

## APPENDIX G : USER'S MANUAL

### EUT Type: LCD TV/ Monitor FCC ID.: BEJ32SL80UB



# LCD TV OWNER'S MANUAL

42LH90	32SL80
47LH90	37 SL80
55LH90	42SL80
	47 SL80
	55 SL80

Please read this manual carefully before operating your set and retain it for future reference. The model and serial number of the TV is located on the back and one side of the TV. Record it below should you ever need service.

Model:

Serial:



This product qualifies for ENERGY STAR in the "factory default (Home Use)" setting.

Changing the factory default settings or enabling other features may increase power consumption that could exceed the limits necessary to qualify for ENERGY STAR.

1-800-243-0000	USA, Consumer User			
1-888-865-3026	USA, Commercial User			
1-888-542-2623	CANADA			
LG Customer Information Center				

P/NO : SAC33601906 (0906-REV03)

# WARNING / CAUTION



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.

### 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.

## WARNING / CAUTION

To prevent fire or shock hazards, do not expose this product to rain or moisture.

### FCC NOTICE

#### **Class B digital device**

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 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 not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

### CAUTION

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

# SAFETY INSTRUCTIONS

## **IMPORTANT SAFETY INSTRUCTIONS**

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



Do not use this apparatus near water.





Clean only with dry cloth.



Do not block any ventilation openings. Install in 3 accordance with the manufacturer's instructions.



Do not install near any heat sources such as 4 radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.



Do not defeat the safety purpose of the polarized 5 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.



Protect the power cord from being walked on 6 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 the cart, stand, tripod, bracket, 8 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.



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



Refer all servicing to qualified service personnel. 10 Servicing is required when the apparatus has been damaged in any way, such as powersupply 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.



# SAFETY INSTRUCTIONS



Never touch this apparatus or antenna during a thunder or lighting storm.

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

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

CAUTION concerning the Power Cord: It is recommend 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 servicer. 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 make 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.



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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.



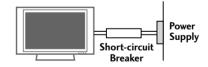
16 Do not expose to dripping or splashing and do not place objects filled with liquids, such as vases, cups, etc. on or over the apparatus (e.g. on shelves above the unit).



### 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.



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#### **DISCONNECTING DEVICE FROM MAINS** Mains plug is the disconnecting device. The plug must remain readily operable.

As long as this unit is connected to the AC wall outlet, it is not disconnected from the AC power source even if you turn off this unit by SWITCH.

#### 20 ANTENNAS

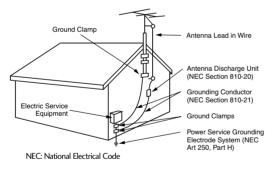
#### Outdoor antenna grounding

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 scrub 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 benzene.

#### 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 against 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 (e.g.) plastic while plugged in. Do not install in excessively dusty places.

- 24 If you smell smoke or other odors coming from the TV or hear strange sounds, unplug the power cord contact an authorized service center.
- 25 Do not press strongly upon the panel with hand or sharp object such as nail, pencil or pen, or make a scratch on it.



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Keep the product away from direct sunlight.

#### For LCD TV

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 monitor'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.

# FEATURE OF THIS TV



High-definition television. High-resolution digital television broadcast and playback system composed of roughly a million or more pixels, 16:9 aspect-ratio screens, and AC3 digital audio. A subset of digital television, HDTV formats include 1080i and 720p resolutions.



This TV contains the detailed calibrations necessary for professional certification by the Imaging Science Foundation. The resulting ISF "day" and "night" modes will then be accessible by the user to experience the best their LG HDTV has to offer.

Sophisticated and detailed calibrations can be made through the ISFccc mode.

Detailed calibration requires a licensed technician.

Please contact your local dealer to inquire about an ISF certified technician.



AV Mode is three preset picture and audio settings. It allows the viewer to quickly switch between common settings. It includes IHX Cinema, Sports, and Game Modes.



A unique invisible speaker system tuned by renowned audio expert, Mr. Mark Levinson. Speakers are embedded in strategic spots behind the front cabinet and use minute vibrations to turn the entire front bezel into the speaker system. The result s a clean, polished look, and enhanced audio by increasing the "sweet spot", giving a wider and richer sound field.



THX (Thomlinson Holman's Experiment) is the audio and video certification standard of THX established by George Lucas, who directed the movie Star Wars, and Thomlinson

This is the product to be certified in THX display area and guarantees screen quality that exceeds the display standard specification in both hardware and software.



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



FISURE is a trademark of SRS Labs, Inc.

TruSurround XT technology is incorporated under license from SRS Labs. Inc.



Automatically enhances and amplifies the sound of human voice frequency range to help keep dialogue audible when background noise swells.



HDMI, the HDMI logo and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC."



Displays HDTV programs in full 1920 x 1080p resolution for a more detailed picture.



TruMotion 240Hz displays 240 scenes per second by combining advanced 120Hz technology with scanning back light. This technology is verified from Intertek & TüV Rheinland.



"DivX Certified to play DivX video up to HD 1080p, including premium content"

ABOUT DIVX VIDEO: DivX® is a digital video format created by DivX,Inc. This is an official DivX Certified device that plays DivX video. Visit www.divx.com for more information and software tools to convert your files into DivX video.

ABOUT DIVX VIDEO-ON-DEMAND: This DivX Certified® device must be registered in order to play DivX Video-on-Demand (VOD) content. To generate the registration code, locate the DivX VOD section in the device setup menu. Go to vod.divx.com with this code to complete the registration process and learn more about DivX VOD.

## IMPORTANT INFORMATION TO PREVENT "IMAGE BURN / BURN-IN" ON YOUR TV SCREEN

- When a fixed image (e.g. logos, screen menus, video game, and computer display) is displayed on the TV for an extended period, it can become permanently imprinted on the screen. This phenomenon is known as "image burn" or "burn-in." Image burn is not covered under the manufacturer's warranty.
- In order to prevent image burn, avoid displaying a fixed image on your TV screen for a prolonged period (2 or more hours for LCD, 1 or more hours for Plasma TV).
- Image burn can also occur on the letterboxed areas of your TV if you use the 4:3 aspect ratio setting for an extended period.

