accessed in the event the device needs to be unplugged.

- 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



#### 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 odors 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.



### 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 highspeed 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.
- Viewing 3D Imaging (For 3D TV)
  - If you watch the 3D imaging too closely or for a long period of time, it may harm your eyesight.
  - Watching the TV or playing video games that incorporate 3D imaging with the 3D glasses for a long period of time can cause drowsiness, headaches or fatigue to you and/or your eyes. If you have a headache, or otherwise feel fatigued or drowsy, stop watching the TV and take a rest.
  - Pregnant woman, seniors, persons with heart problems or persons who experience frequent drowsiness should refrain from watching 3D TV.
  - Some 3D imaging may cause you to duck or dodge the image displayed in the video. Therefore, it is best if you do not watch 3D TV near fragile objects or near any objects that can be knocked over easily.
  - Please prevent children under the age of 5 from watching 3D TV. It may affect their vision development.
  - Warning for photosensitization seizure: Some

viewers may experience a seizure or epilepsy when exposed to certain factors, including flashing lights or images in TV or video games. If you or anybody from your family has a history of epilepsy or seizure, please consult with your doctor before watching 3D TV.

- Also certain symptoms can occur in unspecified conditions without any previous history. If you experience any of the following symptoms, immediately stop watching the 3D imaging and consult a doctor: dizziness or lightheadedness, visual transition or altered vision, visual or facial instability, such as eye or muscle twitching, unconscious action, convulsion, loss of conscience, confusion or disorientation, loss of directional sense, cramps, or nausea. Parents should monitor their children, including teenagers, for these symptoms as they may be more sensitive to the effects of watching 3D TV. Risk of photosensitization seizure can be reduced with the following actions.
- Take frequent breaks from watching 3D TV.
- For those who have vision that is different in each eye, they should watch the TV after taking vision correction measures.
- Watch the TV so that your eyes are on the same level as the 3D screen and refrain from sitting too closely to the TV.
- Do not watch the 3D imaging when tired or sick, and avoid watching the 3D imaging for a long period of time.
- Do not wear the 3D glasses for any other purpose than viewing 3D imaging on a 3D TV.
- Some viewers may feel disoriented after watching 3D TV. Therefore, after you watch 3D TV, take a moment to regain awareness of your situation before moving.

### • <u>LCD</u>

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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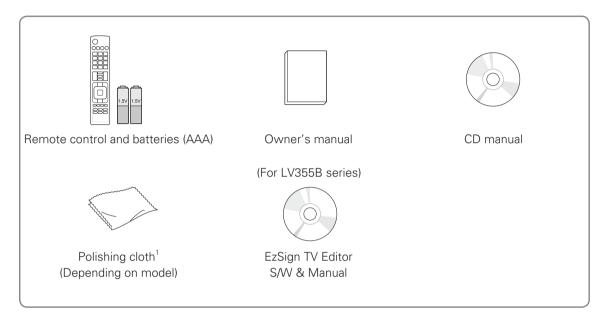
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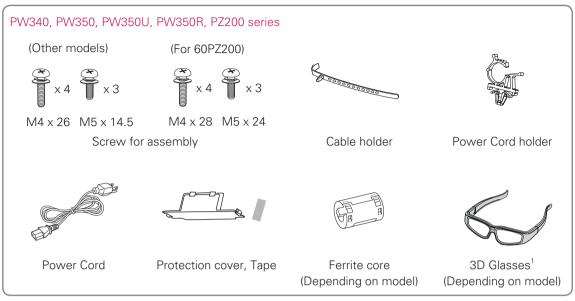
# ASSEMBLING AND PREPARING

# Unpacking

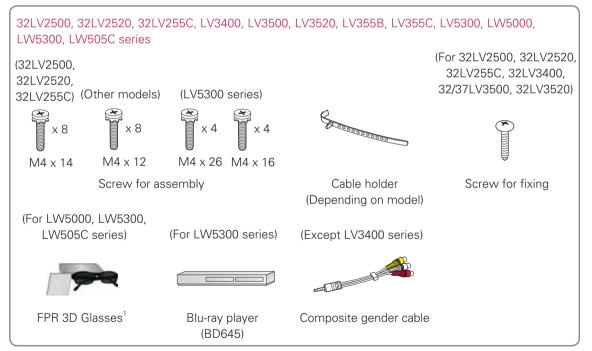
Check your product box for the following items. If there are any missing accessories, contact the local dealer where you purchased your product. The illustrations in this manual may differ from the actual product and item.



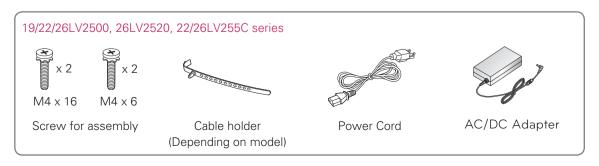
1 Gently wipe the spots on the cabinet with the polishing cloth.



1 The number of 3D glasses may differ depending on the model or country.



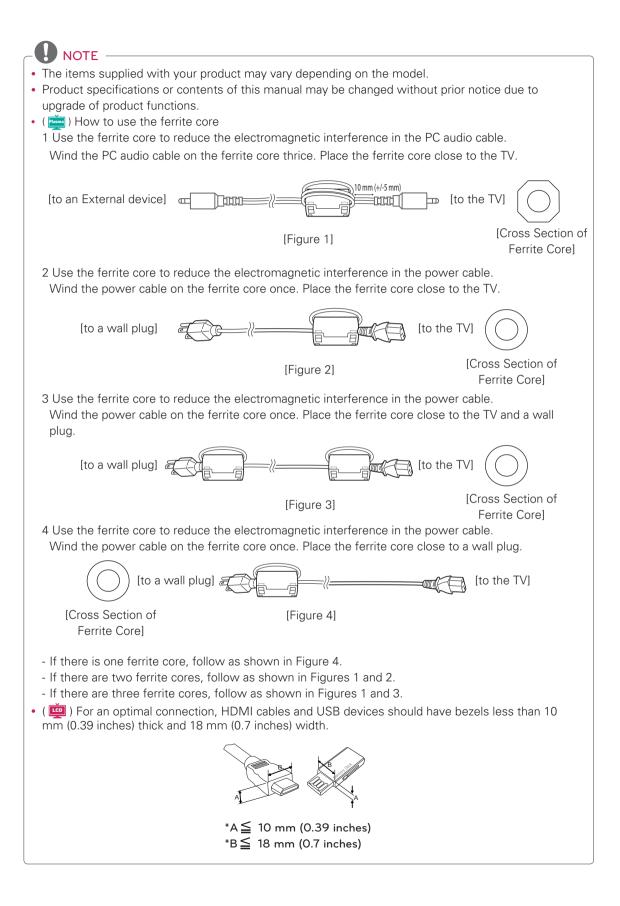
1 The number of 3D glasses may differ depending on the model or country.





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- 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.



# **Optional Extras**

Optional extras can be changed or modified for quality improvement without any notification. Contact your dealer for buying these items.

This device only works with compatible LG Plasma TV, LED LCD TV or LCD TV.

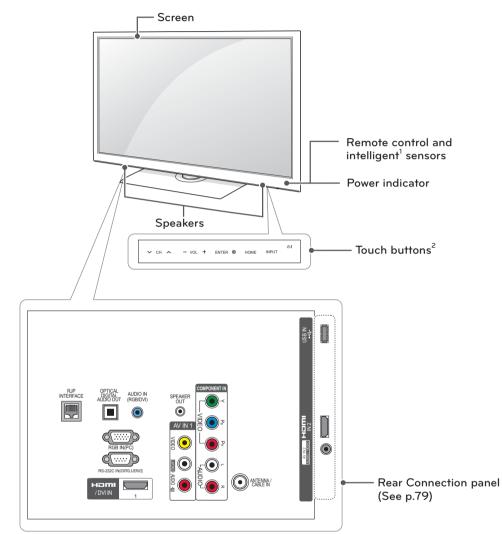


1 Supports PW340, PW350, PW350R, PW350U, PZ200 series

2 Supports LW5000, LW5300, LW505C series The model name or design may be changed depending on the upgrade of product functions, manufacturer's circumstances or policies.

3 When using the VGA (D-sub 15 pin signal cable) PC connection, use the shielded signal interface cable with a ferrite core to maintain standards compliance for the product.

### 32LV255C, LV355B, LV355C series



Touch button <sup>2</sup>	<sup>2</sup> Description	
ወ/	Turns the power on or off.	
INPUT	Changes the input source.	
HOME	Accesses the main menus, or saves your input and exits the menus.	
ENTER 💿	Selects the highlighted menu option or confirms an input.	
- VOL +	Adjusts the volume level.	
v CH ∧	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.
- You can set the power indicator light to on or off by selecting **OPTION** in the main menus.

# REMOTE CONTROL

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

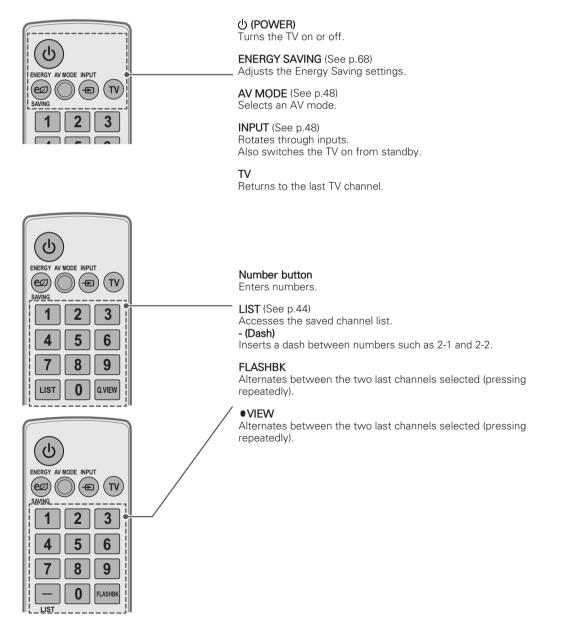
To replace batteries, open the battery cover, replace batteries (1.5 V AAA) matching the  $\oplus$  and  $\bigcirc$  ends to the label inside the compartment, and close the battery cover. To remove the batteries, perform the installation actions in reverse.

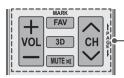


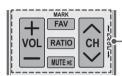
# 

• 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.









VOL

Adjusts the volume level.

#### MARK

Selects a menu or option. FAV (See p.44) Accesses your favorite channel list.

