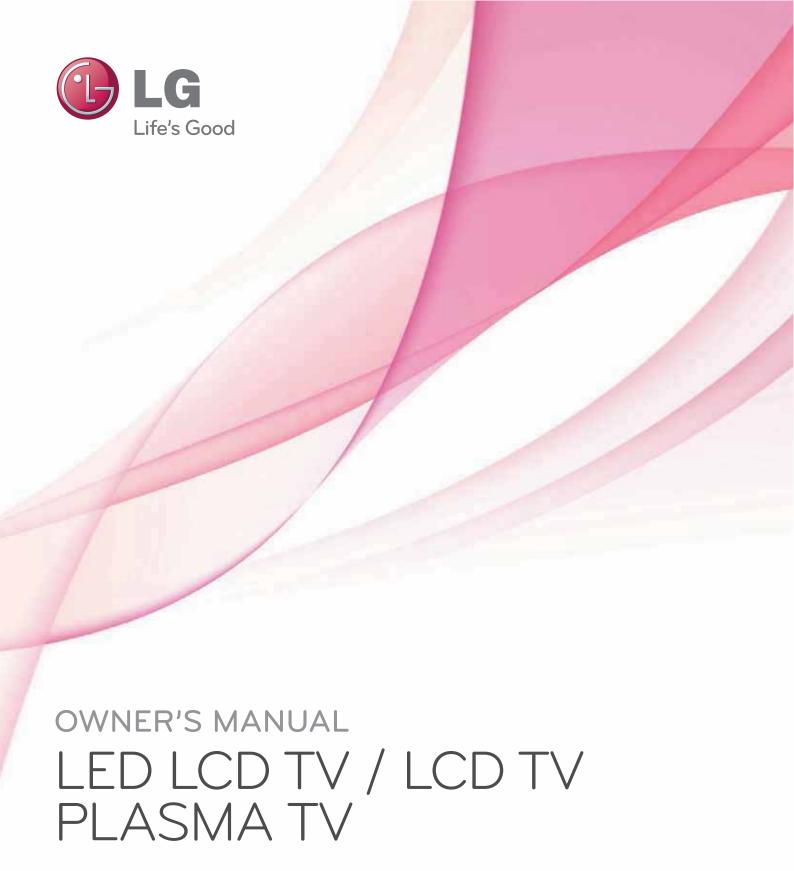


: GETEC-C1-10-062 : GETEC-E3-10-029

APPENDIX G

: USER'S MANUAL

EUT Type: LED LCD TV/Monitor FCC ID.: BEJ42LX6500UB



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

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

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.

constitute a risk of electric shock to persons.

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 in construction of this device which are not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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.



1 Do not use this apparatus near water.



2 Clean only with dry cloth.



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



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



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



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



Only use attachments/accessories specified by the manufacturer.



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





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



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



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.
- Do not allow an impact shock or any objects to fall into the product, and do not drop onto the screen with something.
- (A) 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 use a damaged or loose power cord. Do not pull on the power cord to unplug the TV. Grasp the plug when unplugging the power cord.



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



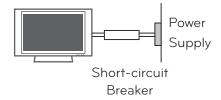
Do not expose to dripping or splashing and do not place objects filled with liquids, such as vases, cups, etc. on or over the apparatus (e.g. on shelves above the unit).



GROUNDING

Ensure that you connect the earth ground wire to prevent possible electric shock (i.e. a TV with a three-prong grounded AC plug must be connected to a three-prong grounded AC outlet). If grounding methods are not possible, have a qualified electrician install a separate circuit breaker.

Do not try to ground the unit by connecting it to telephone wires, lightening rods, or gas pipes.



18 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 AC power even if you turn off the power switch on the unit.

20 ANTENNAS

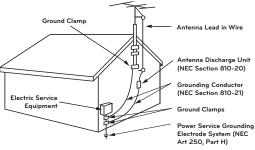
Outdoor antenna grounding

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



NEC: National Electrical Code

Cleaning

When cleaning, unplug the power cord and rub—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.

- Take care not to touch the ventilation openings. When watching the TV for a long period, the ventilation openings may become hot.
- If you smell smoke or other odors coming from the TV or hear strange sounds, unplug the power cord contact an authorized service center.
- Do not press strongly upon the panel with hand or sharp object such as nail, pencil or pen, or make a scratch on it.



Keep the product away from direct sunlight.

7 For LED LCD TV/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.

ON DISPOSAL

(Only Hg lamp used LCD TV)

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

CONTENTS

WARNING / CAUTION	On-Screen Menus Selection6	9
SAFETY INSTRUCTIONS	Quick Menu	71
	Customer Support	
CONTENTS	Software Update7	2
FEATURE OF THIS TV	Picture Test/Sound Test7	'3
	- Product/Service Info7	4
	- Network Test7	4
PREPARATION	Simple Manual7	5
Accessories10	Channel Setup	
Optional Extras	- Auto Scan (Auto Tuning)	
Front Panel Information	- Add/Delete Channel (Manual Tuning) 1	
Back Panel Information	- Channel Edifing	
Stand Instructions	ravorite Channel Setup	
VESA Wall Mounting	Favorite Channel List	
Cable Management	Channel Listol	
Desktop Pedestal Installation3	Channel Informationc	
Swivel Stand	Channel Driet Information0	
Attaching the TV to a Desk	Input List8	
Kensington Security System32	input Labeto.	
Securing the TV to the wall to prevent falling	Reser to ractory Default (Initial Setting)o	
when the tv is used on a stand33	MODE SELLING	
Antenna or Cable Connection34	4 AV Mode8	
	Game8	
EXTERNAL EQUIPMENT SETUP	SIMPLINK9	
HD Receiver Setup35		
DVD SETUP39		
VCR SETUP42		
Other A/V Source Setup44	- 3D Video9	2
USB Connection45	MY MEDIA	
Headphone Setup46	MIT MEDIA	
Audio Out Connection4	7 Entry Mode9	6
External Equipment Wireless Connection	Connection Method9	7
(Optional Extras)48		2
PC Setup49	Photo list10	9
Network Setup55	Music list11	5
WATCHING TV / CHANNEL CONTROL	DivX Registration Code12	0
WATCHING TV / CHANNEL CONTRO	Deactivation	21
Remote Control Functions	NFTWORK	
Turning on the TV		
Volume Adjustment	3	_
TOTAL 110 / Majasil 110111		

Initial Setting67

NETCAST	TIME SETTING	
Netcast Menu	Clock Setting - Auto Clock Setup Manual Clock Setup Auto On/Off Time Setting	158 159
PICTURE CONTROL	Sleep Timer Setting	160
Picture Size (Aspect Ratio) Control128 Picture Wizard130	PARENTAL CONTROL / RAT	INGS
Preset Picture Settings (Picture Mode) 133 Manual Picture Adjustment - User Mode 134 Picture Improvement Technology (Advanced Control)	Set Password & Lock System - Setting up Your Password	162 163 164 165 170
SOUND & LANGUAGE CONTROL	Troubleshooting	
Auto Volume	Product Specifications	177 182

FEATURE OF THIS TV

Some of these features are not available on all models.



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 1080p, 1080i, and 720p resolutions.



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



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.



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.

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

"Pat.7,295,673;7,460,688;7,519,274"



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.



THX (Thomlinson Holman's Experiment) is an audio and video certification standard established by George Lucas and Thomlinson. A THX certified display guarantees screen quality that exceeds the display standard specification in both hardware and software.



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.



Unlike other sensors which can only sense brightness of ambient light, LG's "Intelligent Sensor" uses 4,096 sensing steps to evaluate its surroundings. Using a sophisticated algorithm, the LG processes picture quality elements including brightness, contrast, color, sharpness and white balance. The result is a picture optimized for it's surroundings, more pleasing to watch and which can also save up to 50% in power consumption.