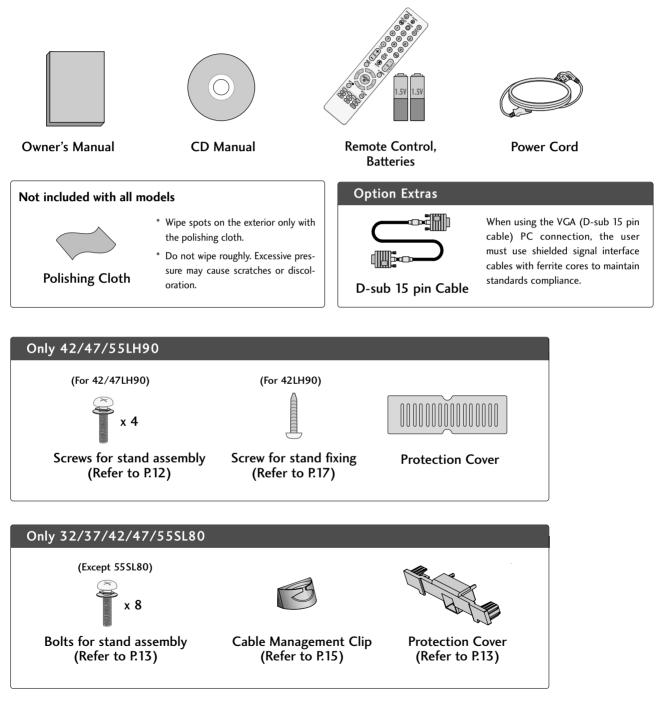


# PREPARATION

## ACCESSORIES

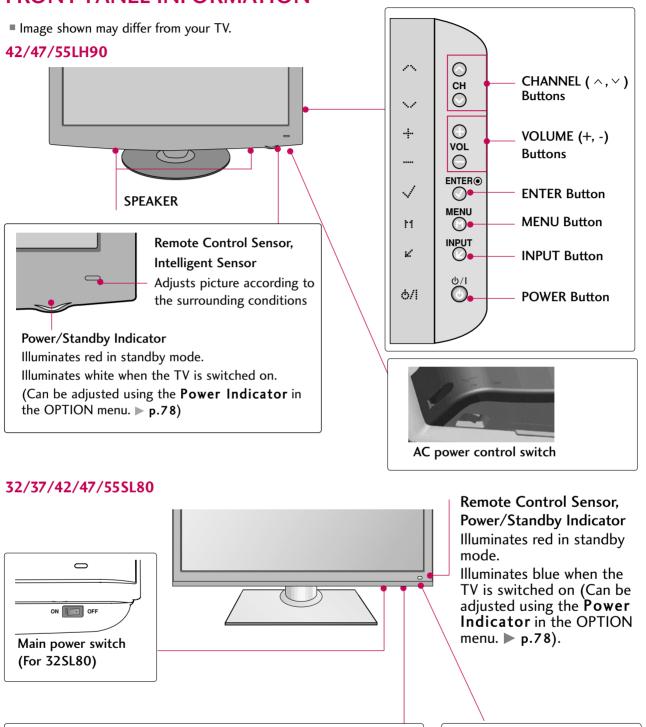
Ensure that the following accessories are included with your TV. If an accessory is missing, please contact the dealer where you purchased the TV.

The accessories included may differ from the images below.

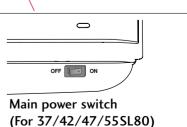


## PREPARATION

## FRONT PANEL INFORMATION

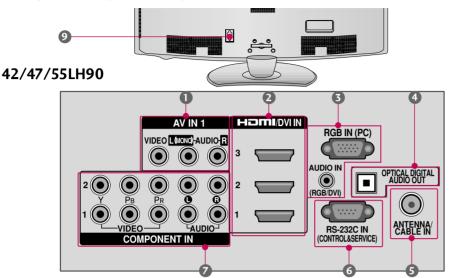


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V A	···· ·	✓ :		:.:	Ċ
CHANNEL (∨, ∧) Buttons	VOLUME (-, +) Buttons		MENU Button		POWER Button

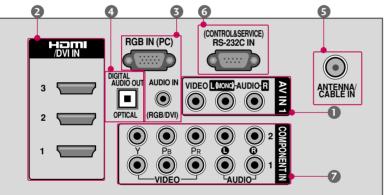


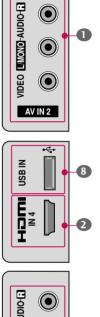
## **BACK PANEL INFORMATION**

Image shown may differ from your TV.



#### 32/37/42/47/55SL82





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### E-MONO-AUDIO-E $\bigcirc$ /IDEO $\bigcirc$ AV IN 2

#### AV (Audio/Video) IN

Analog composite connection. Supports standard definition video only (480i).

#### HDMI/DVI IN, HDMI IN

#### **Digital Connection.**

Supports HD video and Digital audio. Doesn't support 480i.

Accepts DVI video using an adapter or HDMI to DVI cable (not included).

#### **I** RGB IN (PC)

Analog PC Connection. Uses a D-sub 15 pin cable (VGA cable).

#### AUDIO IN (RGB/DVI)

1/8" (0.32 cm) headphone jack for analog PC audio input.

#### OPTICAL DIGITAL AUDIO OUT

Digital optical audio output for use with amps and home theater systems.

Note: In standby mode, this port doesn't work.

#### G ANTENNA/CABLE IN

Connect over-the air signals to this jack. Connect cable signals to this jack.

6 RS-232C IN (CONTROL & SERVICE) PORT Used by third party devices. This port is used for Service or Hotel mode.

#### COMPONENT IN

Analog Connection. Supports HD. Uses a red, green, and blue cable for video & red and white for audio.

#### 8 USB IN

Used for viewing photos/movies and listening to MP3s.

#### Power Cord Socket

For operation with AC power. Caution: Never attempt to operate the TV on DC power.

## PREPARATION

## **VESA WALL MOUNTING**

Install your wall mount on a solid wall perpendicular to the floor. When attaching to other building materials, please contact your nearest installer.

If installed on a ceiling or slanted wall, it may fall and result in severe personal injury.

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

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

Model	VESA (A * B)	Standard Screw	Quantity	Wall Mounting Bracket (sold separately)
32SL80	200 * 100	M4	4	RW230 AW-47LG30M
42LH90, 47LH90, 37SL80, 42SL80, 47SL80,	200 * 200	M6	4	AW-47LG30M
55LH90, 55SL80	400 * 400	M6	4	AW-55LH40M

### NOTE

- Screw length needed depends on the wall mount used. For further information, refer to the instructions included with the mount.
- Standard dimensions for wall mount kits are shown in the table.
- When purchasing our wall mount kit, a detailed installation manual and all parts necessary for assembly are provided.
- Do not use screws longer then the standard dimension, as they may cause damage to the inside to the TV.
- ▶ For wall mounts that do not comply with the VESA

standard screw specifications, the length of the screws may differ depending on their specifications.

Do not use screws that do not comply with the VESA standard screw specifications.

Do not use fasten the screws too strongly, this may damage the TV or cause the TV to a fall, leading to personal injury. LG is not liable for these kinds of accidents.

LG is not liable for TV damage or personal injury when a non-VESA or non specified wall mount is used or the consumer fails to follow the TV installation instructions.

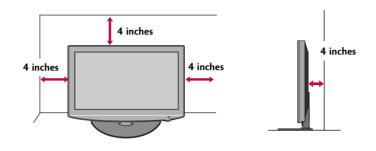
▲ CAUTION ► Do not install your wall mount kit while your TV is turned on. It may result in personal injury due to electric shock.

## PREPARATION

## **DESKTOP PEDESTAL INSTALLATION**

Image shown may differ from your TV.

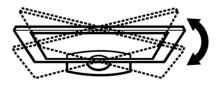
For proper ventilation, allow a clearance of 4 inches on all four sides from the wall.



▲ CAUTION ► Ensure adequate ventilation by following the clearance recommendations. ► Do not mount near or above any type of heat source.

## **SWIVEL STAND**

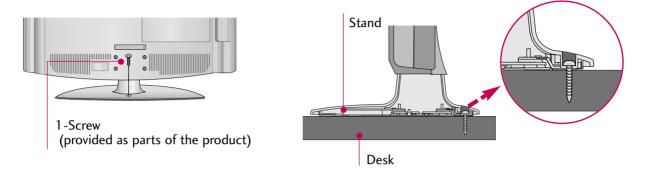
After installing the TV, you can adjust the TV set manually to the left or right direction by 20 degrees to suit your viewing position.



## ATTACHING THE TV TO A DESK (For 42LH90)

Image shown may differ from your TV.

The TV must be attached to a desk so it cannot be pulled in a forward/backward direction, potentially causing injury or damaging the product.



### **WARNING**

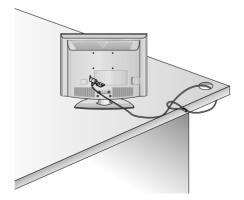
► To prevent TV from falling over, the TV should be securely attached to the floor/wall per installation instructions. Tipping, shaking, or rocking the machine may cause injury.

## **KENSINGTON SECURITY SYSTEM**

- This feature is not available for all models.
- The TV is equipped with a Kensington Security System connector on the back panel. Connect the Kensington Security System cable as shown below.
- For the detailed installation and use of the Kensington Security System, refer to the user's guide provided with the Kensington Security System.

For further information, contact **http://www.kensington.com**, the internet homepage of the Kensington company. Kensington sells security systems for expensive electronic equipment such as notebook PCs and LCD projectors.

NOTE: The Kensington Security System is an optional accessory.