**3D** (For 3D TV) (See p.51) Used for viewing 3D video.

**RATIO** (See p.47) Resizes an image.

#### / MUTE

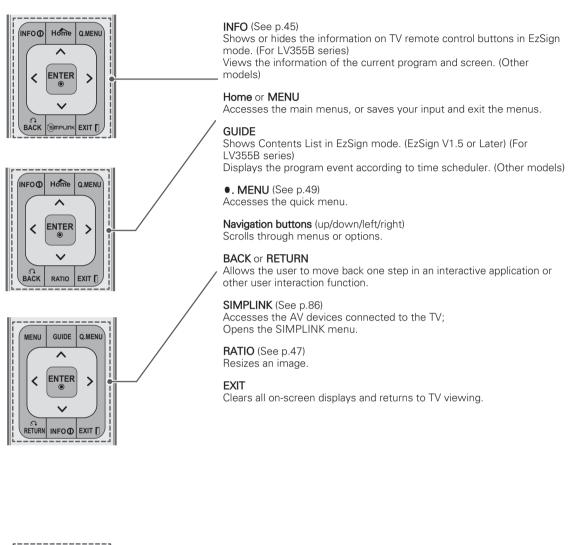
Mutes all sounds.

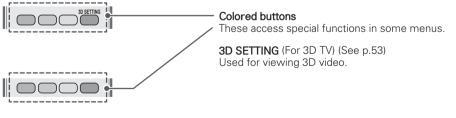
#### СН

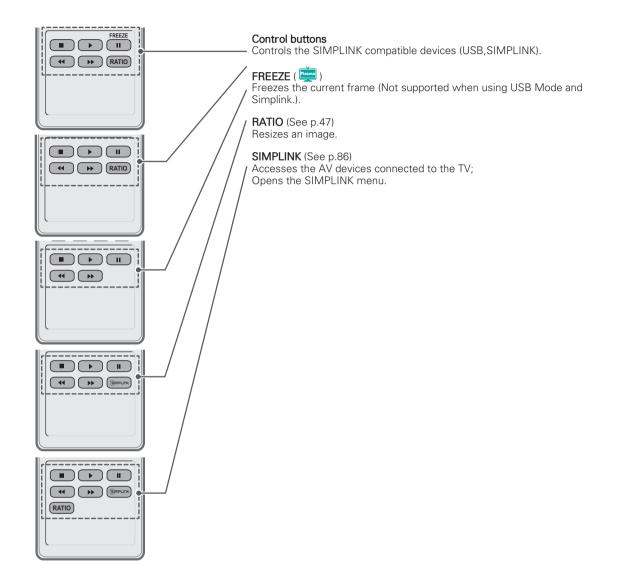
Scrolls through the saved channels. **PAGE** Moves to the previous or next screen.

#### PORTAL

Displays the EzSign content on a TV Screen. (For LV355B series) Displays and removes hotel interactive menu. (Other models)







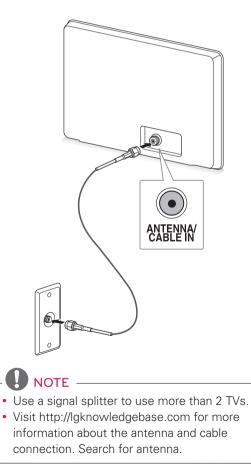
# WATCHING TV

# 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.

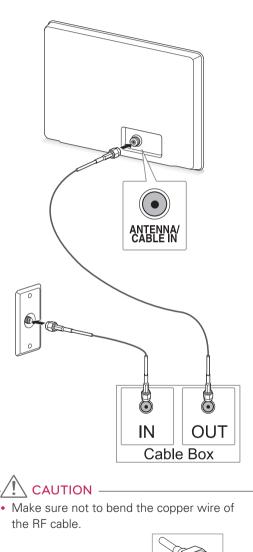
# Connecting an antenna or basic cable

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



### Connecting a cable box

Connect the TV to a cable box and the cable box to a wall antenna socket with 2 RF cables (75  $\Omega$ ).

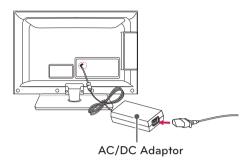


Copper wire

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

# Connecting to the AC/DC adapter

(For 19/22/26LV2500, 26LV2520, 22/26LV255C)



- 1 Connect the AC/DC adapter plug to the power input jack on the TV.
- 2 Connect the power cord to the AC/DC adapter first, then plug the power cord into the wall power outlet.

### CAUTION -

• Please be sure to connect the TV to the AC/ DC power adapter before connecting the TV's power plug to a wall power outlet.

## 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.

, 0	0 / 1	
Language	Selects a language to display.	
Û	. ,	
Mode Setting	Selects <b>Home Use</b> for the home environment.	
Û	(Depending on model)	
Power Indicator	Sets the standby light. (For LED LCD TV)	
Û		
Time Zone	Selects the time zone and daylight saving.	
Û		
Auto Tuning	Scans and saves available channels automatically.	

# NOTE

- To display images in the best quality for vour 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.
- Power Indicator feature is disabled in Store Demo mode
- 4 When the basic settings are complete, press ENTER.

### 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 (^, v)	Scrolls through saved channels.		
LIST <sup>1</sup>	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 <sup>2</sup>	<b>DE<sup>2</sup></b> Selects an AV mode (See p.48).		
•.MENU	Accesses the quick menus (See p.49).		
FLASHBK or •.VIEW	Alternates between the last two channels selected.		
RATIO	Resizes an image (See p.47).		
FREEZE	Freezes the current frame while you are watching TV (		

1 The Lock icon () appears in front of a channel blocked with parental control.

- 2 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

\*The Digital broadcasting (DTV, Cable DTV) is not available for Philippines.

### Setting up channels

### Storing channels

To store channels automatically,

- Press Home or MENU to access the main menus.
- 2 Press the Navigation buttons to scroll to **CHANNEL** and press **ENTER**.
- 3 Press the Navigation buttons to scroll to **Auto Tuning** and press **ENTER**.
- 4 Select Start to start automatic tuning. The TV scans and saves available channels automatically.

- 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 BACK or RETURN.

To store channels manually,

- Press **Home** or **MENU** to access the main menus.
- 2 Press the Navigation buttons to scroll **CHANNEL** and press **ENTER**.
- 3 Press the Navigation buttons to scroll to **Manual Tuning** and press **ENTER**.
- 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 BACK or RETURN.

# 

- 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 1000 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.

### Editing your channel list

- 1 Press **Home** or **MENU** to access the main menus.
- 2 Press the Navigation buttons to scroll to **CHANNEL** and press **ENTER**.
- 3 Press the Navigation buttons to scroll to **Channel Edit** and press **ENTER**.
- 4 Edit channels using the following buttons.

Button	Description		
^	Highlights the channel type.		
^, v, < , >	Scrolls through channel types or channels.		
ENTER	Selects the highlighted channel to view.		
CH (^, v)	Moves to the previous or next page.		
Blue button	Adds or deletes a channel. The deleted channel displays in blue.		
FAV	Registers or cancels the current channel in favorite channel list.		
•.MENU	Selects your desired favorite channel group.		
Yellow button	Blocks or unblocks a channel.		

5 When you are finished, press EXIT. When you return to the previous menu, press BACK or RETURN.

#### Selecting a channel on the channel list

- 1 Press **LIST** to access the channel list.
  - To move to the previous or next page, press  $\label{eq:charge} CH \; ({\color{black} { \boldsymbol{\wedge} }}, {\color{black} { \boldsymbol{\nu} }}).$
  - To tune to the "CHANNEL menu Channel Edit", press Blue button.
- 2 Select a channel you want and press **ENTER**.

# 

- The Lock icon (♠) appears in front of a channel blocked with parental control.
- If you select the blocked channel, you will be prompted to enter your password.

### 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 Yellow button to register or cancel the current channel in favorite channel list. Press the Blue button to move to Channel Edit.
- 5 Press the Navigation buttons to scroll to **Favorite**.
- 6 Press **ENTER** to add the selected channel to the favorite list.
- 7 When you are finished, press EXIT.

### 

• You can also setup Favorite List in the CHANNEL menu - Channel Edit.

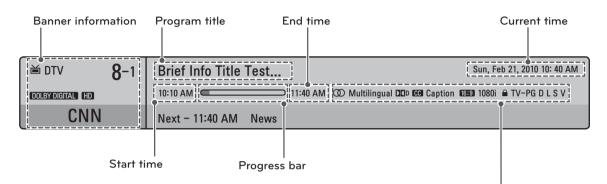
### Selecting a channel on the favorite list

- 1 Press FAV to access the favorite list.
  - To move to the previous or next page, press CH ( $\wedge$ ,  $\nu$ ).
- 2 Select a channel you want and press ENTER.

### Checking current program info

### (Except LV355B series)

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



Icon Description		Description	
Multilingual	Ø	The program contains two or more audio language services. You can change the audio language using the quick menu.	
Dolby Digital	DCD	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.75.	

≝ dtv <b>8</b> −1 cnn	‡ Ch. Change	► Next	Watch     ■
Brief Info Title Test 10:10 AM	s v		
No information Sarah Bradley, Steve Gray and Brendon Pongia present the latest in fashion, the arts, entertainmen with regular and special guests. Sarah Bradley, Steve Gray and Brendon Pongia present the latest in fashion, the arts, entertainmen		0,	Up Down
•			

Button	Description		
INFO	Shows current channel information.		
<pre>&lt; or &gt; Shows previous or next channel information.</pre>			
^ or <b>v</b>	Changes a channel.		

# Using additional options

### Adjusting aspect ratio

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

# 

- 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 and RGB-PC support 4:3 and 16:9.
  - The input sources: HDMI-PC 1920 X 1080 supports all of the aspect ratios.
- **16:9**: Resizes images to fit the screen width.



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



# 

- If you select **Just Scan**, you may see image noises at the edge or edges of the screen.
- The input sources: DTV, Component, HDMI-DTV, and DVI-DTV (720p/1080i/1080p) support Just Scan.
- 4:3: Resizes images to the previous standard
   4:3.



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



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



## NOTE

If you access, **Aspect Ratio** in the ●**uick** menus,

- Press < or > to stretch an image vertically.
- Press A or V to move the zoom focus up or down.
- **Cinema Zoom**: 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.
  - To move the zoom focus up or down, press ∧ or ∨.



# NOTE If you enlarge or reduce

• 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

### Selecting an input source

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 **Home** or **MENU** menu.
- 2 Press the Navigation buttons to scroll to one of the input sources and press **ENTER**.



Input source	Description		
TV	Watch TV over the air, cable, and digital cable broadcast.		
USB	Play media files from a thumb drive.		
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.		

RGB-PC         Use the TV as a computer monitor	
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.
- To access the SIMPLINK, press the **Red** button. If you select "SIMPLINK and On", the pop-up window for the HDMI input will not display. (())

### Adding an Input label

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

Input Labe	Input Label			
ଚଚଚ	AV1		VCR	Þ
000	AV2			
00000	Component1			
00000	Component2			
	RGB-PC			
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 **ENTER**.
- 5 When you are finished, press EXIT. When you return to the previous menu, press BACK or RETURN.