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



View videos and photos and listen to music on your TV through USB 2.0 ('videos' dependent on model).



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



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).
- 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.





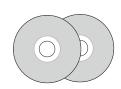


ACCESSORIES

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.







Owner's Manual

CD Manual, Nero MediaHome 4 Essentials CD

Remote Control, Batteries (AAA)

Not included with all models



Polishing Cloth

- * Wipe spots on the exterior only with the polishing cloth.
- * Do not wipe roughly when removing stains. Excessive pressure may cause scratches or discoloration.

Option Extras



D-sub 15 pin Cable

When using the VGA (D-sub 15 pin cable) PC connection, the user must use shielded signal interface cables with ferrite cores to maintain standards compliance.

Not included with all models



Ferrite Core (Black) Ferrite core can be used to reduce the electromagnetic waves that may interfere with the TV. Install the Ferrite core on the power cable close to the wall plug.



Close to the wall plug.



Ferrite Core (White) Ferrite core can be used to reduce the electromagnetic wave when connecting the LAN cable. Place the ferrite core far from TV and wind the LAN cable in the ferrite core once.



50/60PK750

(For 50PK750)





 $(M5 \times 14)$ $(M4 \times 28)$

Screws for stand assembly (Refer to P.20)



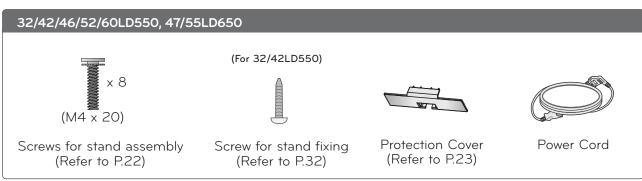
Cable Holder (Refer to p.28)

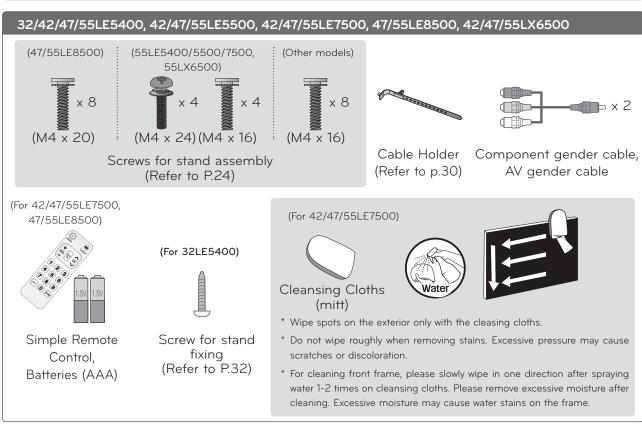


Protection Cover (Refer to p.21)



Power Cord





OPTIONAL EXTRAS

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

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

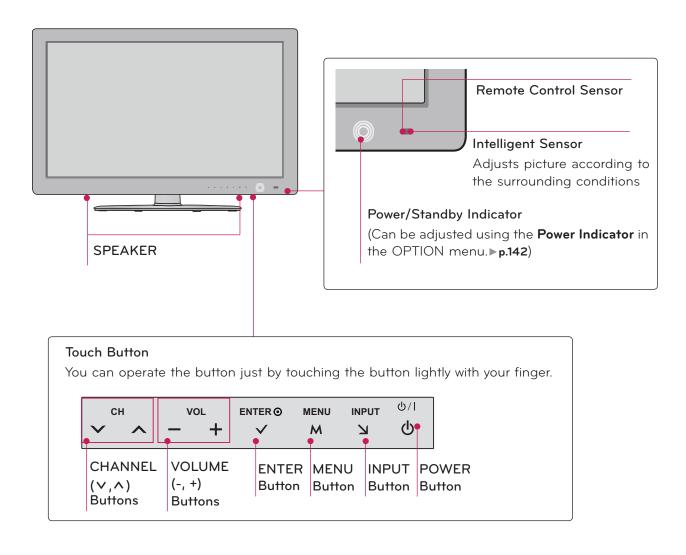


Wireless Media Box (AN-WL100W)

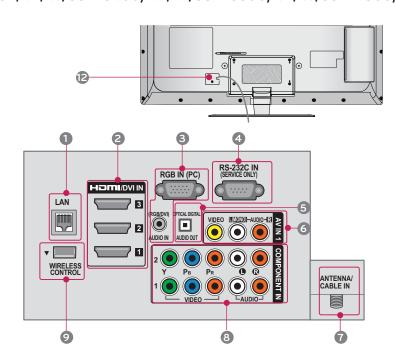


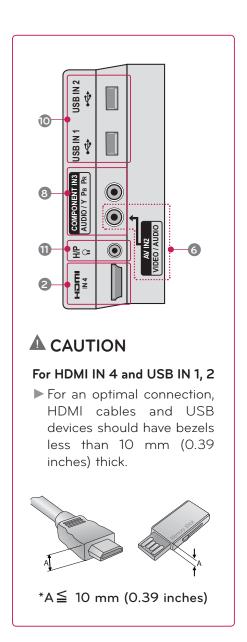
Wireless LAN for Broadband/ DLNA Adaptor (AN-WF100)

32/42/47/55LE5400, 42/47/55LE5500, 42/47/55LE7500, 42/47/55LX6500



32/42/47/55LE5400, 42/47/55LE5500, 42/47/55LE7500, 47/55LE8500, 42/47/55LX6500





1 LAN

Network connection for Netflix, Yahoo! TV Widgets, etc (for USA).

Also used for video, photo and music files on a local network.

2 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).

3 RGB IN (PC)

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

AUDIO IN (RGB/DVI)

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

4 RS-232C IN (SERVICE ONLY), SERVICE ONLY

This port is used for service.

(5) 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.

6 AV (Audio/Video) IN

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

ANTENNA/CABLE IN

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

3 COMPONENT IN

Analog Connection.

Supports HD.

Uses a red, green, and blue cable for video & red and white for audio.

WIRELESS CONTROL

Connect the Wireless Ready Dongle to the TV to control the external input devices connected to Media Box wirelessly.

10 USB INPUT

Used for viewing photos, watching movies and listening to MP3s.

M HEADPHONE

0.32 cm (1/8 inch) headphone jack Impedance 16 Ω , Maximum audio out 15 mW

Power Cord or Socket

For operation with AC power.

Caution: Never attempt to operate the TV on DC power.

(B) REMOTE CONTROL IN

For a wired remote control.

STAND INSTRUCTIONS

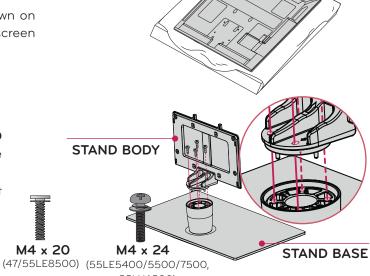
(For 32/42/47/55LE5400, 42/47/55LE5500, 42/47/55LE7500, 47/55LE8500, 42/47/55LX6500)

Image shown may differ from your TV.

INSTALLATION

- Carefully place the TV screen side down on a cushioned surface to protect the screen from damage.
- Assemble the parts of the **STAND** BODY with the STAND BASE of the

At this time, tighten the screws that hold the STAND BODY on.



55LX6500) $M4 \times 16$

STAND REAR

COVER

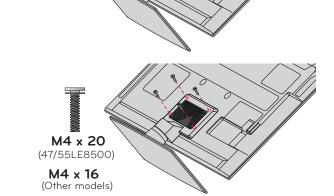
(Other models)

- Assemble the TV as shown.
- 4 Assemble the part of the **STAND REAR COVER** with the TV.