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

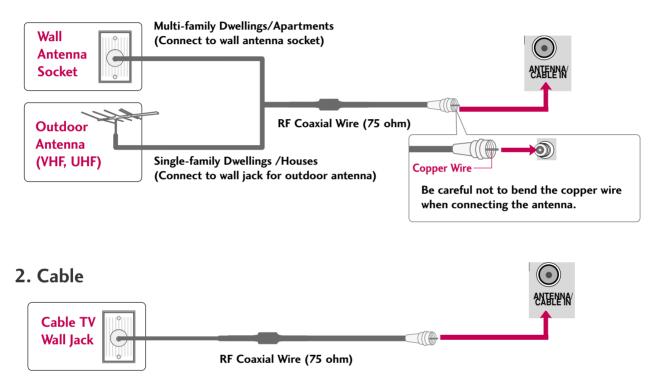
Image shown may differ from your TV.

## ANTENNA OR CABLE CONNECTION

### 1. Antenna (Analog or Digital)

Wall Antenna Socket or Outdoor Antenna without a Cable Box Connections.

For optimum picture quality, adjust antenna direction if needed.



- To improve the picture quality in a poor signal area, please purchase a signal amplifier and install properly.
- If the antenna needs to be split for two TV's, install a 2-Way Signal Splitter.
- If the antenna is not installed properly, contact your dealer for assistance.

# **EXTERNAL EQUIPMENT SETUP**

- To prevent the equipment damage, never plug in any power cords until you have finished connecting all equipment.
- Image shown may differ from your TV.

## HD RECEIVER SETUP

This TV can receive digital over-the-air/digital cable signals without an external digital set-top box. However, if you do receive digital signals from a digital set-top box or other digital external device.

### **Component Connection**

### 1. How to connect



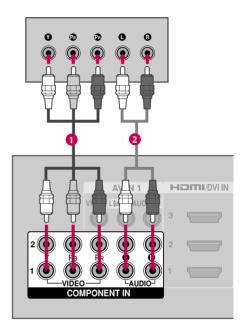
Connect the video outputs (Y, PB, PR) of the digital settop box to the **COMPONENT IN VIDEO 1** or **2** jacks on the TV. Match the jack colors (Y = green, PB = blue, and PR = red).



Connect the audio output of the digital set-top box to the **COMPONENT IN AUDIO 1** or **2** jacks on the TV.

### 2. How to use

- Turn on the digital set-top box.
   (Refer to the owner's manual for the digital set-top box operation.)
- Select the Component1 or 2 input source on the TV using the INPUT button on the remote control.



#### **Supported Resolutions**

Signal	Component	HDMI
480i	Yes	No
480p	Yes	Yes
720p	Yes	Yes
1080i	Yes	Yes
1080p	Yes	Yes

1, CD/1 D, CR/1 R			
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	

Y. CB/PB. CR/PR

### **HDMI** Connection

#### 1. How to connect



Connect the digital set-top box to **HDMI/DVI IN 1**, **2**, **3**, or **4** jack on the TV.



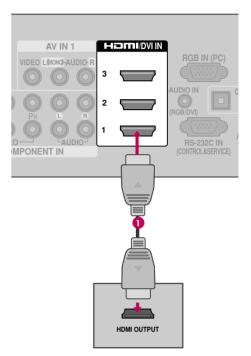
No separate audio connection is necessary. HDMI supports both audio and video.

### 2. How to use

- Turn on the digital set-top box.
   (Refer to the owner's manual for the digital set-top box.)
- Select the HDMI1, HDMI2, HDMI3, or HDMI4 input source on the TV using the INPUT button on the remote control.

### NOTE

- Check HDMI cable over version 1.3. If the HDMI cables don't support HDMI version 1.3, it can cause flickers or no screen display. In this case use the latest cables that support HDMI version 1.3.
- ▶ HDMI mode supports PCM, Dolby Digital audio format.



#### HDMI-DTV

Resolution	Horizontal Frequency(KHz)	Vertical Frequency(Hz)
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

## **EXTERNAL EQUIPMENT SETUP**

### **DVI to HDMI Connection**

### 1. How to connect



Connect the DVI output of the digital set-top box to the HDMI/DVI IN 1, 2, or 3 jack on the TV.

2

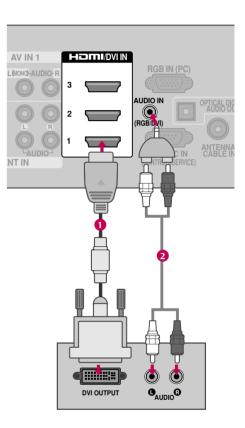
Connect the digital set-top box audio output to the AUDIO IN (RGB/DVI) jack on the TV.

### 2. How to use

- Turn on the digital set-top box. (Refer to the owner's manual for the digital set-top box.)
- Select the HDMI1, HDMI2, or HDMI3 input source on the
- TV using the **INPUT** button on the remote control.

### NOTE

▶ A DVI to HDMI cable or adapter is required for this connection. DVI doesn't support audio, so a separate audio connection is necessary.



## **DVD SETUP**

### **Component Connection**

### 1. How to connect



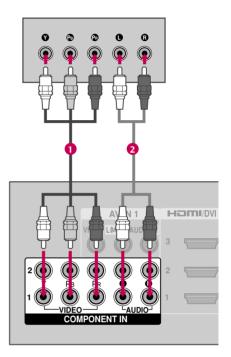
2

Connect the video outputs (Y, PB, PR) of the DVD to the **COMPONENT IN VIDEO 1** or **2** jacks on the TV. Match the jack colors (Y = green, PB = blue, and PR = red).

Connect the audio outputs of the DVD to the **COMPONENT IN AUDIO 1** or **2** jacks on the TV.

### 2. How to use

- Turn on the DVD player, insert a DVD.
- Select the Component1 or 2 input source on the TV using the INPUT button on the remote control.
- Refer to the DVD player's manual for operating instructions.



### **Component Input ports**

To get better picture quality, connect a DVD player to the component input ports as shown below.

Component ports on the TV	Y	Рв	Pr
	Y	Рв	Pr
Video output ports	Y	B-Y	R-Y
on DVD player	Y	СЬ	Cr
	Y	Pb	Pr

## **EXTERNAL EQUIPMENT SETUP**

### Composite (RCA) Connection

### 1. How to connect

- 1
- Connect the **AUDIO/VIDEO** jacks between TV and DVD. Match the jack colors (Video = yellow, Audio Left = white, and Audio Right = red)

### 2. How to use

- Turn on the DVD player, insert a DVD.
- Select the AV1 or AV2 input source on the TV using the INPUT button on the remote control.
- Refer to the DVD player's manual for operating instructions.

### **HDMI Connection**

### 1. How to connect



Connect the HDMI output of the DVD to the HDMI/DVI IN 1, 2, 3 or 4 jack on the TV.



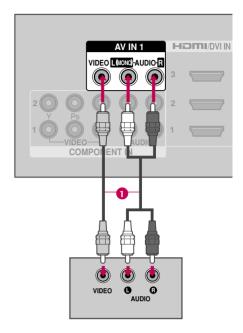
No separate audio connection is necessary. HDMI supports both audio and video.

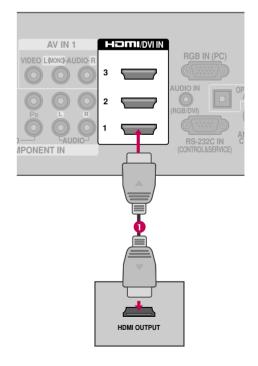
### 2. How to use

- Select the HDMI1, HDMI2, HDMI3, or HDMI4 input source on the TV using the INPUT button on the remote control.
- Refer to the DVD player's manual for operating instructions.

### NOTE

Check HDMI cable over version 1.3. If the HDMI cables don't support HDMI version 1.3, it can cause flickers or no screen display. In this case use the latest cables that support HDMI version 1.3.





## **VCR SETUP**

### **Antenna Connection**

### 1. How to connect

- Connect the RF antenna out socket of the VCR to the ANTENNA/CABLE IN socket on the TV.
  - Connect the antenna cable to the RF antenna in socket of the VCR.