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

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

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

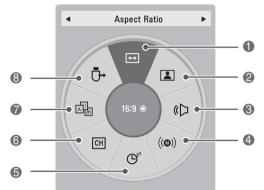
# 

- The TV is programmed to remember the last setting after you turn the TV off.
- If you turn the TV off with the Key lock feature activated, ひ, INPUT, CH (^, v) or Number buttons on the remote control.
- If you press any button on the TV with the Key lock feature activated, A Key Lock appears on the screen.

# 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.



Menu		Description
0	Aspect Ratio	Changes the image size.
2	Picture Mode (Depending on model)	Changes the image mode.
3	Sound Mode	Changes the sound mode.
4	Multi Audio	Changes the audio language (Digital signal).
	SAP	Changes the MTS sound (Analog signal).
5	Sleep Timer	Sets the length of time until the TV to turns off.
6	Del/Add	Edits the channels to add or delete the channel.
7	Caption	Activates or deactivate the subtitles.
8	USB Device	Selects "Eject" in order to eject USB device. If EzSign Content is running via USB, it may not work correctly after "USB Eject" has been selected. So please remove the attached USB Immediately after "USB Eject" has selected. (For LV355B series) Ejects a USB device when a USB device is connected. (Other models)

### 

• 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.

# Using the customer support

### Testing the Picture / Sound

To execute picture and sound tests.

- 1 Press **Home** or **MENU** to access the main menus.
- 2 Press the **Red** button to access **Customer Support**.
- 3 Press the Navigation buttons to scroll **Picture Test** or **Sound Test** and press **ENTER**.
- 4 If you have any problem, press the Navigation buttons to scroll to **Yes** and press **ENTER**.
- 5 When you are finished, press EXIT. When you return to the previous menu, press BACK or RETURN.

# Using the product or service information

To check the product or service information

- 1 Press **Home** or **MENU** to access the main menus.
- 2 Press the **Red** button to access **Customer Support** and press **ENTER**.
- Press the Navigation buttons to scroll Product/ Service Info..
   You can check the various product/Service infomation based on your model.
- 4 When you are finished, press EXIT. When you return to the previous menu, press BACK or RETURN.

# 3D IMAGING (FOR 3D TV)

# **3D Technology**

This TV can display in 3D via 3D broadcasting or when the TV is connected to a compatible device, such as a Blu-ray 3D Player. The viewer must wear compatible 3D glasses in order to see these images in 3D format.

### When watching 3D imaging

### ( 🚺 )

- We recommend that you maintain a distance of at least twice the screen diagonal length when watching 3D videos.
- To watch the TV in 3D, you must put on your 3D glasses. For best results, you should wear LG Brand 3D glasses. The 3D imaging may not display properly when using another brand of 3D glasses. Please see the 3D glasses manual for instructions on how to use the 3D glasses.
- When watching 2D images, it is recommended to take off the 3D glasses. If you watch 2D images with the 3D glasses on, you may see distorted images.

### ( <u>Plasma</u> )

- After powering on the TV, a few seconds may be needed for your TV to calibrate.
- The TV may flicker slightly if the 3D imaging is displayed under 3 wavelength fluorescent light (50 Hz - 60 Hz) or magnetic fluorescent lamp (50Hz - 60 Hz). In such instances, it is recommended to turn the lights off.
- If there is an obstacle between the TV and the 3D glasses, the 3D imaging may not display properly.
- Do not use the TV in close proximity to other electronic equipments and RF equipments.
- The 3D imaging may not display if it is viewed while you are lying down.
- It may take a moment for you to see the 3D imaging if you look away from the TV and then revert your eyes back to the 3D program.
- To watch the TV in 3D, you must put on your 3D glasses. For best results, you should wear LG Brand 3D glasses. The 3D imaging may not display properly when using another brand of 3D glasses. Please see the 3D glasses manual for instructions on how to use the 3D glasses.
- When watching 2D images, it is recommended to take off the 3D glasses. If you watch 2D images with the 3D glasses on, you may see distorted images.

# 

 If 3D TV broadcast standard changes in the future and it is not supported by this TV set, you may need a separate device, such as a set-top-box.

### When using 3D Glasses

### CAUTION -

- 3D glasses are sold separately. Refer to the 3D glasses manual for operating instructions.
- Do not use the 3D glasses to replace your corrective glasses, sunglasses or protective goggles.
- Do not store the 3D glasses in hot or cold locations.
- Do not drop objects onto the 3D glasses. Do not drop or bend the glasses.
- Since the lenses of the 3D glasses are easily scratched, make sure to clean only with a soft cloth. Shake off any dust before using the cloth since the glasses are easily scratched.

### 3D Imaging Viewing Range

(For Plasma TV)

TV size, viewing angle & other circumstances may change the viewing distance and the angle of view.

Viewing Distance	Viewing Angle
2 m - 10 m (6.5 ft - 32.8 ft)	120 ° (When the viewing distance is 2 m (6.5 ft))

# Viewing 3D Imaging

### View 3D mode for 3D images

- Play the 3D video or select 3D channel.
   (2D to 3D mode is available with all contents.)
- Press 3D and select same type in your displayed picture on the screen.
   (Select type on "3D Video" tab.)



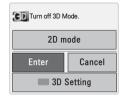
# NOTE -

- Turn on the 3D mode automatically for HDMI input playing the 3D blueray titles.
- 3 Press **ENTER** on displayed information window.





4 To turn off the 3D mode, press 3D and select **ENTER**.



### View 2D mode for 3D images

- 1 Play the 3D video or select 3D channel.
- 2 Press 3D and select same type in your displayed picture on the screen.(Select type on "2D Video" tab.)

3D Video	2D Video

3 To turn off the 2D mode, press 3D and select **ENTER**.



### Using 3D quick menu option

- 1 Press 3D SETTING.
- 2 Use the following options while viewing 3D imaging.

Button	Description
(Depending on model)	
3D Picture Size	Cuts off the outer edges of the picture and stretch it to fit the full screen in 3D mode.
3D Depth	Adjusts the distance between the object and the background in the picture to enhance the 3D effect in 2D to 3D mode.
3D Viewpoint	Brings the picture (including both the object and background images) to the front or back to enhance the 3D effect in 3D mode.
3D Picture Balance	Adjusts the color and brightness difference between the right and left sides of the picture in 3D mode.
3D Picture Correction	Changes the order of images in the right and left sides of the picture in 3D mode.

# - CAUTION -

- Some menus may not work while watching the TV in 3D.
- The 3D imaging mode is disabled automatically when switching DTV channels.
- The screen may not be displayed properly if you view 2D DTV images in 3D imaging mode.
- 3D effect can be seen when 3D Mode is selected appropriately for the 3D input signal supplied to the TV.
- For \*mpo files (3D camera files), the 3D imaging mode is enabled automatically.
- 3D may not be displayed properly for some PC graphics cards.

# NOTE -

### ( LCD )

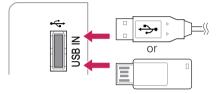
- If you select 3D mode, "Power indicator" is turned off automatically.
- While watching 3D imaging, you cannot adjust video/audio settings using the menu.
- You can only choose "Standard → Cinema → Game" with the AV MODE button on the remote control. AV Mode is set as Standard while playing in 3D.
- If you'd like to play the BGM using \*.mpo file(3D camera file), In advance, the contents path for BGM should be set on full-sized photo view screen which isn't \*.mpo file(3D camera file).
- Picture mode is set as Standard, Energy Saving Off if entering to 3D mode.

# ENTERTAINMENT

(Depending on model)

### 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. 56). 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 USB Device and press ENTER.
- 3 Disconnect the USB storage device only when the message says that it is safe to remove.

# 

- 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.
- If you format a USB storage device as a NTFS file system, you cannot delete the saved files.
- 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.
- USB storage devices below USB 2.0 are supported as well. But they may not work properly in the movie list.
- The electrostatic can cause USB device's malfunction. In this case, USB Device has to be plugged again.

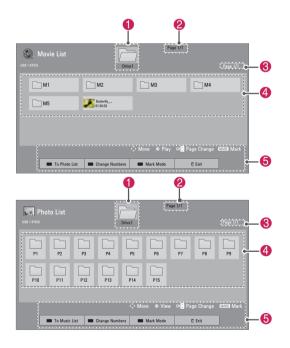
### **Browsing files**

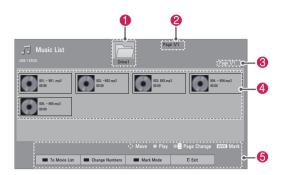
Access the photo, music, or movie lists and browse files.

- 1 Connect a USB storage device.
- 2 Press **Home** or **MENU** to access the main menus.
- 3 Press the Navigation buttons to scroll to MY MEDIA and press ENTER.
- 4 Press Navigation buttons to scroll to EzSign TV, MOVIE LIST, PHOTO LIST, or MUSIC LIST and press ENTER.



- 5 Select **Drive1** to access the connected USB storage device. (Except **EzSign TV**)
- 6 Press the Navigation buttons to Select a folder/ file you want. (Except **EzSign TV**)





No.	Description
0	Moves to the upper level folder.
2	Current page number/total number of pages
3	Current page number/total number of pages
4	Contents under the folder focused on $lacksquare$
6	Available buttons on the remote control
Button	Description
Green button	Moves to <b>Photo List</b> , <b>Music List</b> , or <b>Movie List</b> .
Yellow button	<b>Change Numbers</b> : Changes the number or thumbnails displayed at a time.
Blue button	Allows you to mark certain files.