NOTE

▶ When assembling the desk type stand, make sure the screws are fully tightened (If not tightened fully, the TV can tilt forward after the product installation). Do not over tighten.

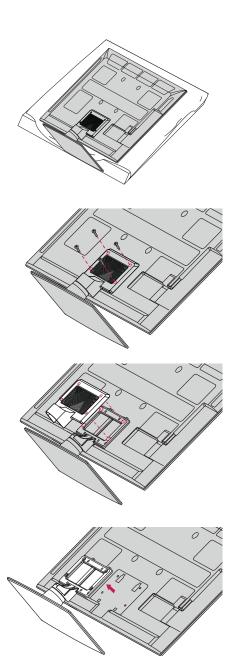


DETACHMENT

- 1 Carefully place the TV screen side down on a cushioned surface to protect the screen from damage.
- 2 Remove the screws that hold the stand on.

3 Detach the **STAND REAR COVER** from TV.

4 Detach the stand from TV.



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)
32LD550, 32LE5400	200 * 100	M4	4	LSW100B, LSW100BG
42/46LD550, 47LD650, 42/47LE5400, 42/47LE5500, 42/47LE7500, 47LE8500, 42/47LX6500	200 * 200	М6	4	LSW200B, LSW200BG
52LD550, 55LD650, 55LE5400, 55LE5500, 55LE7500, 55LE8500, 60LD550, 55LX6500	400 * 400	М6	4	LSW400B, LSW400BG
50PK750	400 * 400	М6	4	AW-50PG60M AW-50PG60MS
60PK750	600 * 400	М8	4	AW-60PG60M AW-60PG60MS

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 than 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.

A CAUTION

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

CABLE MANAGEMENT

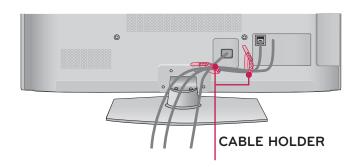
■ Image shown may differ from your TV.

Plasma TV

1

After connecting the cables as necessary, install the **CABLE HOLDER** as shown and bundle the cables.

In case of the LAN cable, install as shown to reduce the electromagnetic wave.

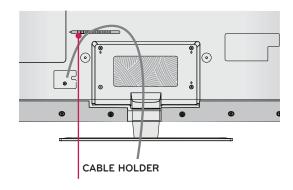


■ Image shown may differ from your TV.

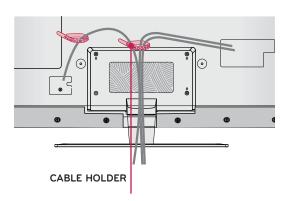
32/42/47/55LE5400, 42/47/55LE5500, 42/47/55LE7500, 47/55LE8500, 42/47/55LX6500

Secure the power cord with the CABLE HOLDER on the TV back cover.

It will help prevent the power cable from being removed by accident.



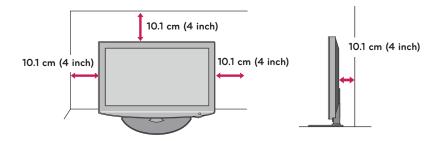
After connecting the cables as necessary, install the **CABLE HOLDER** as shown and bundle the cables.



DESKTOP PEDESTAL INSTALLATION

■ Image shown may differ from your TV.

For proper ventilation, allow a clearance of 10.1 cm (4 inch) on all four sides from the wall.

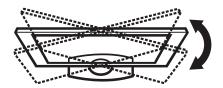


A CAUTION

- ▶ 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 $^{\circ}$ to suit your viewing position.

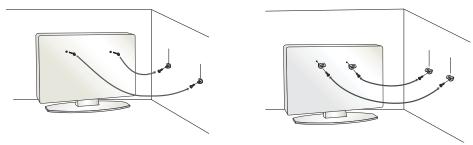


SECURING THE TV TO THE WALL TO PREVENT FALLING WHEN THE TV IS USED ON A STAND

- You should purchase necessary components to prevent the TV from tipping over (when not using a wall mount).
- Image shown may differ from your TV.

We recommend that you set up the TV close to a wall so it cannot fall over if pushed backwards. Additionally, we recommend that the TV be attached to a wall so it cannot be pulled in a forward direction, potentially causing injury or damaging the product.

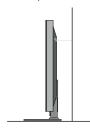
Caution: Please make sure that children don't climb on or hang from the TV.



- Insert the eye-bolts (or TV brackets and bolts) to tighten the product to the wall as shown in the picture.
 - * If your product has the bolts in the eye-bolts position before inserting the eye-bolts, loosen the
 - * Insert the eye-bolts or TV brackets/bolts and tighten them securely in the upper holes.

 Secure the wall brackets with the bolts (sold separately) to the wall. Match the height of the bracket that is mounted on the wall to the holes in the product.

Ensure the eye-bolts or brackets are tightened securely.



Use a sturdy rope (sold separately) to tie the product. It is safer to tie the rope so it becomes horizontal between the wall and the product.

• NOTE

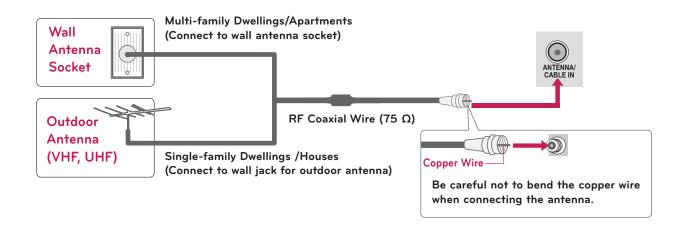
- ▶ Use a platform or cabinet strong enough and large enough to support the size and weight of the TV
- To use the TV safely make sure that the height of the bracket on the wall and the one on the TV are the same.

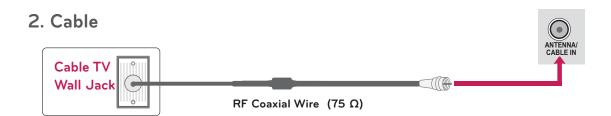
- To prevent damage do not connect to the power outlet until all connections are made between the devices.
- Image shown may differ from your TV.

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.





- If the antenna needs to be split for two TV's, install a 2-Way Signal Splitter.
- For much more information about antennas visit our Knowledgebase at http://lgknowledgebase.com. Search for antenna.

- 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.

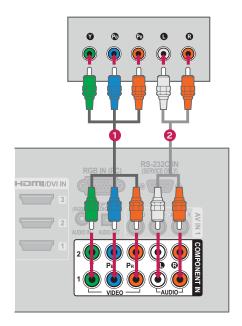
Component Connection

1. How to connect

- Connect the video outputs (Y, PB, PR) of the digital set-top box to the **COMPONENT IN VIDEO 1, 2**, or **3*** 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**, **2**, or **3*** 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, Component2, or Component3 input source on the TV using the INPUT button on the remote control.

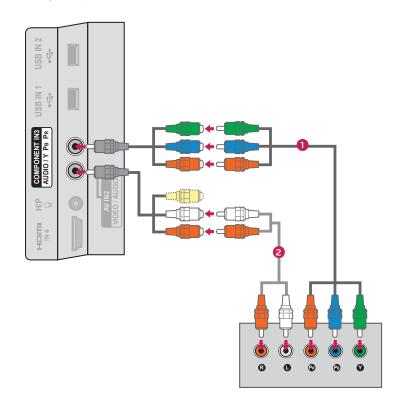


Y, CB/PB, CR/PR

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

^{*} Component3: For LED LCD TV

For LED LCD TV



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

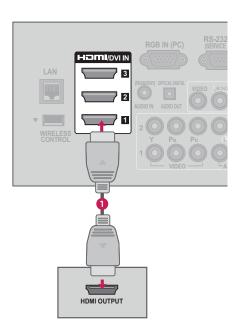
- Turn on the digital set-top box.
 (Refer to the owner's manual for the digital set-top box.)
- Select the HDMI1, HDMI2, HDMI3, or HDMI4 input source on the TV using the INPUT button on the remote control.