### 2. How to use

- Set VCR output switch to 3 or 4 and then tune TV to the same channel number.
- Insert a video tape into the VCR and press PLAY on the VCR. (Refer to the VCR owner's manual.)

### Composite (RCA) Connection

#### 1. How to connect

Connect the **AUDIO/VIDEO** jacks between TV and VCR. Match the jack colors (Video = yellow, Audio Left = white, and Audio Right = red)

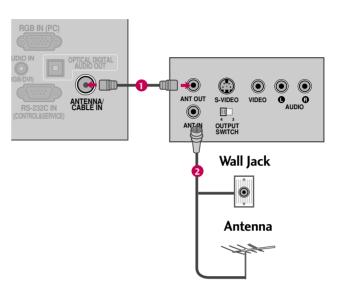
### 2. How to use

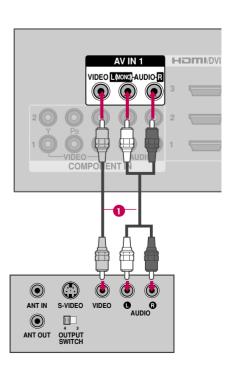
1

- Insert a video tape into the VCR and press PLAY on the VCR. (Refer to the VCR owner's manual.)
- Select the AV1 input source on the TV using the INPUT button on the remote control.
- If connected to AV IN 2, select AV2 input source on the TV.

### NOTE

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





## **EXTERNAL EQUIPMENT SETUP**

## PC SETUP

This TV provides Plug and Play capability, meaning that the PC adjusts automatically to the TV's settings.

### VGA (D-Sub 15 pin) Connection

### 1. How to connect



Connect the VGA output of the PC to the **RGB IN** (PC) jack on the TV.



Connect the PC audio output to the **AUDIO IN** (**RGB/DVI**) jack on the TV.

### 2. How to use

- Turn on the PC and the TV.
- Select the RGB-PC input source on the TV using the INPUT button on the remote control.

### **DVI to HDMI Connection**

#### 1. How to connect



Connect the DVI output of the PC to the **HDMI/DVI IN 1, 2**, or **3** jack on the TV.



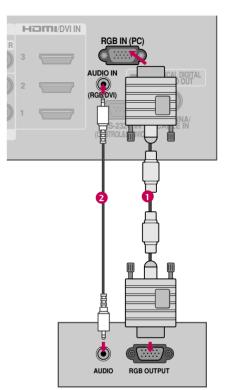
Connect the PC audio output to the AUDIO IN (RGB/DVI) jack on the TV.

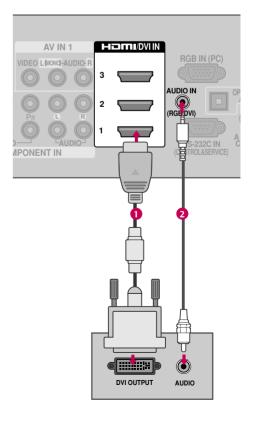
### 2. How to use

- Turn on the PC and the TV.
- Select the HDMI1, HDMI2, or HDMI3 input source on the TV using the INPUT button on the remote control.

### NOTE

Check HDMI cable over version 1.3. If the HDMI cables don't support HDMI version 1.3, it can cause flickers or no screen display. In this case use the latest cables that support HDMI version 1.3.





### 

- ► To get the best picture quality, adjust the PC graphics card to 1920x1080.
- Depending on the graphics card, DOS mode may not work if an 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.

- Depending on the graphics card, some resolution settings may not allow the image to be positioned on the screen properly.
- If the screen is truncated using HDMI-PC 1920x1080, try changing the aspect ratio to Just scan.
- ▶ When selecting HDMI-PC, set the "Input Label PC" in the OPTION menu.

### Supported Display Specifications (RGB-PC, HDMI-PC)

Resolution	Horizontal Frequency(KHz)	Vertical Frequency(Hz)
640x350	31.468	70.09
720x400	31.469	70.08
640x480	31.469	59.94
800x600	37.879	60.31
1024x768	48.363	60.00
1280x768	47.776	59.87
1360x768	47.712	60.015
1280x1024	63.981	60.02
1600x1200	75.00	60.00
1920x1080 RGB-PC	66.587	59.934
1920x1080 HDMI-PC	67.50	60.00

## EXTERNAL EQUIPMENT SETUP

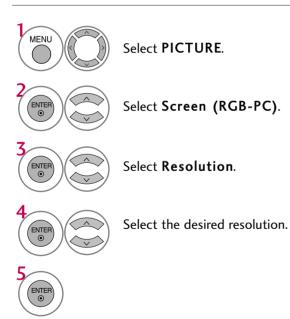
### Screen Setup for PC mode

### **Selecting Resolution**

You can choose the resolution in RGB-PC mode. The **Position**, **Phase**, and **Size** can also be adjusted.

	↔ Move ⊙ Enter		SCREEN	مْ Move ്
Screen (RGB-PC)     E     LED Local Dimming	· · · · · · · · · · · · · · · · · · ·	<b>→</b>	Resolution   Auto Config.   Position   Size   Phase	✓ 1024 x 768 1280 x 768 1360 x 768
			C Boset	

> Prev



## **EXTERNAL EQUIPMENT SETUP**

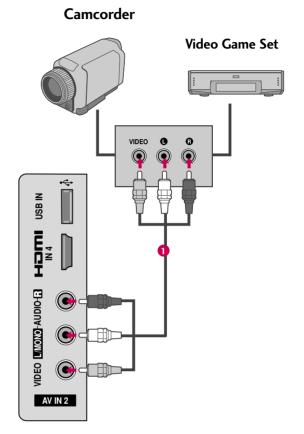
## **OTHER A/V SOURCE SETUP**

### 1. How to connect

Connect the AUDIO/VIDEO jacks between TV and external equipment. Match the jack colors.
 (Video = yellow, Audio Left = white, and Audio Right = red)

### 2. How to use

- Select the AV2 input source on the TV using the INPUT button on the remote control.
- If connected to AV IN 1 input, select the AV1 input source on the TV.
- Operate the corresponding external equipment.



## **USB CONNECTION**

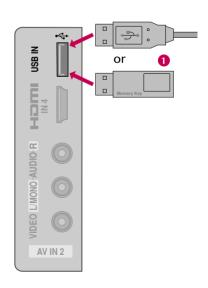
### 1. How to connect



Connect the USB device to the **USB IN** jack on the side of the TV.

### 2. How to use

■ After connecting the **USB IN** jack, you use the USB function. (▶ **p.52**)



## AUDIO OUT CONNECTION

Send the TV's audio to external audio equipment via the Audio Output port. If you want to enjoy digital broadcasting through 5.1-channel speakers, connect the OPTICAL DIGITAL AUDIO OUT terminal on the back of TV to a Home Theater (or amp).

### 1. How to connect

1

2

Connect one end of the optical cable to the TV port of **OPTICAL DIGITAL AUDIO OUT**.

Connect the other end of the optical cable to the digital audio input on the audio equipment.

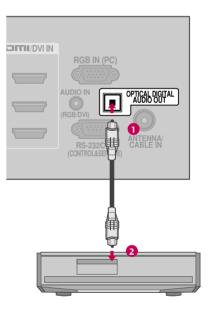
Set the "TV Speaker option - Off" in the AUDIO menu.
 (▶ p.86). See the external audio equipment instruction manual for operation.