#### Tips for using USB storage devices

Туре	Supported File Formats
Video	<ul> <li>MPG, MPEG, DAT, TS, TRP, TP, VOD, MP4, MOV, MKV, DivX, AVI, Motion JPEG (AVI, MP4, MKV), ASF, WMV, FLV</li> <li>Resolution: under 1920 pixel (width) x 1080 pixel (height)</li> <li>Frame Rate: under 30 frame/sec (1920 x 1080), under 60 frame/sec (1280 x 720)</li> <li>Max bitrate of playable movie file: 20 Mbps (Mega bit per second)</li> </ul>
	<ul> <li>Bit rate of audio format: within 32 kbps to 320 kbps (MP3)</li> </ul>
	<ul> <li>Supported subtitle format: *.smi, *.srt, *.sub (MicroDVD, SubViewer 1.0/2.0), *.ass, *ssa, *txt (TMPlayer), *.psb (PowerDivX)</li> </ul>

Туре	Supported File Formats			
Photo	<ul> <li>JPG</li> <li>Available size Baseline: 64 pixel (W) x 64 pixel (H) - 15360 pixel (W) x 8640 pixel (H) Progressive: 64 pixel (W) x 64 pixel (H) - 1920 pixel (W) x 1440 pixel (H)</li> <li>* Do not use the progressive option when saving JPG files on your PC.</li> <li>It may take some time to open high- resolution images in full screen.</li> </ul>			
		File Extensions	Item	Profile
	2D	jpeg jpg jpe	Supproted file format	<ul> <li>SOF0: baseline</li> <li>SOF1: Extend Sequential</li> <li>SOF2: Progressive</li> </ul>
			Photo size	<ul> <li>Min: 64 x 64</li> <li>Max - Normal Type: 15360 (W) x 8640 (H)</li> <li>Progressive Type: 1920 (W) x 1440 (H)</li> </ul>
	3D	mpo	Supproted file format	• mpo
			Photo size	<ul> <li>4:3 size: 3,648</li> <li>x 2,736</li> <li>2,592 x 1,944</li> <li>2,048 x 1,536</li> <li>3:2 size: 3,648</li> <li>x 2,432</li> </ul>
Music	<ul> <li>MP3</li> <li>Bit rate range 32 Kbps - 320 Kbps</li> <li>Sampling rate (Sampling Frequency) MPEG1 layer 3: 32 kHz, 44.1 kHz, 48 kHz</li> <li>MPEG2 layer 3: 16 kHz, 22.05 kHz, 24 kHz</li> <li>MPEG2.5 layer 3: 8 kHz, 11.025 kHz, 12 kHz</li> <li>* A copy-protected file will not play.</li> </ul>			

# EzSign TV

The EzSign TV function allows you to play and manage high-quality ad content that you create quickly and easily using the EzSign TV Editor. For more information of using, refer to the EzSign TV Editor S/W & Manual.

- 1 Press **Home** or **MENU** to access the main menus.
- 2 Press the Navigation buttons to scroll to **MY MEDIA** and press **ENTER**.
- 3 Press the Navigation buttons to scroll to **EzSign TV** and press **ENTER**.
- 4 Select TV memory or USB.

# TV memory

Option	Description
Play	Plays EzSign TV content in the memory.
Delete	Deletes EzSign TV content from the memory. (Your TV restarts after the content is deleted.)
Close	Closes the EzSign TV menu window.

# USB

Option	Description
Copy to TV memory & Play	Copies a file from the USB memory to the EzSign TV memory and plays it. (Once the file has been copied, it can be played even when it is removed from the USB memory.)
Play	Plays a file directly from the USB memory without copying it to the EzSign TV memory.
Close	Closes the EzSign TV menu window.

#### Using the remote control

While the content is being played from a USB device or TV memory, you can press a TV remote control button to switch to an EzSign mode or TV mode or see the content information.

Button	Description
EXIT	The mode is switched from EzSign to TV mode. The playing content or content list disappears, and a regular TV broadcasting is displayed on the full screen.
PORTAL	The mode is switched from TV to EzSign mode. The screen stops regular TV broadcasting, and EzSign TV content is played.
GUIDE	Shows or hides the content list on a TV screen.
INFO	Shows or hides the information on TV remote control buttons on a TV screen.

# 

- While loading EzSign TV content, your TV may function slower than normal.
- It is recommended that you copy files to the TV memory before playing them, as playing directly from the USB memory for an extended period of time may cause the device to overheat.
- In EzSign TV, some remote control keys may not work.
- In EzSign mode, the content is played. Only in this mode, you can see the information related to the EzSign contents (content screen, content list, TV remote button info, etc.)
- In TV mode, regular TV broadcasting is displayed on a full screen with no playback of the content. In this mode, you cannot see the content information using the Program Guide or information display key.

# **Viewing Videos**

Your TV can display video files from a USB storage device.

- 1 Press **Home** or **MENU** to access the main menus.
- 2 Press the Navigation buttons to scroll to **MY MEDIA** and press **ENTER**.
- 3 Press the Navigation buttons to scroll to **Movie** List and press ENTER.
- 4 Select **Drive1** to access the connected USB storage device.
- 5 Press the Navigation buttons to scroll to a folder/file you want and press **ENTER**.
- 6 Play a movie by using the following menus/ buttons.

🛞 Movie List		Page 1/1	
	Drive1		
<u>М</u> 1	M2	M3	<u>□</u> M4
M5	Butterfly 01:34:33		
		•Move ⊛Play CH <mark>S</mark> P.	age Change 🖾 🖾 Mark
To Photo List	Change Numbers	Mark Mode	() Exit
Movie List	Drive1	Page 1/1	Page 1/1
	Drive 1	Page 1/1	Page 1/1
USB 1 XTICK			-
USB I XTICK	M2		-
USB I XTICK	M2 M2 Mitelly	С мз	<u>☐ M4</u>
USB 1 XTICK	M2 M2 Mitelly	С мз	-

Button	Description
Navigation button	Scrolls through the files.
ENTER	Plays the highlighted file or enters the mark mode.
CH (ʌ, v)	Moves to the previous or next page.
MARK	Enters the mark mode.
Menu	Description
Play Marked	Plays the selected video.
Mark All	Selects all files.
Unmark All	Clears all of your selections.
Exit Mark Mode	Exit 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 the playback.
	Plays a video.
II	Pauses or resumes the playback.
•	Scans backward in a file.
₩	Scans forward in a file.
I and 🕨	Plays videos in slow motion.
< or >	Skips to specific points in a file during playback. The time of a specific point will appear on the status bar. In some files, this function may not work properly.
ENERGY SAVING	Increases or deceases the brightness of your screen.
•.MENU	Shows the Option menu (See p.60).
AV MODE	Selects the desired source.
BACK or RETURN	Hides the menu on screen. To see the menu again, press ENTER button to display.
EXIT	Returns to TV viewing.

# Tips for playing video files

- Some user-created subtitles may not work properly.
- Subtitles may not display some special characters or HTML tags.
- Subtitles in the non-supported languages are unavailable.
- The time information in an external subtitle file should be arranged in ascending order to play.

- The screen may suffer from temporary interruptions such as image stoppage or faster playback when you change the audio language.
- If you play a damaged video file, the video file may not be played correctly or some player functions may not be unavailable.
- The TV may not properly play the video files produced with certain encoders.
- If the recorded file does not have video or audio, either video or audio is not outputted
- If the TV plays the recorded file without video or audio, either video or audio is not outputted.
- The TV may not smoothly play the video files with a resolution higher than the supported resolution for each frame.
- The TV may not properly play the video files not included on the specified type and format.
- The TV may not play the files encoded with GMC (Global Motion Compensation) or guarter-pel motion estimation.
- The TV supports the only files saved in ASCII code in subtitles.
- The maximum number of characters displayed on each subtitle line is 250 (Korean), 500 (English), and 500 (Numbers).
- The TV supports the only 10,000 sync blocks within the subtitle file.
- The TV supports the H.264 codec up to the profile level 4.1.
- The TV does not support DTS audio codec.
- The TV cannot play a video file whose size is larger than 30 GB. The file size limit is dependent on the encoding environment.
- If you play a video file through the USB connection that does not support the high speed, the video player may not work properly.
- The TV supports a USB storage device whose version is lower than 2.0. However, the USB storage device may not work properly in the movie list.
- The video file and its subtitle should be in the same folder and the name of the video file and subtitle should be identical.
- You can adjust the image by using **ENERGY SAVING** and **AV MODE**. But you cannot customize image options of each mode.
- The TV may not play the video files in the supported file format depending on the encoded condition.

• The TV will not play the video files that has a damaged index or no index.

#### Q.MENU options for movie list

1 Press **•. MENU**.

A pop-up window will appear.

- 2 Press the Navigation buttons to scroll to movie list option and press **ENTER**.
- 3 Press the Navigation buttons to scroll to one of the following options and press **ENTER**.

#### Set Video Play.

Option	Desci	ription	
Picture Size	<ul> <li>Selects your desired picture format for videos.</li> <li>Full Mode: Files are played in full screen mode according to the aspect ratio of video.</li> <li>Original Mode: Files are played in their native size.</li> </ul>		
Audio Language	Changes the Language Group of the audio for video files. Files with a single audio track cannot be selected.		
Subtitle Language	The subtitles can be turned on or off.		
Language	Activated for SMI subtitles and can select the language within the subtitle.		
	Subtitle font selection. When set to default, contents are displayed in the language set in "Option - Language - Menu Language."		
Code Page	Subtitle Language Group	Supported Language	
	Latin1	English, Spanish, French	
	Korean	English, Korean	
Sync	If the video is not synchronized with the captions, it can be adjusted by 0.5 second.		
Position	Move the location of the subtitles.		
Size	Changes the subtitle font size.		
Repeat	Turn on/off repeat function of movie playback. When turned on, the file within the folder will be played back repeatedly. When turned off, if the next file name is similar to the previous file, it can be played sequentially.		

# 

- When replaying a video file after stopping, select "Yes" to restart where it previously stopped.
- If continuous series files exist within the folder, the next file will automatically be played. But, this excludes cases when the Repeat function of Movie List Option is turned "On" (See p.60) or when set as **Play Marked**.

### Set Video.

Allows you to change Video presets. (Refer to "PICTURE Settings" on p.68).

#### Set Audio.

Allows you to change Audio presets. (Refer to "AUDIO Settings" on p.73).

# DivX® VOD Guide

#### DivX® VOD Registration

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

- 1 Press **Home** or **MENU** to access the main menus.
- 2 Press the Navigation buttons to scroll to MY MEDIA and press ENTER.
- 3 Press the Blue button.
- 4 Press the Navigation buttons to scroll to **DivX VOD Registration** and press **ENTER**.
- 5 View the registration code of your TV.



6 When you are finished, press ENTER.

# 

- While you are checking the registration code, some buttons may not work.
- If you use the DivX registration code of another device, you cannot play the rented or purchased DivX file. Make sure to use the DivX registration code assigned to your TV.
- The video or audio files that are not converted by the standard DivX codec may be corrupted or not be played.
- The DivX VOD code allows you to activate up to 6 devices under one account.

### DivX® VOD Deregistration

You should deregister your device with 8 digit DivX deregistration code from your device at www.divx. com/vod.

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

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



6 When you are finished, press EXIT. When you return to the previous menu, press BACK or RETURN.

# **Viewing Photos**

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

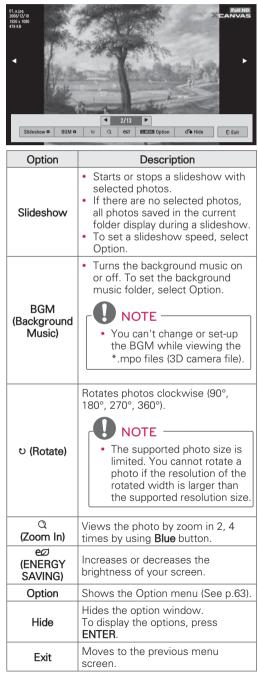
- 1 Press **Home** or **MENU** to access the main menus.
- 2 Press the Navigation buttons to scroll to **MY MEDIA** and press **ENTER**.
- 3 Press the Navigation buttons to scroll to **Photo** List and press ENTER.
- 4 Select **Drive1** to access the connected USB storage device.
- 5 Press the Navigation buttons to scroll to a folder/file you want and press **ENTER**.
- 6 View photos by using the following menus/ buttons.