NOTE

- ▶ If an HDMI cable doesn't support High Speed HDMI, it can cause flickers or no screen display. In this case use the latest cables that support High Speed HDMI.
- ► HDMI Audio Supported Format: Dolby Digital (32 KHz, 44.1 KHz, 48 KHz), Linear PCM (32 KHz, 44.1 KHz, 48 KHz)

HDMI-DTV

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



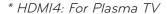
DVI to HDMI Connection

1. How to connect

- Connect the DVI output of the digital set-top box to the **HDMI/DVI IN 1**, **2**, **3**, or **4*** jack on the TV
- Connect the digital set-top box audio output to the AUDIO IN (RGB/DVI) jack on the TV.

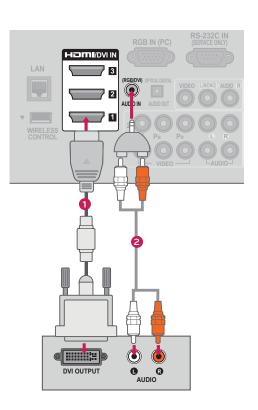
2. How to use

- Turn on the digital set-top box. (Refer to the owner's manual for the digital set-top box.)
- Select the HDMI1, HDMI2, HDMI3, or HDMI4* 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

Connect the video outputs (Y, PB, PR) of the DVD to the COMPONENT IN VIDEO 1, 2, or 3* 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, 2, or 3* jacks on the TV.

2. How to use

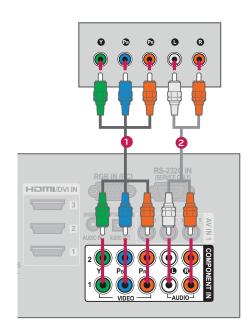
- Turn on the DVD player, insert a DVD.
- Select the Component1, Component2, Component3 input source on the TV using the **INPUT** button on the remote control.
- Refer to the DVD player's manual for operating instructions.



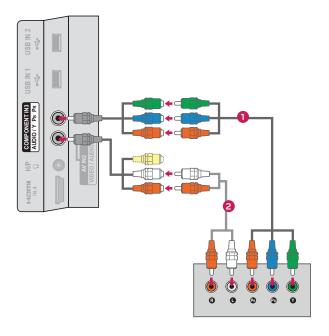
Component Input ports

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



For LED LCD TV



Composite (RCA) Connection

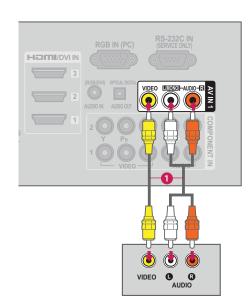
1. How to connect

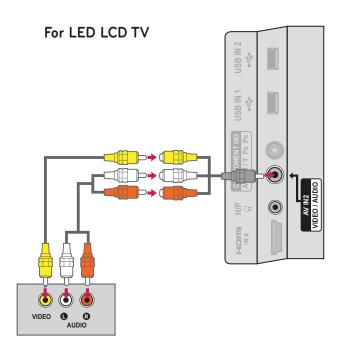


Connect the **AUDIO/VIDEO** jacks between TV and DVD. Match the jack colors (Video = yellow, Audio Left = white, and Audio Right = red)

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

- 1 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.

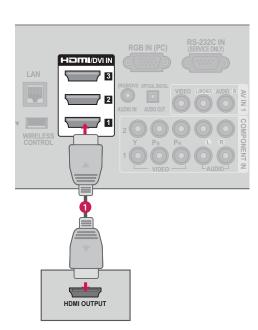
 HDMI supports both audio and video.

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

- ▶ If an HDMI cable doesn't support High Speed HDMI, it can cause flickers or no screen display. In this case use the latest cables that support High Speed HDMI.
- ► HDMI Audio Supported Format: Dolby Digital (32 KHz, 44.1 KHz, 48 KHz), Linear PCM (32 KHz, 44.1 KHz, 48 KHz)



VCR SETUP

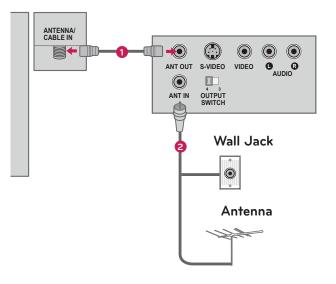
Antenna Connection

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).



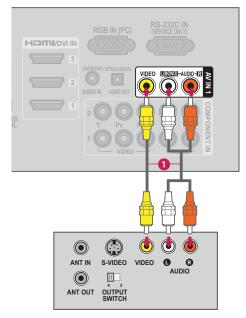
Composite (RCA) Connection

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)

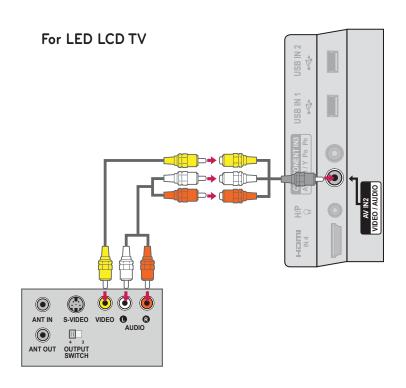
2. How to use

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



• NOTE

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



OTHER A/V SOURCE SETUP

1. How to connect

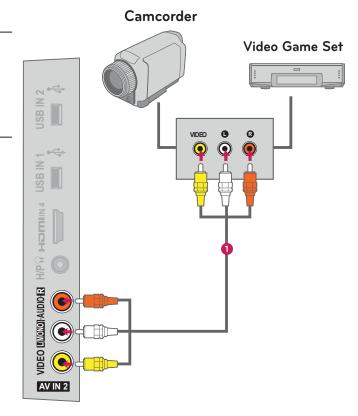


Connect the **AUDIO/VIDEO** jacks between TV and external equipment. Match the jack colors.

(Video = yellow, Audio Left = white, and Audio Right = red)

2. How to use

- Select the AV1 or AV2 input source on the TV using the INPUT button on the remote control.
- Operate the corresponding external equipment.



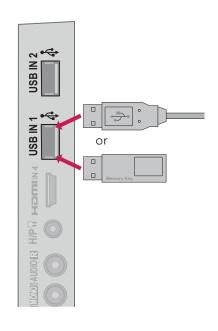
USB CONNECTION

1. How to connect

Connect the USB device to the USB IN 1 or 2 jack on the side of TV.

2. How to use

■ After connecting the **USB IN** jack, you use the USB function. (▶ p.93)

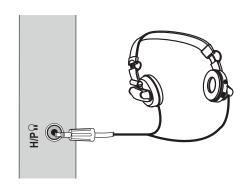


HEADPHONE SETUP (FOR LED LCD TV/LCD TV)

You can listen to the sound through the headphone.

1. How to connect

- 1 Plug the headphone into the headphone socket.
- To adjust the headphone volume, press the **VOL +/-** button. If you press the **MUTE** button, the sound from the headphone is switched off.



NOTE

- AUDIO menu options are disabled when connecting a headphone.
- When changing AV MODE with a headphone connected, the change is applied to video but not to audio.
- ▶ Optical Digital Audio Out is not available when connecting a headphone.