### NOTE

When connecting with external audio equipment, such as amplifiers or speakers, you can turn the TV speakers off in the menu. (> p.86)

### **A** CAUTION

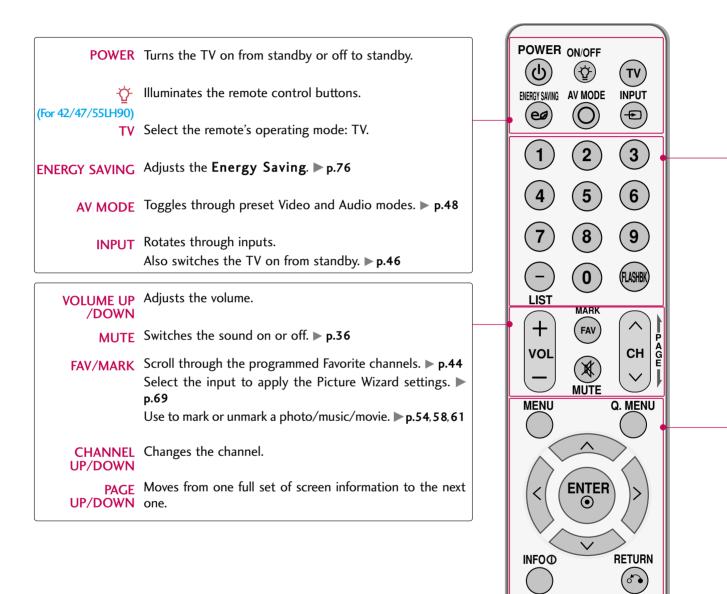
- Do not look into the optical output port. Looking at the laser beam may damage your vision.
- Audio with ACP (Audio Copy Protection) function may block digital audio output.



# WATCHING TV / CHANNEL CONTROL

## **REMOTE CONTROL FUNCTIONS**

When using the remote control, aim it at the remote control sensor on the TV.



(Smplin)

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••

## USB

### **MOVIE LIST**

The movie list is activated once a USB drive is detected. It is used when playing movie files on TV. Displays the movies in the USB folder and supports play.

Allows playback of all movies in the folder but you can not delete the movies. Editing such as delete and add is not allowed. It is a movie list that displays folder information and DivX file.

Movie(\*.dat/\*.mpg/\*.mpeg/\*.ts/\*.trp/\*.tp/\*.vob/\*.mp4/\*.mkv/ \*.avi/\*.divx) supporting file Bit rate : within 32 ~ 320kbps(MP3)

Video Format	Audio Format	Subtitle format
DivX3.11, DivX4.12, DivX5.x, DivX6, Xvid1.00, Xvid1.01, Xvid1.02, Xvid1.03, Xvid 1.10-beta- 1/beta-2, Mpeg-1, Mpeg-2, Mpeg-4, H.264/AVC	Dolby Digital, AAC, Mpeg, MP3, LPCM, HEAAC	*.smi/*.srt/*.sub(MicroDVD, SubViewer1.0/2.0)/*.ass/*.ssa/*. txt(TMPlayer)/*.psb(PowerDivx)

Extension name	Video Codec	Audio Codec	Resolution
mpg, mpeg, vob	MPEG1, MPEG2	Dolby Digital, MPEG, MP3, LPCM	
dat	MPEG1	Dolby Digital, MPEG, MP3, LPCM	
ts,trp,tp	MPEG2, H.264/AVC	Dolby Digital, AAC, MPEG	
	MPEG4 SP, MPEG4 ASP, Divx 3.11, Dvix 4.12, Dvix 5.x		
mp4	Dvix 6, Xvid 1.00, Xvid 1.01, Xvid 1.02, Xvid 1.03	Dolby Digital, HEAAC, AAC, MPEG, MP3,	1920x1080P @25/30P.
	Xvid 1.10-beta 1, Xvid 1.10-beta 2, H.264/AVC		
	MPEG 2, MPEG 4 SP, MPEG4 ASP, Divx 3.11, Divx 4, Divx 5, Divx 6	Dolby Digital, HEAAC, AAC, MPEG, MP3,	1280x720P
avi	Xvid 1.00, Xvid 1.01, Xvid 1.02, Xvid 1.03, Xvid 1.10-beta 1		
	Xvid 1.10-beta 2, H.264/AVC		@50/60P
mkv	H.264/AVC, MPEG 1, MPEG 2, MPEG 4 SP , MPEG4 ASP	Dolby Digital, HEAAC, AAC, MPEG, MP3, LPCM	
	MPEG 2, MPEG 4 SP, MPEG4 ASP, Divx 3.11, Divx 4, Divx 5, Divx 6		
divx	Xvid 1.00, Xvid 1.01, Xvid 1.02, Xvid 1.03, Xvid 1.10-beta 1	Dolby Digital, HEAAC, AAC, MPEG,MP3, LPCM	
	Xvid 1.10-beta 2, H.264/AVC		

### Precautions when playing the movie

- Some user-created subtitles may not work properly.
- Some special characters are not supported in subtitles.
- ► HTML tags are not supported in subtitles.
- Subtitles in languages other than the supported languages are not available.
- Time information in an external subtitle file should be arranged in ascending order to be played.
- The screen may suffer temporary interruptions (image stoppage, faster playback, etc.) when the audio language is changed.
- A damaged video file may not play correctly, or some player functions may not be usable.
- Video files produced with some encoders may not play correctly.
- If the video and audio structure of recorded file is not interleaved, either video or audio is outputted.
- HD videos with a maximum of 1920x1080@25/30P or 1280x720@50/60P are supported, depending on the frame rate.
- Videos with resolutions higher than 1920X1080@25/30P or 1280x720@50/60P may not work properly depending on the frame rate.
- Video files other than the specified types and formats may not work properly.
- The video file encoded by the GMC (Clobal Motion Compensation) is not supported.
- ▶ Only the files saved in ASCII CODE is supported in

subtitles.

- Only 250 Korean characters, 500 alphabets and 500 numbers are supported for each line of the subtitle.
- Only 10,000 of sync blocks can be supported within the subtitle file.
- Max bitrate of playable movie file is 20Mbps.
- ▶ We do not guarantee smooth playback of profiles encoded level 4.1 or higher in H.264.
- ▶ DTS Audio codec is not supported.
- A video file more than 30GB in file size is not supported for playback.
- Playing a video via a USB connection that doesn't support high speed may not work properly.
- USB storage devices below USB 2.0 are supported as well. But they may not work properly in the movie list.
- The video file and the subtitle file must be located in the same folder.
- The name of the video file and the subtitle file must be the same to view the subtitles normally.
- When you are watching the movie by Movie List function, you can adjust the picture by Energy Saving and AV Mode button on the remote control. User setup for each picture mode does not operate.

## APPENDIX

## **PRODUCT SPECIFICATIONS**

Μ	IODELS	<b>42LH90</b> (42LH90-UB)	<b>47LH90</b> (47LH90-UB)	<b>55LH90</b> (55LH90-UB)				
Dimensions (Width x Height	With stand	41.9 x 30.5 x 14.2 inches 1065.9 x 776.0 x 361.7 mm	46.4 x 33.5 x 15.7 inches 1179.0 x 851.4 x 398.8 mm					
x Depth)	Without stand	41.9 x 28.2 x 3.7 inches 1065.9 x 716.4 x 94.4 mm	46.4 x 30.7 x 4.1 inches 1179.0 x 780.6 x 105.9 mm					
Weight	With stand Without stand	51.1 lbs / 23.2 kg 42.9 lbs / 19.5 kg	60.1 lbs / 27.3 kg 51.8 lbs / 23.5 kg	90.1 lbs / 40.9 kg 78.2 lbs / 35.5 kg				
Ν	IODELS	<b>32SL80</b> (32SL80-UB)		<b>37SL80</b> (37SL80-UB)				
Dimensions (Width x Height	With stand	30.1 x 21.6 x 9.1 i 764.8 x 549.0 x 230		x 24.4 x 8.9 inches 5 x 618.6 x 224.8mm				
x Depth)	Without stand	30.1 x 19.3 x 2.0 i 764.8 x 490.4 x 49		0x 22.0 x 2.0 inches 6 x 559.8 x 49.8mm				
Weight	With stand Without stand	14.0 lbs / 30.9 11.2 lbs / 24.7	0	16.5 kg / 36.4 lbs 14.8 kg / 32.6 lbs				
Ν	IODELS	<b>42 SL80</b> (42 SL80-UB)	<b>47SL80</b> (47SL80-UB)	<b>55SL80</b> (55SL80-UB)				
Dimensions (Width x Height	With stand		43.7 x 29.6 x 10.3 inches 1109.6 x 751.2 x 261.0 mm	50.4 x 33.6 x 12.6 inches 1279 x 853.3 x 320.2 mm				
x Depth)	Without stand	39.4 x 24.5 x 1.8 inches 1001.2 x 623.2 x 45.0 mm	43.7 x 27.0 x 1.8 inches 1109.6 x 685.3 x 45.5mm	50.4x 30.7 x 1.8 inches 1279 x 780.5 x 45.5 mm				
Weight	With stand Without stand	26.0 kg / 57.3 lbs 23.7 kg / 52.2 lbs	37.2 kg / 82.0 lbs 32.0 kg / 70.5 lbs					
Power requirement Television System Program Coverage External Antenna I		AC100-240V ~ 50/60Hz NTSC-M, ATSC, 64 & 256 QAM VHF 2-13, UHF 14-69, CATV 1-135, DTV 2-69, CADTV 1-135 75 ohm						
Environment	Operating Temperature Operating Humidity	32 ~ 104°F (0 ~ 40°C) Less than 80%						
condition	Storage Temperature Storage Humidity							