Button	Description
Navigation button	Scrolls the file.
ENTER	Views the highlighted file or enters the mark mode.
CH (ʌ, v)	Moves to the previous or next page.
MARK	Enters the mark mode.
Menu	Description
View Marked	Views the selected photo.
Mark All	Selects all files
Unmark All	Clears all of your selections.
Exit Mark Mode	Exits the Mark Mode.

# 

- 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 values changed in Photo List do not affect Movie List and Music List.
- Option values changed in Photo List or Music List are changed likewise in Photo List and Music List, but not Movie List.

## Q.MENU options for photo list

- 1 Press ●. MENU.
  - A pop-up window will appears.
- 2 Press the Navigation buttons to scroll to photo list option and press **ENTER**.
- 3 Press the Navigation buttons to scroll to one of the following options and press **ENTER**.

### Set Photo View.

Option	Description	
Slide Speed	Selects a slideshow speed (Fast, Medium, Slow).	
BGM	Selects a music folder for the background music. • Repeat • Random • NOTE • You cannot change the music folder while the background music is playing.	

# Set Video.

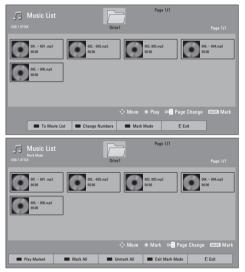
Allows you to change Video presets. (Refer to "PICTURE Settings" on p.68).

# Set Audio.

Allows you to change Audio presets. (Refer to "AUDIO Settings" on p.73).

# Listening to music

- 1 Press **Home** or **MENU** to access the main menus.
- 2 Press the Navigation buttons to scroll to **MY MEDIA** and press **ENTER**.
- 3 Press the Navigation buttons to scroll to **Music** List and press ENTER.
- 4 Select **Drive1** to access the connected USB storage device.
- 5 Press the Navigation buttons to scroll to a folder/file you want and press **ENTER**.
- 6 Play music by using the following menus/ buttons.



Button	Description
Navigation button	Scrolls through the files.
ENTER	Plays the highlighted file or enters the mark mode.
CH (ʌ, v)	Moves to the previous or next page.
MARK	Enters the mark mode.
Menu	Description
Play Marked	Plays the selected music file.
Mark All	Selects all files.
Unmark All	Clears all of your selections.
Exit Mark Mode	Exits the Mark Mode.

# 

- Shormal files are displayed using this graphic.
- Solution: Non-supported files are displayed using this graphic.
- 7 Control playback by using the following buttons.

Button	Description
	Stops playback.
•	Plays a music file.
II	Pauses or resumes playback.
*	Skips to the previous file.
*	Skips to the next file.
Play with Photo	Displays photos during playback.
eø (ENERGY SAVING)	Increases or deceases the brightness of your screen.
Option	Shows the Option menu (See p.65).
Hide	Hides the option window. To display the options, press ENTER.
Exit	Moves to the previous menu screen.

#### Q.MENU options for music list

- Press •. MENU.
   A pop-up window will appears.
- 2 Press the Navigation buttons to scroll to music list option and press **ENTER**.
- 3 Press the Navigation buttons to scroll to one of the following options and press **ENTER**.



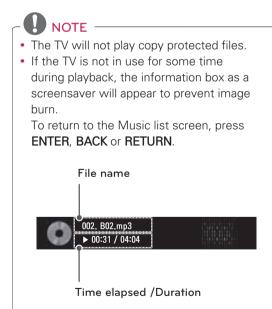
- Option values changed in Movie List does not affect the Photo List and Music List.
- Option value changed in Photo List and Music List are changed likewise in Photo List and Music List.

## Set Audio Play.

Select Repeat or Random option.

### Set Audio.

Allows you to change Audio presets. (Refer to "AUDIO Settings" on p.73).



# CUSTOMIZING TV SETTINGS

# The Main Menus

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

Menu (Depending on model)		Description	
	CHANNEL	Sets up and edit channels.	
	PICTURE	Adjusts the image size, quality, or effect.	
$\bigcirc$	AUDIO	Adjusts the sound quality, effect, or volume level.	
$\bigcirc$	TIME	Sets the time, date, or Timer feature.	
	LOCK	Locks or unlocks channels and programs.	
	OPTION	Customizes the general settings.	
	INPUT	Views the input sources with their labels.	
R	MY MEDIA	Displays and play movie, photo and music content stored on your USB.	

# 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.

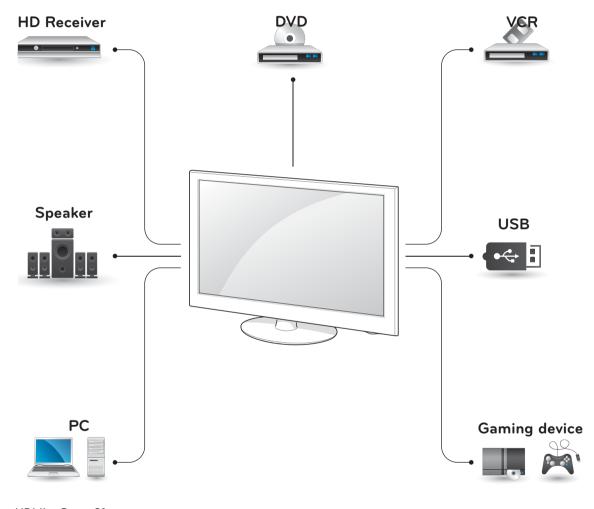
#### 

- 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.



HDMI – See p.81 DVI – See p.81 Component – See p.82 Composite – See p.82 Digital – See p.85 RGB – See p.84 Memory storage – See p.85 Memory card reader – See p.85

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

• This part of MAKING CONNECTIONS mainly uses picture for PW350, LV3500 series.

# Connecting to a HD receiver, DVD or VCR player

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

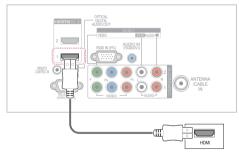
# **HDMI** Connection

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

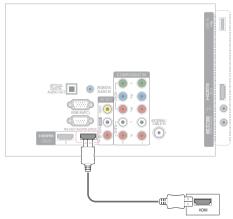
# NOTE -

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

## PW350 series



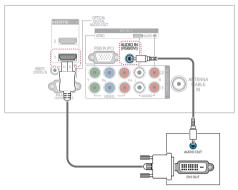
# LV3500 series



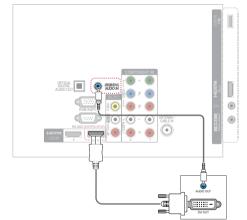
# DVI to HDMI Connection

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

# PW350 series



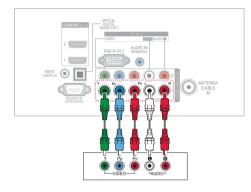
# LV3500 series



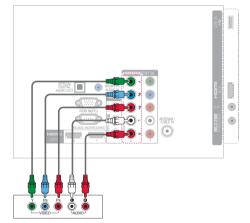
# **Component Connection**

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.

### PW350 series



# LV3500 series



# 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.

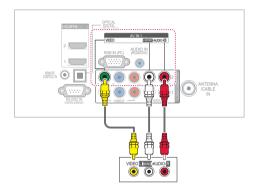
# **Composite Connection**

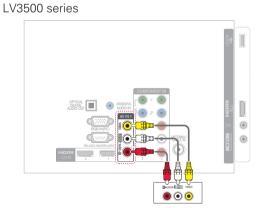
Transmits the analog video and audio signals from an external device to the TV. Connect the external device and the TV with the composite cable as shown in the following illustration.

# NOTE -

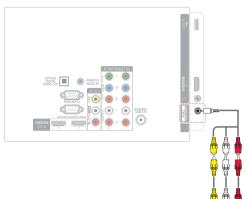
• If you have a mono VCR, connect the audio cable from the VCR to the AUDIO L/MONO jack of the TV.

### PW350 series





(For only 32LV2500, 32LV2520, 32LV255C, LV3500, LV3520, LV355B, LV355C, LV5300, LW5000, LW50300, LW505C series)



# Connecting to a PC

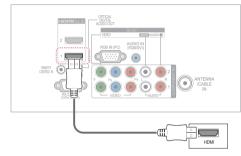


• It is recommended to use the TV set with the HDMI connection for the best image quality.

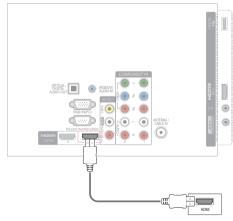
# **HDMI** Connection

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

# PW350 series



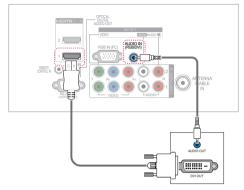
# LV3500 series



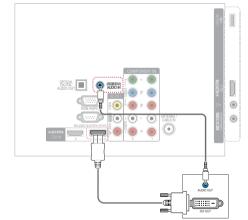
# DVI to HDMI Connection

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

# PW350 series



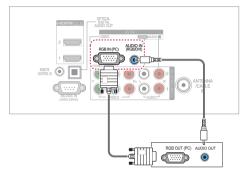
# LV3500 series



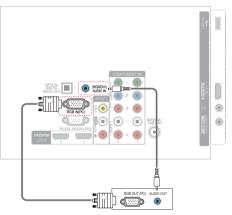
# **RGB** Connection

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

#### PW350 series



# LV3500 series



# 

• To get the best picture quality, adjust the PC graphics card to

	Resolution
22LV2500, 32LV255C, LV3500, LV3520, LV355B, LV355C, LV5300, LW5000, LW5300, LW505C, LK430, LK450, LK451C, LK453C, LK520 series	1920x1080
Other models	1360x768

Plasma	Resolution
PZ200 series	1920x1080
Other models	1024x768

- 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.
- Avoid keeping a fixed image on the screen for a long period of time. The fixed image may become permanently imprinted on the screen.
- 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.
- When selecting HDMI-PC, set the "Input Label - PC" in the INPUT menu.

# Connecting to an Audio System

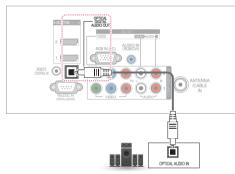
Use an optional external audio system instead of the built-in speaker.

- If you use an optional external audio device instead of the built-in speaker, set the TV speaker feature to off (See p.73).