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

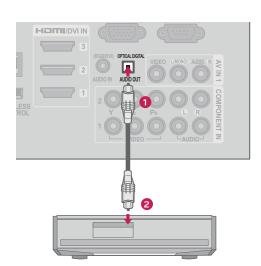
- Connect one end of the optical cable to the TV port of **OPTICAL DIGITAL AUDIO OUT**.
- Connect the other end of the optical cable to the digital audio input on the audio equipment.
- Set the "TV Speaker option Off" in the AUDIO menu. (▶p.150). See the external audio equipment instruction manual for operation.



When connecting with external audio equipment, such as amplifiers or speakers, you can turn the TV speakers off in the menu. (▶p.150)

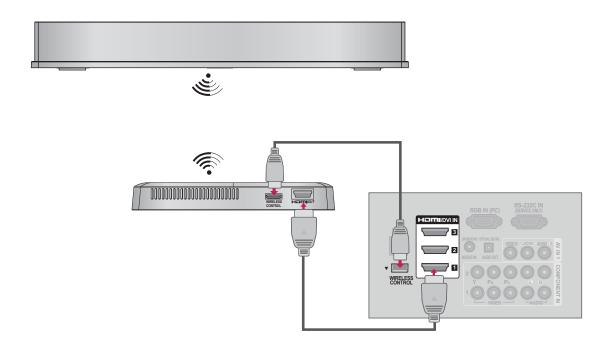
A CAUTION

- ▶ 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.



EXTERNAL EQUIPMENT WIRELESS CONNECTION (OPTIONAL EXTRAS)

LG TVs with a Wireless Control port support the LG Wireless Media Box, which is sold separately. When you connect the wireless ready dongle (included with the media box) to the TV, external devices can be connected to the LG Wireless Media Box and video and audio will be sent to the TV wirelessly.



1. How to connect

- 1 Connect the **WIRELESS CONTROL** jack of the Wireless Ready Dongle to the **WIRELESS CONTROL** jack on the TV.
- Connect **HDMI OUT** jack of the Wireless Ready Dongle to the **HDMI IN** jack on the TV.

2. How to use

- Select the desired input source on the TV using the INPUT button on the remote control.
- Refer to the Wireless Media Box manual for operating instructions.

NOTE

► When using the external device connected to the Wireless Media Box, some functions of the TV menu may not work.

PC SETUP

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

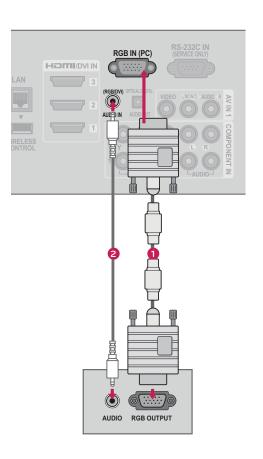
VGA (D-Sub 15 Pin) Connection

1. How to connect

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



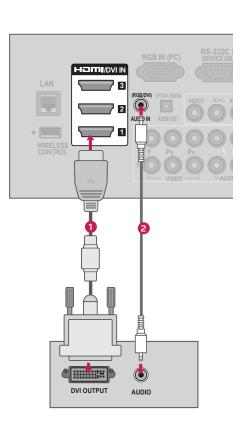
DVI to HDMI Connection

1. How to connect

- 1 Connect the DVI output of the PC to the HDMI/DVI IN 1, 2, 3, or 4* 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, HDMI3, or HDMI4* input source on the TV using the INPUT button on the remote control.



^{*} HDMI4: For Plasma TV

NOTE

- To get the best picture quality, adjust the PC graphics card to 1920x1080.
- Depending on the graphics card, DOS mode may not work if a HDMI to DVI Cable is in use.
- ▶In PC mode, there may be noise associated with the resolution, vertical pattern, contrast or brightness. If noise is present, change the PC output to another resolution, change the refresh rate to another rate or adjust the brightness and contrast on the PICTURE menu until the picture is clear.
- Avoid keeping a fixed image on the screen for a long period of time. The fixed image may become permanently imprinted on the screen.
- The synchronization input form for Horizontal and Vertical frequencies is separate.
- Depending on the graphics card, some resolution settings may not allow the image to be positioned on the screen properly.
- ▶ If you experience overscan issues when using HDMI-PC 1920x1080, change 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
720×400	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
1920x1080 RGB-PC	66.587	59.934
1920x1080 HDMI-PC	67.50	60.00

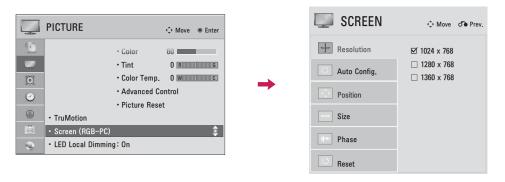
Screen Setup for PC mode

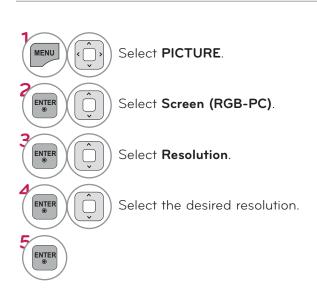
Selecting Resolution

You can choose the resolution in RGB-PC mode.

The Position, Phase, and Size can also be adjusted.

You can choose this option only when the PC resolution is set to 1024X768, 1280X768 or 1360X768.





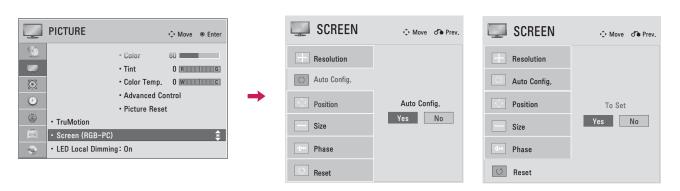
Auto Configure

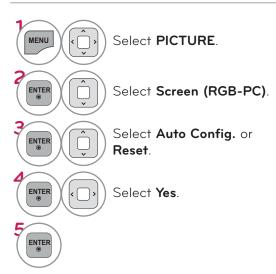
Automatically adjusts picture position and minimizes image instability. After adjustment, if the image is still not correct, try using the manual settings or a different resolution or refresh rate on the PC.

Screen Reset (Reset to original initial values)

Returns Position, Size, and Phase to the default initial settings.

This feature operates only in RGB-PC mode.

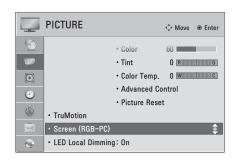


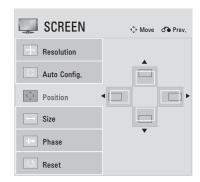


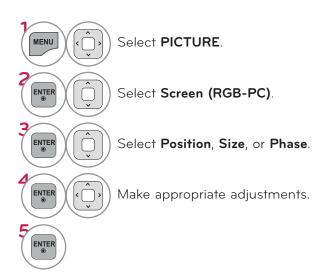
- If the position of the image is still not correct, try Auto adjustment again.
- If picture needs to be adjusted again after Auto adjustment in RGB-PC, you can adjust the Position, Size or Phase.

Adjustment for screen Position, Size, and Phase

If the picture is not clear after auto adjustment or if text is shaking, adjust the picture phase manually. This feature operates only in RGB-PC mode.





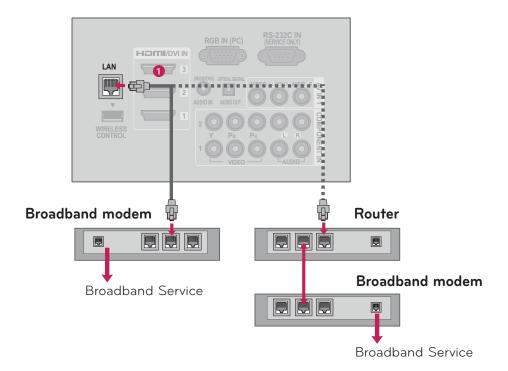


- **Position**: This function is to adjust picture to left/right and up/down as you prefer.
- **Size**: This function is to minimize any vertical bars or stripes visible on the screen background. And the horizontal screen size will also change.
- Phase: This function allows you to remove any horizontal noise and clear or sharpen the image of characters.