The specifications shown above may be changed without prior notice for quality improvement.

## **IR CODES**

Code (Hexa)	Function	Note	Code (Hexa)	Function	Note
08	POWER	Remote control Button (Power On/Off)	D6	TV	Discrete IR Code
FO	TV	Remote control Button			(TV Input Selection)
45	Q.MENU	Remote control Button	C4	POWER ON	Discrete IR Code
43	MENU	Remote control Button			(Only Power On)
ОВ	INPUT	Remote control Button	C5	POWER OFF	Discrete IR Code
10-19	Number Key 0-9	Remote control Button			(Only Power Off)
4C	- (Dash)/LIST	Remote control Button	5A	AV1	Discrete IR Code
1A	FLASHBK	Remote control Button			(AV1 Input Selection)
09	MUTE	Remote control Button	D0	AV2	Discrete IR Code
02	VOL +	Remote control Button			(AV2 Input Selection)
03	VOL -	Remote control Button	BF	COMPONENT1	Discrete IR Code
00	CH ^	Remote control Button			(Component1 Input Selection)
01	CH ∽	Remote control Button	D4	COMPONENT2	Discrete IR Code
1E	FAV/MARK	Remote control Button			(Component2 Input Selection)
40	^	Remote control Button	D5	RGB-PC	Discrete IR Code
41	$\checkmark$	Remote control Button			(RGB-PC Input Selection)
07	<	Remote control Button	CE	HDMI1	Discrete IR Code
06	>	Remote control Button			(HDMI1 Input Selection)
44	ENTER	Remote control Button	CC	HDMI2	Discrete IR Code
28	RETURN	Remote control Button			(HDMI2 Input Selection)
95	ENERGY SAVING	Remote control Button	E9	HDMI3	Discrete IR Code
7E	SIMPLINK	Remote control Button			(HDMI3 Input Selection)
AA	INFO	Remote control Button	DA	HDMI4	Discrete IR Code
30	AV MODE	Remote control Button			(HDMI4 Input Selection)
72	RED	Remote control Button	76	Ratio 4:3	Discrete IR Code
71	GREEN	Remote control Button			(Only 4:3 Mode)
63	YELLOW	Remote control Button	77	Ratio 16:9	Discrete IR Code
61	BLUE	Remote control Button			(Only 16:9 Mode)
B1		Remote control Button	AF	Ratio Zoom	Discrete IR Code
во	►	Remote control Button			(Only Zoom Mode)
BA	н	Remote control Button			
8F	44	Remote control Button			
8E	••	Remote control Button			

## APPENDIX

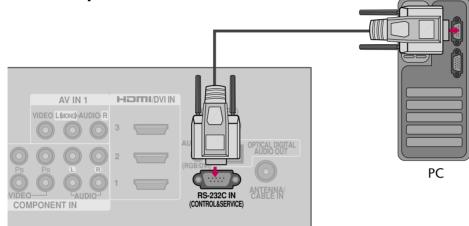
## EXTERNAL CONTROL THROUGH RS-232C

The RS-232C port allows you connect the RS-232C input jack to an external control device (such as a computer or an A/V control system) to control the TV's functions externally.

Note: RS-232C on this unit is intended to be used with third party RS-232C control hardware and software.

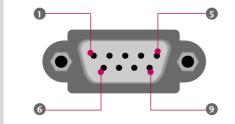
The instructions below are provided to help with programming software or to test functionality using telenet software.

### **RS-232C Setup**



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

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
	<b>0</b> G



### **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.

### 

This product has command echo back in the RS-232C Command.

Data5:	7	Main/Sub Picture	6	Two/One Part Channel	5	Using Physical Channel	<b>4</b> 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
							x	0	1	0	0	ATSC Cable_hrc
							х	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	
							Y	1	1	1	1	Reserved

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

Acknowledgement[a][][Set ID][][OK][Data00][Data01] [Data02][Data03][Data04][x][a][][Set ID] [][NG][Data00][x]

#### 21. 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]

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

To send IR remote control code.

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

See page 113.

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

When TV is in the standby mode, TV will turn on by  $\ensuremath{\mathsf{POWER}}$  button of remote control only.

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

To adjust screen backlight.

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

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

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

## APPENDIX

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Version 2, June 1991

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Version 2.1, February 1999

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code which is described in the source code notice required by exhibit as original code, and which, at the time of its release under this license is not already covered code governed by this license.

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- 1.11. "Source code" means the preferred form of the covered code for making modifications to it, including all modules it contains, plus any associated interface definition files, scripts used to control compilation and installation of an executable, or source code differential comparisons against either the original code or another well known, available covered code of the contributor's choice. The source code can be in a compressed or archival form, provided the appropriate decompression or de-archiving software is widely available for no charge.
- 1.12. "You" (or "Your") means an individual or a legal entity exercising rights under, and complying with all of the terms of, this license or a future version of this license issued under section 6.1.

For legal entities, "You" includes any entity which controls, is controlled by, or is under common control with You. For purposes of this definition, "control" means (a) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (b) ownership of more than fifty percent (50%) of the outstanding shares or beneficial ownership of such entity.

- 2. Source Code License.
- 2.1. The initial developer grant.

The initial developer hereby grants You a world-wide, royalty-free, non-exclusive license, subject to third party intellectual property claims:

- a) under intellectual property rights (other than patent or trademark) licensable by initial developer to use, reproduce, modify, display, perform, sublicense and distribute the original code (or portions thereof) with or without modifications, and/or as part of a larger work; and
- (b) under patents claims infringed by the making, using or selling of original code, to make, have made, use, practice, sell, and offer for sale, and/or otherwise dispose of the original code (or portions there of).

## APPENDIX

- (c) the licenses granted in this section 2.1 (a) and (b) are effective on the date Initial developer first distributes original code under the terms of this license.
- (d) Notwithstanding section 2.1 (b) above, no patent license is granted: 1) for code that You delete from the original Code; 2) separate from the original code; or 3) for infringements caused by: i) the modification of the original code or ii) the combination of the original code with other software or devices.

#### 2.2. Contributor Grant.

Subject to third party intellectual property claims, each contributor hereby grants You a world-wide, royalty-free, non-exclusive license

- (a) under intellectual property rights (other than patent or trademark) licensable by contributor, to use, reproduce, modify, display, perform, sublicense and distribute the modifications created by such contributor (or portions thereof) either on an unmodified basis, with other modifications, as covered code and/or as part of a larger work; and
- (b) under patent claims infringed by the making, using, or selling of modifications made by that contributor either alone and/or in combination with its contributor version (or portions of such combination), to make, use, sell, offer for sale, have made, and/or otherwise dispose of: 1) modifications made by that contributor (or portions thereof); and 2) the combination of modifications made by that contributor with its contributor version (or portions of such combination).
- (c) the licenses granted in sections 2.2(a) and 2.2(b) are effective on the date contributor first makes commercial use of the covered code.
- (d) Notwithstanding section 2.2(b) above, no patent license is granted: 1) for any code that contributor has deleted from the contributor version; 2) separate from the contributor version; 3) for infringements caused by: i) third party modifications of contributor version or ii) the combination of modifications made by that contributor with other software (except as part of the contributor version) or other devices; or 4) under patent claims infringed by covered code in the absence of modifications made by that contributor.