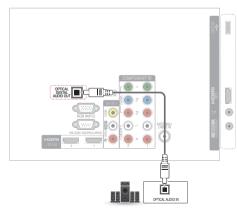
# Digital optical audio connection

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

# PW350 series



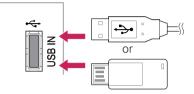
# LV3500 series



# Connecting to a USB

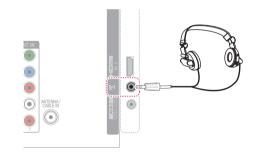
(Not support for PZ200 series)

Connect a USB storage device such as a USB flash memory, external hard drive or a USB memory card reader to the TV and access the My media menu to use various multimedia files. See "Connecting USB storage devices" on p.55 and "Browsing files" on p. 56.



# Connecting to a Headphone ()

Listen to the sound through a headphone.



# 

- AUDIO menu options are disabled when connecting a headphone.
- When changing AV MODE with a headphone connected, the change is applied to video but not to audio.
- Optical Digital Audio Out is not available when connecting a headphone.
- Headphone impedance: 16  $\Omega$
- Max audio output: 10 mW to 15 mW
- Headphone jack size: 0.35 cm (0.13 inches)

# **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 Simpling logo are fully supported.

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

- **()** NOTE -
- If the connected device does not support HDMI-CEC, the SIMPLINK feature is unavailable.
- To operate SIMPLINK, 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 **ENTER**.



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

- 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, ENTER,
     ▶, ■, ■, ▲ 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.
  - Sync Power on: When the equipment with SIMPLINK function connected HDMI terminal starts to play, The TV will automatically turn on.

# 

- 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.
- If a connected SIMPLINK home theater system does not play the audio from the TV, connect the DIGITAL AUDIO OUT terminal on the rear of the TV to the DIGITAL AUDIO IN terminal on the back of the SIMPLINK device with an optical cable.

# MAINTENANCE

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

# Cleaning Your TV

# - CAUTION -

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

# Screen and frame

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

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

# 

- 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.

# Cabinet and stand

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

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



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

# Power cord

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

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



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

# TROUBLESHOOTING

# General

Problem	Resolution	
Cannot control the TV with the remote control.	<ul> <li>Check the remote control sensor on the product and try again.</li> <li>Check if there is any obstacle between the product and the remote control.</li> <li>Check if the batteries are still working and properly installed (⊕ to ⊕, ⊝ to ⊝).</li> <li>Check if the appropriate input mode such as TV or VCR is set for using the remote control.</li> </ul>	
No image display and no sound is produced.	<ul> <li>Check if the product is turned on.</li> <li>Check if the power cord is connected to a wall outlet.</li> <li>Check if there is a problem in the wall outlet by connecting other products.</li> </ul>	
Image appears slowly when the TV turns on.	• 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.	<ul> <li>Check the power control settings. The power supply may be interrupted.</li> <li>Check if the Auto sleep feature is activated in the Time settings. Refer to the "Sleep Timer".</li> <li>If there is no signal while the TV is on, the TV will turn off automatically after 15 minutes of inactivity. (Depending on model)</li> </ul>	

# Audio

Problem	Resolution	
No sound is produced while images are displaying.	<ul> <li>Press VOL + or - button.</li> <li>Check if the sound is muted by pressing MUTE.</li> <li>Scroll to other channels. There may a problem with the broadcast.</li> <li>Check if the TV Speaker feature is activated in the menu option.</li> </ul>	
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.	<ul> <li>Adjust the color setting in the menu option.</li> <li>Keep a sufficient distance between this product and other electronic products.</li> <li>Scroll to other channels. There may a problem with the broadcast.</li> </ul>		
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.	<ul> <li>Check if the signal cable is connected between the TV and products properly.</li> <li>Check the selected input source by pressing INPUT.</li> </ul>		
Black spots appear on the screen.	<ul> <li>Several pixels in red, green, white, or black may appear on the screen that can attribute to the characteristics of the panel.</li> <li>This is normal.</li> </ul>		
The display offset is wrong.	<ul> <li>Adjust the position setting in the Picture menu.</li> <li>Check if the video card resolution and frequency are supported by the product. If the frequency is out of range, set to the recommended resolution using the display settings on the external device.</li> </ul>		
Thin lines appear in the background of the screen.	Check the video cable connections.		
Horizontal noises appear or characters blur.	<ul> <li>Adjust the Phase setting in the menu option. Refer to the "SCREEN (RGB-PC)".</li> </ul>		
The reception on some channels is poor	<ul> <li>Scroll to other channels. There may a problem with the broadcast.</li> <li>The station signal may be weak. Aim the antenna to the proper direction.</li> <li>Check if there is local interferences such as an electrical appliance or power tool.</li> </ul>		

# Movie

Problem	Resolution	
The file does not appear on the Movie List.	Check whether the extension is supported.	
Message is displayed saying "This file is invalid" or the audio is working normally but the video is not working normally.	<ul> <li>Check whether the file is playing normally on a PC. (Check whether the file is damaged.)</li> <li>Check whether the resolution is supported.</li> <li>Check whether the video/audio codec is supported.</li> <li>Check whether the frame rate is supported.</li> </ul>	
Message is displayed saying "Unsupported Audio" or the video is working normally but the audio is not working normally.	<ul> <li>Check whether the file is playing normally on a PC. (Check whether the file is damaged.)</li> <li>Check whether the audio codec is supported.</li> <li>Check whether the bit rate is supported.</li> <li>Check whether the sample rate is supported.</li> </ul>	
Subtitle is not working.	<ul> <li>Check whether the file is playing normally on a PC. (Check whether the file is damaged.)</li> <li>Check whether the video file and subtitle file name are the same.</li> <li>Check whether the video file and subtitle file are located in the same folder.</li> <li>Check whether the subtitle file is supported.</li> <li>Check whether the language is supported. (When you open the subtitle file in Memo Pad, you can check the language of the subtitle file.)</li> </ul>	

# 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		42PW340 (42PW340-UB)	50PW340 (50PW340-UB)
		42PW350 (42PW350-UE)	50PW350 (50PW350-UE)
		42PW350U (42PW350U-UC)	50PW350U (50PW350U-UC)
		42PW350R (42PW350R-MA)	50PW350R (50PW350R-MA)
Dimensions (W x H x D)	With stand	991.8 mm x 667.0 mm x 230.5 mm (39.0 inch x 26.2 inch x 9.0 inch)	1176.1 mm x 774.7 mm x 289.8 mm (46.3inch x 30.5 inch x 11.4 inch)
	Without stand	991.8 mm x 613.8 mm x 52.5 mm (39.0 inch x 24.1 inch x 2.0 inch)	1176.1 mm x 716.5 mm x 52.5 mm (46.3 inch x 28.2 inch x 2.0 inch)
Weight	With stand	21.5 kg (47.3 lbs)	29.6 kg (65.2 lbs)
	Without stand	20.0 kg (44.0 lbs)	27.3 kg (60.1 lbs)
Current Value / Power consumption		2.3 A / 230 W	3.0 A / 300 W
Power requirement		AC100 - 240	V ~ 50/60 Hz

MODELS		50PZ200 (50PZ200-UA)	60PZ200 (60PZ200-UA)	
Dimensions (W x H x D)	With stand	1171.9 mm x 770.9 mm x 289.8 mm (46.1 inch x 30.3 inch x 11.4 inch)	1390.8 mm x 905.2 mm x 334.7 mm (54.7 inch x 35.6 inch x 13.1 inch)	
	Without stand	1171.9 mm x 712.2 mm x 52.5 mm (46.1 inch x 28.0 inch x 2.0 inch)	1390.8 mm x 835.5 mm x 52.5 mm (54.7 inch x 32.8 inch x 2.0 inch)	
Weight	With stand	29.8 kg (65.6 lbs)	42.6 kg (93.9 lbs)	
	Without stand	27.5 kg (60.6 lbs)	38.5 kg (84.8 lbs)	
Current Value / Power consumption		3.5 A / 350 W	5.3 A / 530 W	
Power requirement		AC100 - 240	AC100 - 240 V ~ 50/60 Hz	

MODELS		42LV3500 (42LV3500-UA)	47LV3500 (47LV3500-UA) 47LV355B (47LV355B-UA) 47LV3500 (47LV3500-UG)
		42LV3500 (42LV3500-UG)	
		42LV3520 (42LV3520-UC)	
		42LV3520 (42LV3520-UJ)	
		42LV355B (42LV355B-UA)	
		42LV355C (42LV355C-UA)	
Dimensions (W x H x D)	With stand	998.0 mm x 684.0 mm x 256.0 mm (39.2 inch x 26.9 inch x 10.0 inch)	1108.0 mm x 746.0 mm x 256.0 mm (43.6 inch x 29.3 inch x 10.0 inch)
	Without stand	998.0 mm x 615.0 mm x 30.4 mm (39.2 inch x 24.2 inch x 1.1 inch)	1108.0 mm x 677.0 mm x 30.4 mm (43.6 inch x 26.6 inch x 1.1 inch)
Weight	With stand	15.5 kg (34.1 lbs)	20.9 kg (46.0 lbs)
	Without stand	13.3 kg (29.3 lbs)	18.7 kg (41.2 lbs)
Current Value / Power consumption		1.1 A / 110 W	1.4 A / 140 W
Power requirement			AC 120 V ~ 50 / 60 Hz )0 - 240 V ~ 50 / 60 Hz

		55LV3500 (55LV3500-UA)
	MODELS	55LV355B (55LV355B-UA)
		55LV355C (55LV355C-UA)
Dimensions (W x H x D)	With stand	1286.0 mm x 847.0 mm x 338.0 mm (50.6 inch x 33.3 inch x 13.3 inch)
	Without stand	1286.0 mm x 778.0 mm x 30.4 mm (50.6 inch x 30.6 inch x 1.1 inch)
Weight	With stand	25.5 kg (56.2 lbs)
	Without stand	21.4 kg (47.1 lbs)
Current Value / Power consumption		1.6 A / 160 W
Power requirement		USA, Canada, Mexico: AC 120 V ~ 50 / 60 Hz Other Country: AC 100 - 240 V ~ 50 / 60 Hz

MODELS		55LV5300 (55LV5300-UA)
Dimensions (W x H x D)	With stand	1306.0 mm x 867.0 mm x 328.0 mm (51.4 inch x 34.1 inch x 12.9 inch)
	Without stand	1306.0 mm x 797.0 mm x 30.7 mm (51.4 inch x 31.3 inch x 1.2 inch)
Weight	With stand	34.0 kg (74.9 lbs)
	Without stand	28.8 kg (63.4 lbs)
Current Value / Power consumption		2.0 A / 200 W
Power requirement		USA, Canada, Mexico: AC 120 V ~ 50 / 60 Hz Other Country: AC 100 - 240 V ~ 50 / 60 Hz

	Resolution	Resolution Horizontal Frequency (KHz)	
	720×400	31.469	70.08
	640x480	31.469	59.94
	800×600	37.879	60.31
	1024x768	48.363	60.00
Γ	1360x768	47.712	60.015
	1280x1024	63.981	60.02
	1920x1080 RGB-PC	66.587	59.934
	1920x1080 HDMI-PC	67.5	60.00