NETWORK SETUP

Wired Network Connection

This TV can be connected to a local area network (LAN) via the LAN port. After making the physical connection, the TV needs to be set up for network communication.



1. How to connect



Connect the LAN port of the Modem or Router to the LAN port on the TV.

2. How to use

- Select "Network Setting" in the NETWORK menu.
- After connecting the **LAN** port, use the NETCAST menu.
- For more information about NETCAST setup and troubleshooting, visit http://lgknowledgebase.com. Search for NETCAST.

A CAUTION

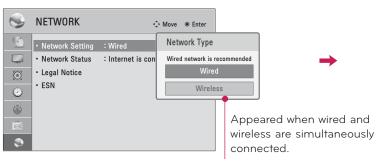
- Do not connect a modular phone cable to the LAN port.
- ➤ Since there are various connection methods, please follow the specifications of your telecommunication carrier or internet service provider.

Wired Network Setup

If wired and wireless networks are both available, wired is the preferred method.

After making a physical connection, a small number of home networks may require the TV network settings to be adjusted.

For detail information, contact your internet provider or router manual.

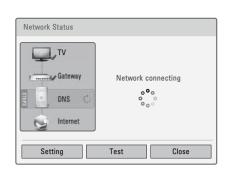


If you already set the Network Setting

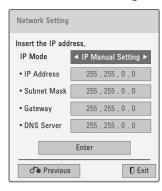


IP Auto Setting

IP Manual Setting









Select **NETWORK**.



Select Network Setting.



Select Wired.



If you already set Network Setting: Select **Resetting**. The new connection settings resets the current network settings.



Select IP Auto Setting or IP Manual Setting.



When Selecting **IP Manual Setting:** IP addresses will need to be input manually.



Select Enter.

- This feature requires an always-on broadband internet connection.
- You do not need to connect to a PC to use this function.
- If Network Setting is not working, check your network conditions. Check the LAN cable and make sure your router has DHCP turned on if you wish to use the Auto Setting.
- If the Network Setting is not completed, network may not operate normally.
- IP Auto Setting: Select it if there is a DHCP server on the local area network (LAN) via wired connection, the TV will automatically be allocated an IP address. If you're using a broadband router or broadband modem that has a DHCP (Dynamic Host Configuration Protocol) server function. The IP address will automatically be determined.
- IP Manual Setting: Select it if there is no DHCP server on the network and you want to set the IP address manually.

NOTE

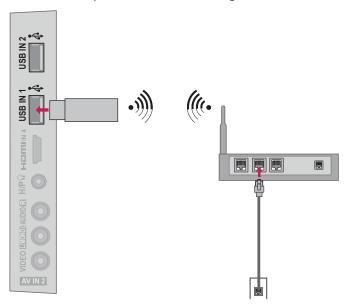
- ▶ For more information about NETCAST setup and troubleshooting, visit http://lgknowledgebase.com. Search for NETCAST.
- ► Use a standard LAN cable with this TV. Cat5 or better with a RJ45 connector.
- ▶ Many network connection problems during set up can often be fixed by re-setting the router or modem. After connecting the player to the home network, quickly power off and/or disconnect the power cable of the home network router or cable modem. Then power on and/or connect the power cable again.
- Depending on the internet service provider (ISP), the number of devices that can receive internet service may be limited by the applicable terms of service. For details, contact your ISP.
- LG is not responsible for any malfunction of the TV and/or the internet connection feature due to communication errors/malfunctions associated with your broadband internet connection, or other connected equipment.
- ► LG is not responsible for problems within your internet connection.
- Some content available through the network connection may not be compatible with the TV. If you have questions about such content, please contact the producer of the content.
- ➤ You may experience undesired results if the network connection speed does not meet the requirements of the content being accessed.
- Some internet connection operations may not be possible due to certain restrictions set by the Internet service provider (ISP) supplying your broadband Internet connection.
- Any fees charged by an ISP including, without limitation, connection charges are your responsibility.
- ► A 10 Base-T or 100 Base-TX LAN port is required for connection to this TV. If your internet service does not allow for such a connection, you will not be able to connect the TV.
- ▶ A DSL modem is required to use DSL service and a cable modem is required to use cable modem service. Depending on the access method of and subscriber agreement with your ISP, you may not be able to use the internet connection feature contained in this TV or you may be limited to the number of devices you can connect at the same time. (If your ISP

- limits subscription to one device, this TV may not be allowed to connect when a PC is already connected.)
- ► The use of a "Router" may not be allowed or its usage may be limited depending on the policies and restrictions of your ISP. For details, contact your ISP directly.
- The wireless network operates at 2.4 GHz radio frequencies that are also used by other household devices such as cordless telephone, Bluetooth® devices, microwave oven, and can be affected by interference from them. It can be interrupted by the device using 5Ghz radio frequencies. It is same device with LG wireless media box, cordless telephone, other Wi-Fi device.
- It may decrease the service speed using Wireless network by surrounding wireless condition.
- Turn off all unused network equipment in your local home network. Some devices may generate network traffic.
- In some instances, placing the access point or wireless router higher up away from the floor may improve the reception.
- The reception quality over wireless depends on many factors such as type of the access point, distance between the TV and access point, and the location of the TV.
- ▶ When connecting internet through the wired/ wireless sharing machine, it may interrupt the connection because of the use limitation and confirmation of service company.
- To connect wireless AP, an AP that supports the wireless connection is necessary, and the wireless connection function of the AP needs to be activated. Please enquire to the AP supplier for the possibility of AP wireless connections
- Please verify the security settings of AP SSID for wireless AP connection, and enquire to the AP supplier for the AP SSID security settings.
- The TV can become slower or malfunction with wrong settings of network equipments (wired/wireless router, hub, etc). Please install correctly by referring to the manual of the equipment, and set the network.

Wireless Network Connection

The LG Wireless LAN for Broadband/DLNA Adaptor, which is sold separately, allows the TV to connect to a wireless lan network.

The network configuration and connection method may vary depending on the equipment in use and the network environment. Refer to the setup instructions supplied with your access point or wireless router for detailed connection steps and network settings.



1. How to connect



Connect the "LG Wireless LAN for Broadband/DLNA Adaptor (sold separately)" to the USB IN 1 or 2 port on the TV.

2. How to use

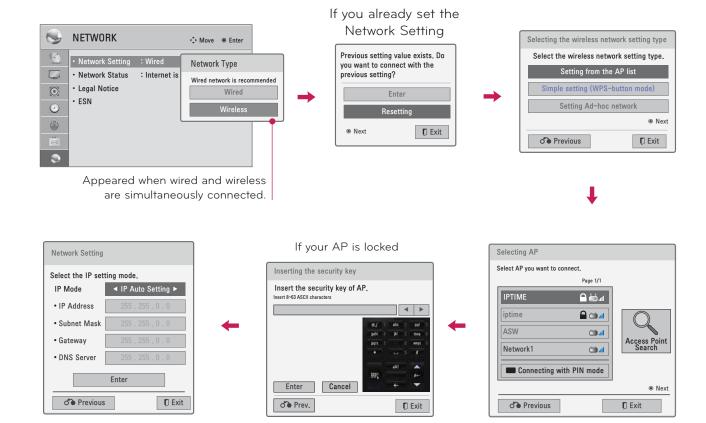
- Select "Network Setting" in the NETWORK menu.
- After connecting, you can use the NETCAST menu.