## $\label{eq:2.2} 3. \ {\sf Distribution \ Obligations}.$

#### 3.1. Application of license.

The modifications which You create or to which you contribute are governed by the terms of this license, including without limitation section 2.2. The source code version of covered code may be distributed only under the terms of this license or a future version of this license released under section 6.1, and you must include a copy of this license with every copy of the source code you distribute. You may not offer or impose any terms on any source code version that alters or restricts the applicable version of this license or the recipients' rights hereunder. However, you may include an additional document offering the additional rights described in section 3.5.

#### 3.2. Availability of source code.

Any modification which you create or to which you contribute must be made available in source code form under the terms of this license either on the same media as an executable version or via an accepted electronic distribution mechanism to anyone to whom you made an executable version available; and if made available via electronic distribution mechanism, must remain available for at least twelve (12) months after the date it initially became available, or at least six (6) months after a subsequent version of that particular modification has been made available to such recipients. You are responsible for ensuring that the source code version remains available even if the electronic distribution mechanism is maintained by a third party.

#### 3.3. Description of modifications.

You must cause all covered code to which you contribute to contain a file documenting the changes You made to create that covered code and the date of any change. You must include a prominent statement that the modification is derived, directly or indirectly, from original code provided by the initial developer and including the name of the initial developer in (a) the source code, and (b) in any notice in an executable version or related documentation in which you describe the origin or ownership of the covered code.

#### 3.4. Intellectual property matters

(a) Third party claims.

If contributor has knowledge that a license under a third party's intellectual property rights is required to exercise the rights granted by such contributor under sections 2.1 or 2.2, contributor must include a text file with the source code distribution titled "LEGAL" which describes the claim and the party making the claim in sufficient detail that a recipient will know whom to contact. If contributor obtains such knowledge after the modification is made available as described in section 3.2, contributor shall promptly modify the LEGAL file in all copies contributor makes available thereafter and shall take other steps (such as notifying appropriate mailing lists or newsgroups) reasonably calculated to inform those who received the covered code that new knowledge has been obtained.

#### (b) Contributor APIs.

If contributor's modifications include an application programming interface and contributor has knowledge of patent licenses which are reasonably necessary to implement that API, contributor must also include this information in the LEGAL file.

#### (c) Representations.

contributor represents that, except as disclosed pursuant to section 3.4(a) above, contributor believes that contributor's modifications are contributor's original creation(s) and/or contributor has sufficient rights to grant the rights conveyed by this license.

#### 3.5. Required notices.

You must duplicate the notice in exhibit A in each file of the source code. If it is not possible to put such notice in a particular source code file due to its structure, then You must include such notice in a location (such as a relevant directory) where a user would be likely to look for such a notice. If You created one or more modification(s), you may add your name as a contributor to the notice described in exhibit A. you must also duplicate this license in any documentation for the source code where You describe recipients' rights or ownership rights relating to covered code. You may choose to offer, and to charge a fee for, warranty, support, indemnity or liability obligations to one or more recipients of covered code. However, you may do so only on your own behalf, and not on behalf of the Initial developer or any contributor. You must make it absolutely clear than any such warranty, support, indemnity or liability obligation is offered by you alone, and You hereby agree to indemnify the Initial developer and every contributor for any liability incurred by the Initial developer or such contributor as a result of warranty, support, indemnity or liability terms you offer.

#### 3.6. Distribution of executable versions.

You may distribute covered code in executable form only if the requirements of section 3.1-3.5 have been met for that covered code, and if you include a notice stating that the source code version of the covered code is available under the terms of this license, including a description of how and where you have fulfilled the obligations of section 3.2. The notice must be conspicuously included in any notice in an executable version, related documentation or collateral in which you describe recipients' rights relating to the covered code. You may distribute the executable version of covered code or ownership rights under a license of your choice, which may contain terms different from this license, provided that you are in compliance with the terms of this license and that the license for the executable version does not attempt to limit or alter the recipient's rights in the source code version from the rights set forth in this license. If you distribute the executable version under a different license you must make it absolutely clear that any terms which differ from this license are offered by you alone, not by the Initial developer or any contributor. You hereby agree to indemnify the initial developer and every contributor for any liability incurred by the initial developer or such contributor as a result of any such terms You offer.

#### 3.7. Larger works.

You may create a larger work by combining covered code with other code not governed by the terms of this license and distribute the larger work as a single product. In such a case, you must make sure the requirements of this license are fulfilled for the covered code.

#### 4. Inability to comply due to statute or regulation.

If it is impossible for you to comply with any of the terms of this license with respect to some or all of the covered code due to statute, judicial order, or regulation then you must: (a) comply with the terms of this license to the maximum extent possible; and (b) describe the limitations and the code they affect. Such description must be included in the LEGAL file described in section 3.4 and must be included with all distributions of the source code. Except to the extent prohibited by statute or regulation, such description must be sufficiently detailed for a recipient of ordinary skill to be able to understand it.

#### 5. Application of this license.

This license applies to code to which the initial developer has attached the notice in exhibit A and to related covered code.

6. Versions of the license.

6.1. New versions.

Netscape communications corporation ("Netscape") may publish revised and/or new versions of the license from time to time. Each version will be given a distinguishing version number.

#### 6.2. Effect of new versions.

Once covered code has been published under a particular version of the license, you may always continue to use it under the terms of that version. You may also choose to use such covered code under the terms of any subsequent version of the license published by netscape. No one other than netscape has the right to modify the terms applicable to covered code created under this license.

#### 6.3. Derivative works.

If You create or use a modified version of this license (which you may only do in order to apply it to code which is not already covered code governed by this license), You must (a) rename Your license so that the phrases "Mozilla", "MOZILLAPL", "MOZPL", "Netscape", "MPL", "NPL" or any confusingly similar phrase do not appear in your license (except to note that your license differs from this license) and (b) otherwise make it clear that Your version of the license contains terms which differ from the Mozilla Public license and netscape Public License. (Filling in the name of the initial developer, original code or contributor in the notice described in exhibit A shall not of themselves be deemed to be modifications of this license.)

#### 7. DISCLAIMER OF WARRANTY.

COVERED CODE IS PROVIDED UNDER THIS LICENSE ON AN "AS IS" BASIS, WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, WITHOUT LIMITATION. WARRANTIES THAT THE COV-ERED CODE IS FREE OF DEFECTS, MERCHANTABLE, FIT FOR A PARTICULAR PURPOSE OR NON-INFRINGING. THE ENTIRE RISK AS TO THE QUALITY AND PERFOR-MANCE OF THE COVERED CODE IS WITH YOU. SHOULD ANY COVERED CODE PROVE DEFECTIVE IN ANY RESPECT, YOU (NOT THE INITIAL DEVELOPER OR ANY OTHER CONTRIBUTOR) ASSUME THE COST OF ANY NECESSARY SERVICING, REPAIR OR CORRECTION. THIS DISCLAIMER OF WARRANTY CONSTITUTES AN ESSENTIAL PART OF THIS LICENSE. NO USE OF ANY COVERED CODE IS AUTHORIZED HEREUNDER EXCEPT UNDER THIS DISCLAIMER.