#### RGB (PC), HDMI (PC) supported mode ( 🚎 )

For 50/60PZ200

### RGB (PC), HDMI (PC) supported mode ( 📺 )

Resolution	Horizontal Frequency (KHz)	Vertical Frequency (Hz)
720×400	31.469	70.08
640×480	31.469	59.94
800×600	37.879	60.31
1024x768	48.363	60.00
1360x768	47.712	60.015
1280x768 RGB-PC	47.776	59.870
1280x1024	63.981	60.02
1920x1080 RGB-PC	66.587	59.934
1920x1080 HDMI-PC	67.5	60.00

For 22LV2500, 32LV255C,

32/37/42/47/55LV3500, 32/42LV3520, 42/47/55LV355B, 42/55LV355C, 55LV5300, 42/47/55LW5000, 42/47/55LW5300, 42LW505C, 32/42LK430, 32/37/42/47LK450, 42/47LK451C, 32/37/42LK453C, 42/47/55LK520

#### Horizontal Vertical Resolution Frequency (KHz) Frequency (Hz) 31.47 59.94 720x480p 31.50 60.00 44.96 59.94 1280x720p 45.00 60.00 33.72 59.94 1920x1080i 33.75 60.00 26.97 23.976

24.00

29.97

30.00

59.94

60.00

HDMI (DTV) supported mode ( 🚞 🛄 )

### Component port connecting information

27.00

33.71

33.75

67.50

67.432

1920x1080p

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

### Component supported mode ( 🚞 🛄 )

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

# Video Supported Formats (Depending on model)

File Extension name	Video Decoder	Audio Codec	Max Resolution
mpg, mpeg	MPEG1, MPEG2	MP2, MP3, Dolby Digital, LPCM	
dat	MPEG1	MP2	
ts, trp, tp	MPEG2, H.264, AVS, VC1	MP2, MP3, Dolby Digital, AAC, HE-AAC	
vob	MPEG1, 2	MP2, MP3, Dolby Digital, LPCM	
mp4, mov	MPEG4,DivX 3.11, DivX 4.12, DivX 5.x, DivX 6, Xvid 1.00, Xvid 1.01, Xvid 1.02, Xvid 1.03, Xvid 1.10-beta1/2H.264	AAC, HE-AAC, MP3	- 1920 x 1080 @ 30p (Only Motion JPEG 640x480@30p)
mkv	H.264, MPEG-1,2,4	MP2, MP3, Dolby Digital, AAC HE-AAC, LPCM	
divx, avi	MPEG2, MPEG4, DivX 3.11, DivX 4, DivX 5, DivX 6, Xvid 1.00, Xvid 1.01, Xvid 1.02, Xvid 1.03, Xvid 1.10-beta1/2H.264	MP2, MP3, Dolby Digital, LPCM, ADPCM, AAC, HE-AAC	
Motion JPEG (avi, mp4, mkv)	JPEG	LPCM, ADPCM	
asf, wmv VC1		WMA	
flv	Sorenson H.263, H264	MP3, AAC	

# 3D Supported Formats (For 3D TV)

	Signal	Resolution	Horizontal Frequency (kHz)	Vertical Frequency (Hz)	Playable 3D video format
	720p	1280x720	44.96 / 45.00		Top & Bottom, Side by Side
	720p	1200x720	89.90 / 90.00	59.94 / 60.00	HDMI 3D Frame Packing
	1080i		33.72 / 33.75	59.94 / 60.00	Top & Bottom, Side by Side
HDMI Input			67.432 / 67.50		Top & Bottom, Side by Side, Checker Board Single Frame Sequential
	1080p	1920x1080	27.00	24.00	Top & Bottom, Side by Side, Checker Board
	1080p		53.95 / 54.00	23.98 / 24.00	HDMI 3D Frame Packing
			33.75	30.00	Top & Bottom, Side by Side Checker Board
	1080p	1920x1080	33.75	30.00	Top & Bottom, Side by Side Checker Board, MPO (Photo)
USB Input	Resolution			Playable 3D video format	
	Other Resolu	tion (For Plas	ma TV)	Top & Bottom, Side by Side	
PC Input (PZ200, LW5000, LW5300, LW505C series)	1920×1080		66.587	59.93	Top & Bottom, Side by Side
Component	720p	1280x720	44.96 / 45.00	59.94 / 60.00	
(For Plasma TV)	1080i 1920x1080		33.72 / 33.75	59.94 / 60.00	Top & Bottom, Side by Side
	Signal		·	·	Playable 3D video format
DTV	720p, 1080i				Top & Bottom, Side by Side

# **IR CODES**

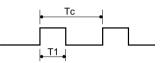
(Depending on model)

How to Connect Connect your wired remote control to the Remote Control port on the TV.

# Remote Control IR Codes

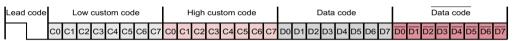
# Output waveform

Single pulse, modulated with 37.917kHz signal at 455kHz



# Frame configuration

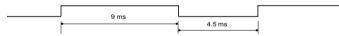
1st frame



Repeat frame



# Lead code



# Repeat code



# Bit description



# Frame interval: Tf

The waveform is transmitted as long as a key is depressed.



Code (Hexa)		Function	Note	Code (Hexa)	Function	Note	
08		POWER	Remote control Button	OF	TV	Remote control Button	
			(Power On/Off)	DC	3D	Remote control Button	
45		Q.MENU	Remote control Button	5B	EXIT	Remote control Button	
43		Home or MENU	Remote control Button	OC	PORTAL	Remote control Button	
0B		INPUT	Remote control Button	AB	GUIDE	Remote control Button	
10 -	19	Number Key 0-9	Remote control Button	D6	TV	Discrete IR Code	
4C		- (Dash)/LIST	Remote control Button			(TV Input Selection)	
1A		FLASHBK or Q.VIEW	Remote control Button	C4	POWER ON	Discrete IR Code (Only Power On)	
9		MUTE/DELETE	Remote control Button				
2		VOL +	Remote control Button	C5	POWER OFF	Discrete IR Code	
3		VOL -	Remote control Button			(Only Power Off)	
0		СН 🔨	Remote control Button	5A	AV1	Discrete IR Code	
1		CH <b>v</b>	Remote control Button			(AV1 Input Selection)	
1E		FAV/MARK	Remote control Button	D0	AV2	Discrete IR Code	
40		^	Remote control Button			(AV2 Input Selection)	
41		v	Remote control Button	BF	COMPONENT1	Discrete IR Code (Component1 Input	
7		<	Remote control Button			Selection)	
6		>	Remote control Button	D4	COMPONENT2	Discrete IR Code (Component2 Input Selection)	
44		ENTER	Remote control Button	_			
28		BACK or RETURN	Remote control Button	D5	RGB-PC	Discrete IR Code (RGB-PC Input Selection)	
79	~	RATIO	Remote control Button	_			
	( 📺 )	FREEZE	Remote control Button	CE	HDMI1	Discrete IR Code (HDMI1 Input Selection)	
95		ENERGY SAVING	Remote control Button	_			
7E		SIMPLINK	Remote control Button		HDMI2	Discrete IR Code (HDMI2 Input Selection)	
AA		INFO	Remote control Button	_			
30		AV MODE	Remote control Button	E9	HDMI3	Discrete IR Code (HDMI3 Input Selection)	
B1			Remote control Button	_			
B0		► 	Remote control Button	DA	HDMI4	Discrete IR Code (HDMI4 Input Selection)	
BA		<b>II</b>	Remote control Button	_			
8E			Remote control Button	76	Ratio 4:3	Discrete IR Code (Only 4:3 Mode)	
8F		••	Remote control Button	_			
72	C1	RED	Remote control Button	77	Ratio 16:9	Discrete IR Code (Only 16:9 Mode)	
71	C0	GREEN	Remote control Button	_			
63	C2	YELLOW	Remote control Button	AF	Ratio Zoom	Discrete IR Code (Only Zoom Mode)	
61	C3	BLUE	Remote control Button				

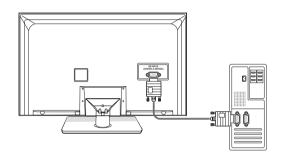
For LV255C, LV355B, LV355C series

# EXTERNAL CONTROL DEVICE SETUP

# RS-232C Setup

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

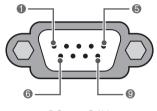
Connect the serial port of the control device to the RS-232C jack on the product back panel.



# NOTE

• RS-232C on this unit is intended to be used with third party RS-232C control hardware and software. The instructions below are provided to help with programming software or to test functionality using telenet software. RS-232C connection cables are not supplied with the product.

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



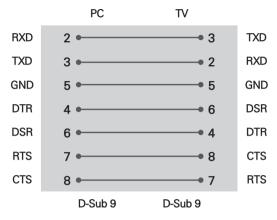
RS-232C IN (CONTROL & SERVICE)

No.	Pin name
1	No connection
2	RXD (Receive data)
3	TXD (Transmit data)
4	DTR (DTE side ready)
5	GND
6	DSR (DCE side ready)
7	RTS (Ready to send)
8	CTS (Clear to send)
9	No Connection

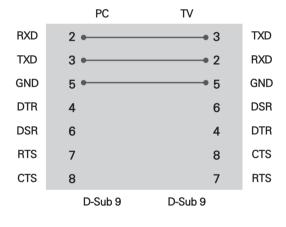
# **RS-232C** configurations

7-Wire Configuration

(Serial female-female NULL modem cable)

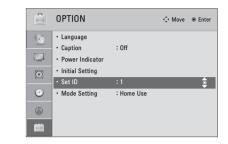


## 3-Wire Configurations(Not standard)

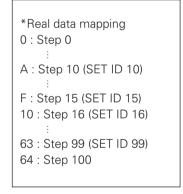


## Set ID

Set ID number.



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



# **Communication Parameters**

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

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

# Command reference list

	COMMAND1	COMMAND2	DATA (Hexadecimal)		COMMAND1	COMMAND2	DATA (Hexadecimal)
01. Power	k	а	00 - 01	14. Treble	k	r	00 - 64
02. Input Select	х	b	(See p.104)	15. Bass	k	s	00 - 64
03. Aspect Ratio	k	С	(See p.104)	16. Balance	k	t	00 - 64
04. Screen Mute	k	d	00 - 01	17. 3D (For 3D TV)	x	t	(See p.105)
05. Volume Mute	k	е	00 - 01	18. Color Temperature	x	u	00 - 64
06. Volume Control	k	f	00 - 64	19. Extended 3D (For 3D TV)	x	v	(See p.105)
07. Contrast	k	g	00 - 64	20. ISM Method ( 📷 )	j	р	(See p.106)
08. Brightness	k	h	00 - 64	21. Energy Saving	j	q	(See p.106)
09. Color	k	i	00 - 64	22. Auto Configuration	j	u	(See p.106)
10. Tint	k	j	00 - 64	24. Channel Add/Del	m	b	00 - 01
11. Sharpness	k	k	00 - 64	25. Key	m	с	(See p.106)
12. OSD Select	k	1	00 - 01	26. 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	а	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

#### 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 60: RGB-PC 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  $\sim$  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  $\sim$  Max: 64 (\*transmit by Hexadecimal code)

\*Refer to "Real data mapping".