NOTE

- ▶ For enjoying pictures, music, or video stored in the PC using the router, the use of wired port in the router is recommended.
- ▶ When the wireless port of the router is used, there may be restrictions for some functions.

Wireless Network Setup

Setting up the AP (Access Point) or the wireless router is required before connecting the TV to the network.





Select **NETWORK**.



Select Network Setting.



Select Wireless.



If you already set Network Setting: Select **Resetting**.

The new connection settings resets the current network settings.



Select Setting from the AP list.



Scan the all available AP (Access Point) or wireless routers within range and display them as a list.



Select an AP (Access Point) or wireless router on the list. (If your AP is locked, insert the security key of AP).



Input the security key of AP.

9 Repeat step 4-5 on P.56.

When a security code is already set

PIN (Personal Identification Number)

If you want to connect the AP (Access Point) or router with PIN, use this feature.





1 Repeat step 1-6 on P.59.



Connect the acccess point with **PIN** mode.

3 You can see the Network ID and Security Key on your TV screen.

Enter the PIN number to your device.

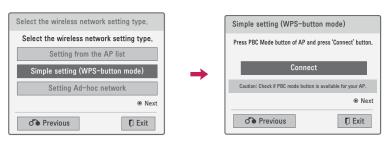


5 Repeat step 4-5 on P.56.

PIN number is the unique 8 digit number of the dongle.

Simple setting (WPS-button mode)

If your access point or wireless router that supports PIN or WPS (Wi-Fi Protected Setup), it's available to use your access point or wireless router within 120 counts. You do not need to know the access point name (SSID: Service Set Identifier) and security code of your access point or wireless router.



1 Repeat step 1-4 on P.59.



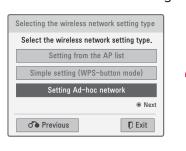
Select Simple setting (WPS-button mode).

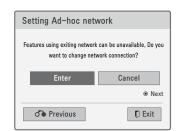


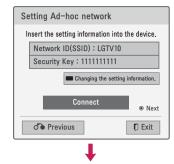
4 Repeat step 4-5 on P.56.

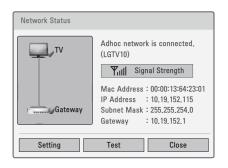
AD-hoc Mode

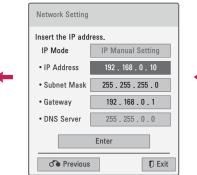
This is the method of communicating directly with the machine to communicate without AP. This is the same as connecting two PCs with a cross cable.

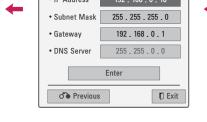












PC Setting Internet Protocol(TCP/IP) of PC needs to be set

Internet Projocoi (1017), 2 manually.

IP address, Subnet Mask, and default Gateway can be set with your own discretion.

i.e) IP address: 192.168.0.1 / Subnet Mask: 255.255.255.0 / default Gateway: 192.168.0.10 TV Setting

Verify IP address and gateway of PC. Input Gateway address of PC to IP Address, and IP Address of PC to Gateway, and select **Enter**. i.e) IP address: 192.168.0.10 / Subnet Mask: 255.255.255.0 / default Gateway: 192.168.0.1



- Example of the PC setting that supports a wireless network
- 1. Find a wireless network device in your PC.
- Select LGTV10 that appears in the list. (Select the same name as the network ID that appears on your TV screen.)
- 3. Type 1111111111 in the Inserting the security key dialog. (Type the security key that appears on your TV screen.)

1 Repeat step 1-3 on P.59.



Select Setting AD-hoc network.



Select Enter.



Select Connect to connect Ad-hoc network.

You can see the Network ID and Security Key on your TV screen. Enter this Network ID and Security Key to your device.

If a network may not operate, change the setting information using the RED button.

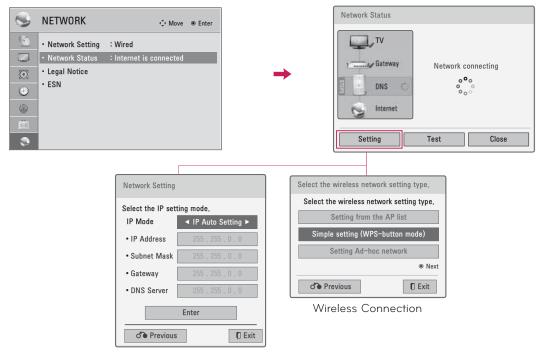


Insert the IP address.



Network setting is completed. Select Close.

Network Status



Wired Connection



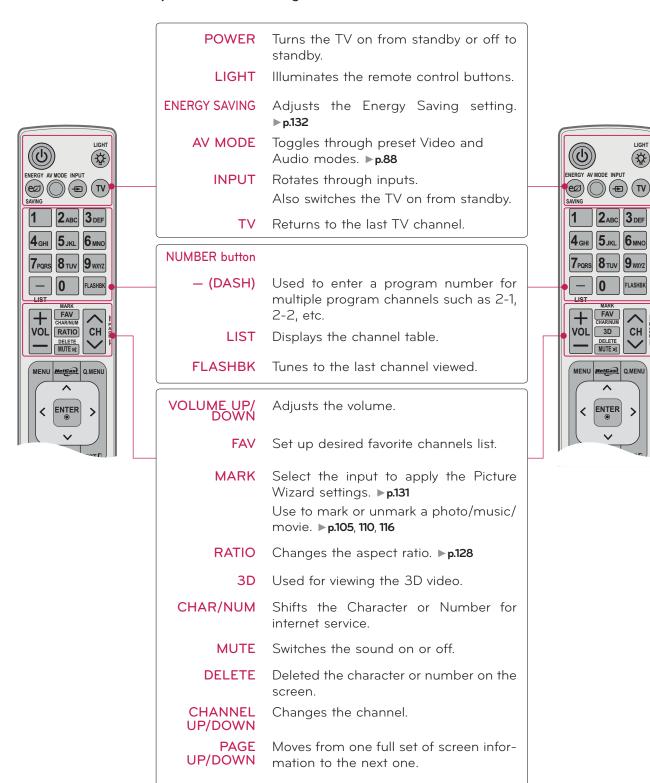
- **Setting**: Return to the network setting menu or wireless network setting type menu.
- **Test**: Test the current network status after setting the network.
- Close: Return to the previous menu.

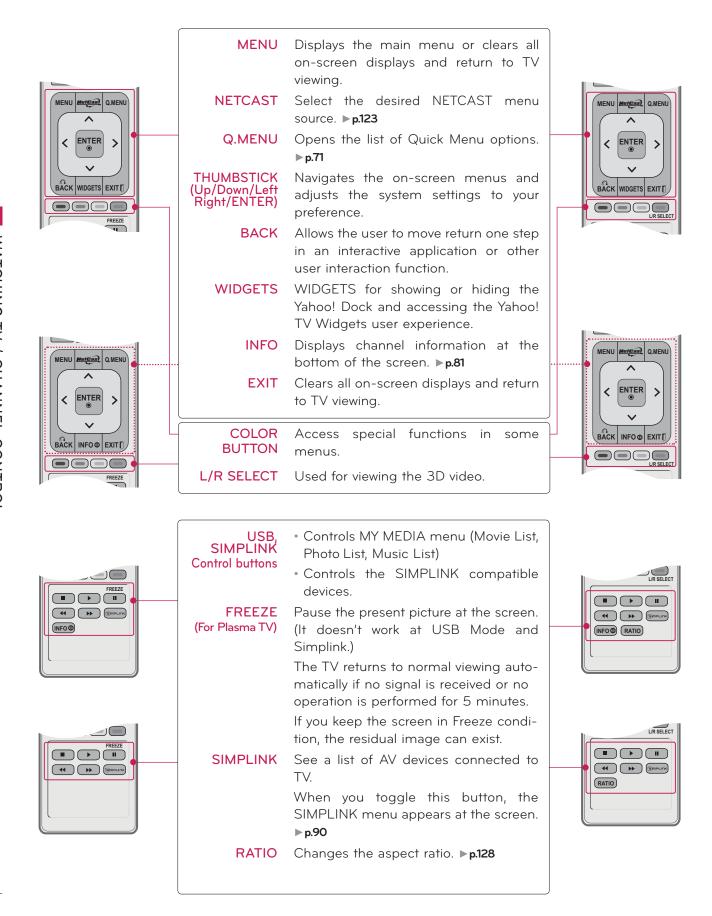
(☆)