#### 8. TERMINATION.

- 8.1. This license and the rights granted hereunder will terminate automatically if you fail to comply with terms herein and fail to cure such breach within 30 days of becoming aware of the breach. All sublicenses to the covered code which are properly granted shall survive any termination of this license. Provisions which, by their nature, must remain in effect beyond the termination of this license shall survive.
- 8.2. If you initiate litigation by asserting a patent infringement claim (excluding declatory judgment actions) against initial developer or a contributor (the initial developer or contributor against whom you file such action is referred to as "Participant") alleging that:
  - (a) such participant's contributor version directly or indirectly infringes any patent, then any and all rights granted by such participant to you under sections 2.1 and/or 2.2 of this license shall, upon 60 days notice from Participant terminate prospectively, unless if within 60 days after receipt of notice you either: (i) agree in writing to pay participant a mutually agreeable reasonable royalty for your past and future use of modifications made by such participant, or (ii) withdraw your litigation claim with respect to the contributor version against such participant. If within 60 days of notice, a reasonable royalty and payment arrangement are not mutually agreed upon in writing by the parties or the litigation claim is not withdrawn, the rights granted by participant to you under sections 2.1 and/or 2.2 automatically terminate at the expiration of the 60 day notice period specified above.
  - (b) any software, hardware, or device, other than such participant's contributor Version, directly or indirectly infringes any patent, then any rights granted to You by

such participant under sections 2.1 (b) and 2.2 (b) are revoked effective as of the date you first made, used, sold, distributed, or had made, modifications made by that participant.

- 8.3. If you assert a patent infringement claim against participant alleging that such participant's contributor version directly or indirectly infringes any patent where such claim is resolved (such as by license or settlement) prior to the initiation of patent infringement litigation, then the reasonable value of the licenses granted by such participant under sections 2.1 or 2.2 shall be taken into account in determining the amount or value of any payment or license.
- 8.4. In the event of termination under sections 8.1 or 8.2 above, all end user license agreements (excluding distributors and resellers) which have been validly granted by you or any distributor hereunder prior to termination shall survive termination.

#### 9. LIMITATION OF LIABILITY.

UNDER NO CIRCUMSTANCES AND UNDER NO LEGAL THEORY, WHETHER TORT (INCLUDING NEGLIGENCE), CONTRACT, OR OTHERWISE, SHALL YOU, THE INITIAL DEVELOPER. ANY OTHER CONTRIBUTOR. OR ANY DIS-TRIBUTOR OF COVERED CODE.OR ANY SUPPLIER OF ANY OF SUCH PARTIES, BE LIABLE TO ANY PERSON FOR ANY INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUEN-TIAL DAMAGES OF ANY CHARACTER INCLUDING, WITH-OUT LIMITATION, DAMAGES FOR LOSS OF GOODWILL, WORK STOPPAGE. COMPUTER FAILURE OR MALFUNC-TION, OR ANY AND ALL OTHER COMMERCIAL DAM-AGES OR LOSSES. EVEN IF SUCH PARTY SHALL HAVE BEEN INFORMED OF THE POSSIBILITY OF SUCH DAM-AGES. THIS LIMITATION OF LIABILITY SHALL NOT APPLY TO LIABILITY FOR DEATH OR PERSONAL INJURY RESULT-ING FROM SUCH PARTY'S NEGLIGENCE TO THE EXTENT APPLICABLE LAW PROHIBITS SUCH LIMITATION. SOME JURISDICTIONS DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAM-AGES, SO THIS EXCLUSION AND LIMITATION MAY NOT APPLY TO YOU.

#### 10. U.S. GOVERNMENT END USERS.

The covered code is a "commercial item," as that term is defined in 48 C.F.R. 2.101 (Oct. 1995), consisting of "commercial computer software" and "commercial computer software documentation," as such terms are used in 48 C.F.R. 12.212 (Sept. 1995). Consistent with 48 C.F.R. 12.212 and 48 C.F.R. 227.7202-1 through 227.7202-4 (June 1995), all U.S. Government end users acquire covered code with only those rights set forth herein.

#### 11. MISCELLANEOUS.

This license represents the complete agreement concerning subject matter hereof. If any provision of this license is held to be unenforceable, such provision shall be reformed only to the extent necessary to make it enforceable. This License shall be governed by California law provisions (except to the extent applicable law, if any, provides otherwise), excluding its conflict-of-law provisions. With respect to disputes in which at least one party is a citizen of, or an entity chartered or registered to do business in the united states of america, any litigation relating to this License shall be subject to the jurisdiction of the federal courts of the northern district of california, with venue lying in santa clara county, california, with the losing party responsible for costs, including without limitation, court costs and reasonable attorneys' fees and expenses. The application of the united nations convention on contracts for the International sale of goods is expressly excluded. Any law or regulation which provides that the language of a contract shall be construed against the drafter shall not apply to this license.

#### 12. RESPONSIBILITY FOR CLAIMS.

As between initial developer and the contributors, each party is responsible for claims and damages arising, directly or indirectly, out of its utilization of rights under this license and you agree to work with initial developer and contributors to distribute such responsibility on an equitable basis. Nothing herein is intended or shall be deemed to constitute any admission of liability.

#### 13. MULTIPLE-LICENSED CODE.

Initial developer may designate portions of the covered code as "Multiple-Licensed". "Multiple-Licensed" means that the initial developer permits you to utilize portions of the covered code under your choice of the NPL or the alternative licenses, if any, specified by the initial developer in the file described in exhibit A.

#### EXHIBIT A -Mozilla Public License.

The contents of this file are subject to the Mozilla Public License Version 1.1 (the "license"); you may not use this file except in compliance with the License. You may obtain a copy of the license at http://www.mozilla.org/MPL/

Software distributed under the license is distributed on an "AS IS" basis, WITHOUT WARRANTY OF ANY KIND, either express or implied. See the license for the specific language governing rights and limitations under the License.

The Original Code is \_\_\_\_\_

The	Initial	Developer	of	the	Original	Code
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Portions created by			are Copyright (C)			
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Contributor(s): \_\_\_\_\_

Alternatively, the contents of this file may be used under the terms of the \_\_\_\_\_ license (the "[\_\_\_] License"), in which case the provisions of [\_\_\_\_\_] license are applicable instead of those above. If you wish to allow use of your version of this file only under the terms of the [\_\_\_\_] license and not to allow others to use your version of this file under the MPL, indicate your decision by deleting the provisions above and replace them with the notice and other provisions required by the [\_\_\_] license. If you do not delete the provisions above, a recipient may use your version of this file under either the MPL or the [\_\_\_] license."

NOTE: The text of this exhibit A may differ slightly from the text of the notices in the source code files of the original code. You should use the text of this exhibit A rather than the text found in the original code/source code for Your modifications.

## :: FCC Compliance Statement

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

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

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

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

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

#### NOTICE

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

## :: Canadian DOC Notice

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

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

### **CE Conformity Notice** (for Europe)

Products with the "CE" Marking comply with the EMC Directive(89/336/EEC) and LOW VOLTAGE Directive (73/23/EEC) issued by the Commission of the European Community.

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

NOTICE

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

## :: Low Radiation Compliance (MPR II)

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

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



#### Congratulations!

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

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

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

#### What does labelling involve?

The product meets the requirements for the TCO'99 scheme which provides for international and environmental labelling of personal computers and/or displays. The labelling scheme was developed as a joint effort by the TCO (The Swedish Confederation of Professional Employees), Svenska Naturskyddsforeningen (The Swedish Society for Nature Conservation) and Statens Energimyndighet (The Swedish National Energy Administration).

Approval requirements cover a wide range of issues: ecology, ergonomics, emission of electrical and magnetical fields, energy consumption and electrical safety.

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

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

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

#### visual ergonomics.

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

**TCO** Development

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

#### Ecological requirements

#### Flame retardants

Flame retardants may be present in printed wiring board laminates, cables, and housings. Their purpose is to prevent, or at least to delay the spread of fire. Up to 30% by weight of the plastic in a computer casing can consist of flame retardant substances. Many flame retardants contain bromine or chlorine, and these flame retardants are chemically related to PCBs (polychlorinated biphenyls). Both the flame retardants containing bromine or chlorine and the PCBs are suspected of giving rise to health effects, including reproductive damage in 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.

# **LG Electronics Inc.**