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

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

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

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

Data 00: OSD off Data 01: OSD on Acknowledgement []][ ][Set IDI[ ][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  $\sim$  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  $\sim$  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. 3D (Command: x t) (For 3D TV)

To change 3D mode for TV.

Transmission [x][t][ ][Set ID][ ][Data01] [ ][Data02][ ][Data03][ ][Data04][Cr]

Data1

00: 3D On	01: 3D Off
02: 3D to 2D	03: 2D to 3D
Data2	

00: Top and Bottom 01: Side by Side 02: Check Board 03: Frame Sequential Data3

00: Right to Left

01: Left to Right

Data4

3D Depth: Min : 00 ~ Max : 14

(\*transmit by Hexadecimal code)

### ( Plasma )

\*If data1 is 00(3D On), data4 has no meaning.

\*If data1 is 01(3D Off) or 02(3D to 2D), data2, data3 and data4 have no meaning.

\*If data1 is 03(2D to 3D), data2 and data3 have no meaning.

Data 1	Data 2	Data 3	Data 4
00	0	0	х
01	x	х	х
02	x	х	х
03	x	x	0

x : Don't care

# ( [ [ ] ]

\*If data1 is 00(3D On), data4 has no meaning. \*If data1 is 01(3D Off) or 02(3D to 2D), data2, data3 and data4 have no meaning.

\*If data1 is 03(2D to 3D), data2 has no meaning.

Data 1	Data 2	Data 3	Data 4
00	0	0	х
01	x	x	х
02	x	x	х
03	x	0	0

x : Don't care

Acknowledgement [t][ ][OK][Data01][Data02] [Data03][Data04][x][t][ ][NG][Data01][x]

#### 18. 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]

#### 19. Extended 3D (Command: x v) (For 3D TV)

To change 3D option for TV.

Transmission [x][v][ ][Set ID][ ][Data01][ ][Data02][Cr] Data1: 3D option

00: 3D Picture Correction

- 01: 3D Depth (2D to 3D Only)
- 02: 3D Viewpoint
- 03: 3D Picture Size

04: 3D Picture Balance

05: 3D Optimization

Data2: It has own range for each 3D option determined by Data1. 1) When Data1 is 00 00: Right to Left 01: Left to Right 2) When Data1 is 01, 02 Data Min: 00 ~ Max: 14 (\*transmit by Hexadecimal code) 3) When Data1 is 03 00: Just Scan 01: 16:9 4) When Data1 is 04 00. Off 01· On 5) When Data1 is 05 Data Min: 00 ~ Max: 02 (\*transmit by Hexadecimal (ahoo Acknowledgement [v][ ][OK][Data1][Data2][x] [v][][NG][Data1][x]

\* Use the feature depending on your model.

### 20. ISM Method (Command: j p) ( 🚎 )

To avoid having a fixed image remain on screen. Transmission [j][p][ ][Set ID][ ][Data][Cr]

Data 02: Orbiter

- 04: White Wash
- 08: Normal
- 20: Color Wash

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

#### 21. 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]

#### 22. 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]

#### 23. Channel Tuning (Command: m a)

To tune channel to following physical/major/minor number.

#### Transmission [m][a][ ][Set ID][ ][Data00][ ][Data01] [ ][Data02][ ][Data03][ ][Data04][ ][Data05][Cr]

Digital channels have a Physical, Major, and Minor channel number. The Physical number is the actual digital channel number, the Major is the number that the channel should be mapped to, and the Minor is the sub-channel. Since the ATSC tuner automatically maps the channel to the Major number, the Physical number is not required when sending a command. Data 00: Physical Channel Number NTSC air: 02~45, NTSC cable: 01, 0E~7D ATSC air: 01~45, ATSC cable: 01~87 Data 01 & 02: Major Channel Number Data 01: High byte Data 02: Low byte Two bytes are available for the Major and Minor, normally only the second byte is used. Data 03 & 04: Minor Channel Number Not needed for NTSC. The table above lists the binary code which must be converted to Hexadecimal before sending. For example: The binary code to tune the sub source to an NTSC cable channel is "1000 0001", which translates to "81" in Hex.

- \* 7th bit : For which source do you want to change the channel.
- \* 6th bit: Use a two part or one part channel. Most cases just use 0 since it's ignored when using NTSC.
- \* 5th bit: Use 0 with NTSC since it can only use the physical channel number. Normally use 1 for ATSC since most times it doesn't matter what the physical number is.
- \* 4th bit: Set to 0.
- \* 3-0 bits: Choose signal type.

\* Tune Command Examples: 1. Tune to the analog (NTSC) cable channel 35. Data 00 = Physical of 35 = 23 Data 01 & 02 = No Major = 00 00 Data 03 & 04 = No Minor = 00 00 Data 05 = 0000 0001 in binary = 01 Total = ma 00 23 00 00 00 00 01

2. Tune to the digital (ATSC) local channel 30-3. Data 00 = Don't know Physical = 00 Data 01 & 02 = Major is 30 = 00 1E Data 03 & 04 = Minor is 3 = 00 03 Data 05 = 0010 0010 in binary = 22 Total = ma 00 00 00 1E 00 03 22

\* Use the feature depending on your model.

#### 24. 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]

### 25. 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.

### 26. Backlight (Command: m g) ( 謹 )

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	х	0	0	0	0	NTSC Air	
1	Sub	1	One	1	No Use	х	0	0	0	1	NTSC Cable	
						х	0	0	1	0	ATSC Air	
						x	0	0	1	1	ATSC Cable_std	
						х	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		
						х	1	1	1	1	Reserved	

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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

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# :: 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.

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Complance 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

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# :: 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 fisheating 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 fördem 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 del'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.

milieuvnendelijkrield 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 삼이왔습니다. 이 선언문을 바탕으로 LG 전자는 모든 경영 활동에서 경제성뿐만 아니라 환경성 및 사회성을 주요 의사 결정의 기준으로 삼음으로써 지속적으로 환경 친회적인 경영을 전개하고 있습니다.

본사는 보다 활발한 환경 보존 활동과 더불어 환경 친회적 제품 개발에 주력해 왔습니다.

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

본 모니터에는 환경에 위해를 주는 부품이 포함되어 있을 수도 있습니다. 따라서 사용이 끝난 모니터는 재활용하는 것이 좋습니다.

폐모니터는 모두 환경 친회적 방식으로 처리됩니다. 현재 세계적으로 운영되고 있는 회수 및 재활용 시스템에는 여러 가지가 있습니다. 대부분의 부품의 경우 재사용 또는 재활용되지만 환경 위해 물질과 중금속은 환경 친화적 방법으로 처리됩니다.

본사의 재활용 프로그램에 대한 자세한 정보는 각 지역의 LG 공급업체나 LG 기업 대표부에 문의하시기 바랍니다.

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)





### English

### Disposal of your old appliance

- 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.
- 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.
- Les éléments électriques et électroniques doivent être jetés séparément, dans les videordures 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.

- 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

- 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.
- 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

- 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

- Tämä merkki tuotteessa tarkoittaa, että tuote kuuluu sähkö- ja elektroniikkalaiteromusta annetun EU-direktiivin 2002/96/EY soveltamisalaan.
- 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

- Όταν ένα προϊόν διαθέτει το δύμβολο ενός διαγραμμένου κάλαθου απορριμμάτων, τότε το προϊόν καλύπτεται από την Ευρωπαϊκή Οδηγία 2002/96/ΕΟΚ.
- 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 αρμόδίο τοπικό γραφείο, υπηρεσία διάθεσης οικιακών απορριμμάτων ή το μαγαξί από το οποίο αγοράσατε το προϊόν.

# **Spanish**

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

- Si en un producto aparece el símbolo de un contenedor de basura tachado, significa que éste se acoge a la Directiva 2002/96/CE.
- Zodos 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

- Quando este símbolo de latão cruzado estiver afixado a um produto, significa que o produto é abrangido pela Directiva Europeia 2002/96/EC.
- 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.
- À eliminação correcta do seu aparelho antigo ajuda a evitar potenciais consequências negativas para o ambiente e para a saúde humana.
- 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

- Keď sa na produkte nachádza tento symbol prečiarknutej smetnej nádoby s kolieskami, znamená to, že daný produkt vyhovuje európskej Smernici č. 2002/96/EC.
- 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.
- Správnou likvidáciou starých zariadení pomôžete predchádzať potenciálnym negatívnym následkom pre prostredie a ľudské zdravie.
- 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

- 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.
- 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.
- Správný způsob likvidace starého elektrického spotřebiče pomáhá zamezit možným negativním dopadům na životní prostředí a zdraví.
- 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

 Ako se na proizvodu nalazi simbol prekrižene kante za smeće, to znači da je proizvod pokriven europskom direktivom 2002/96/EC.

- Električni i elektronski proizvodi ne smiju se odlagati zajedno s komunalnim otpadom, već u posebna odlagališta koja je odredila vlada ili lokalne vlasti.
- Pravilno odlaganje starog proizvoda sprečit če potenci jalne negativne posljedice po okoliš i zdravlje ljudi.
- 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
- A termékhez csatolt áthúzott, kerekes szeméttároló jel jelöli, hogy a termék a 2002/96/EC EU-direktíva hatálya alá esik.
- Minden elektromos és elektronikai terméket a lakossági hulladéktól elkülönítve kell begyüjteni, a kormány vagy az önkormányzatok által kijelölt begyüjtö eszközök használatával.
- 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

- Kiedy do produktu dołączony jest niniejszy przekreślony symbol kołowego pojemnika na śmieci, oznacza to, że produkt jest objęty dyrektywą 2002/96/EC.
- 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.
- 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, przedsiebiorstwem zajmującym się utylizacją odpadów lub sklepem, w którym produkt został kupiony.

# Estonian

#### Kasutuskõlbmatu seadme käitlemise kord

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

# Latvian

#### Vecās elektroierīces nodošana

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

# Lithuanian

#### Senos įrangos atliekų tvarkymas

- 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 sistemą, patvirtintą vyriausybės ar vietos valdžios.
- Teisingas senos įrangos atliekų tvarkymas, padės išvengti neigiamų pasekmių aplinkai ir žmonių sveikatai.
- Dėl išsamesnės informacijos apie senos įrangos tvarkymą, prašome kreiptis į miesto valdžią, atliekų perdirbimo tarnybą arba parduotuvę, kurioje pirkote įrangą.