WATCHING TV / CHANNEL CONTROL

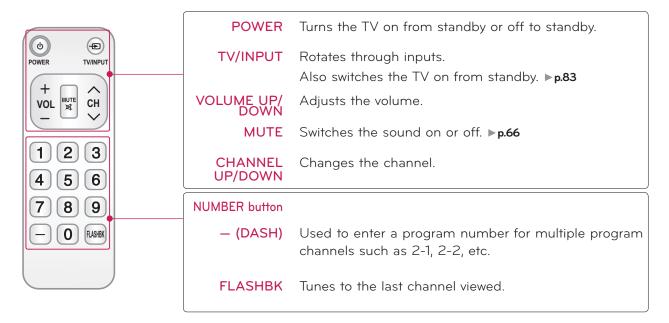
REMOTE CONTROL FUNCTIONS

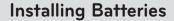
When using the remote control, aim it at the remote control sensor on the TV. The remote control may differ from the images below.

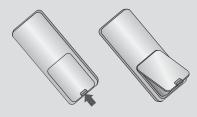




Simple Remote Control (For 42/47/55LE7500, 47/55LE8500)

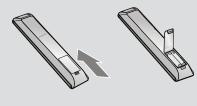






- Open the battery compartment cover on the back side and install the batteries matching correct polarity.
- Install two 1.5V AAA batteries. Don't mix old or used batteries with new ones.
- Close cover.

Installing Batteries



- Open the battery compartment cover on the back side and install the batteries matching correct polarity.
- Install two 1.5V AAA batteries. Don't mix old or used batteries with new ones.
- Close cover.

TURNING ON THE TV

- First, connect power cord correctly.
 - At this moment, the TV switches to standby mode.
 - In standby mode to turn TV on, press the \bigcirc / I, INPUT, CH (\land or \lor) button on the TV or press the \bigcirc , INPUT, CH (\land or \lor), Number (0-9) button on the remote control.
- Select the viewing source by using the **INPUT** button on the remote control.
- When finished using the TV, press the **POWER** button on the remote control. The TV reverts to standby mode.

NOTE

- If you intend to be away on vacation, disconnect the power plug from the wall power outlet.
- If you do not complete the **Initial setting**, it will appear whenever the TV is switched on until the **Initial setting** procedure is completed.

CHANNEL SELECTION

Press the CH (^ or V) or NUMBER buttons to select a channel number.

VOLUME ADJUSTMENT

Adjust the volume to suit your personal preference.

- Press the VOL (+ or -) button to adjust the volume.
- If you want to switch the sound off, press the MUTE button.
- You can cancel the Mute function by pressing the MUTE or VOL (+ or -) button.

INITIAL SETTING

This Function guides the user to easily set the essential items for viewing the TV for the first time when purchasing the TV. It will be displayed on the screen when turning the TV on for the first time. It can also be activated from the user menus.

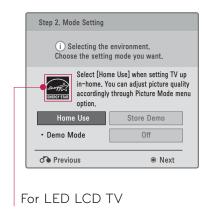
- Default selection is "**Home Use**". We recommend setting the TV to "**Home Use**" mode for the best picture in your home environment.
- **"Store Demo"** Mode is only intended for use in retail environments. Customers can adjust the "**Picture** menu **Picture mode"** manually while inspecting the TV, but the TV will automatically return to preset in-store mode after 5 minutes.
- "Store Demo" Mode is an optimal setting for displaying at stores. "Store Demo" mode initializes the TV to set the image quality:

Step 1. Selecting Language





Step 2. Mode setting





Step 3. Power Indicator (For LED LCD TV)





This function is disable in "Step2. Mode Setting - Store Demo".

Step 4. Time Zone





Step 5. Auto Tuning





ON-SCREEN MENUS SELECTION

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

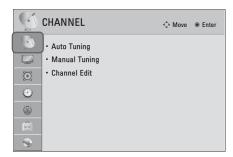


Display each menu.

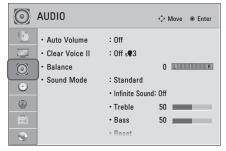


Select a menu item.



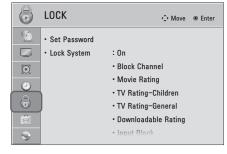




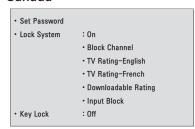


For USA





For Canada



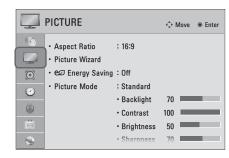


Accept the current selection.

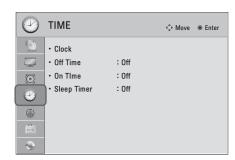


Return to TV viewing.

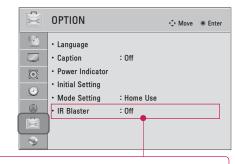












For further information, refer to the optional "Wireless Media Box" manual for operating instructions.

NOTE

- ▶ ISM Method: For Plasma TV.
- Backlight, TruMotion, LED Local Dimming, Power Indicator: For LED LCD TV/LCD TV.













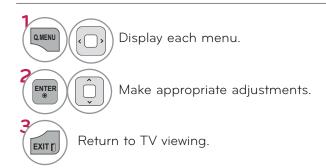


QUICK MENU

Your TV's OSD (On Screen Display) may differ slightly from what is shown in this manual. Q.Menu (Quick Menu) is a menu of features which users might use frequently.



- Aspect Ratio: Selects your desired picture format.
- **Picture Mode**: Selects the desired preset picture setting.
- **© Sound Mode**: Selects the desired preset sound setting.
- (a) Multi Audio: Changes the audio language (Digital signal).
- (a) SAP: Selects MTS sound (Analog signal).
- **G²Sleep Timer**: Select the amount of time before your TV turns off automatically.
- CH Del/Add: Select channel you want to add or delete.
- △ Caption: Select on or off.
- **USB Device**: Select "Eject" in order to eject a USB device.



CUSTOMER SUPPORT

Software Update

You can update the TV with the latest software to enhance the product operation and/or add new features

You can update the software by connecting the TV directly to the software update server.

The Software Update function may not work properly depending on your internet environment. In this case, you can obtain the latest software from the authorized LG Electronics Service Center then update your TV.









Select Customer Support.



Select Software Update.



Select **Check Update Version** to check the newest version.

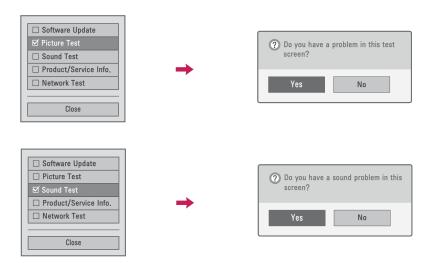
When selecting "Software Update-On"

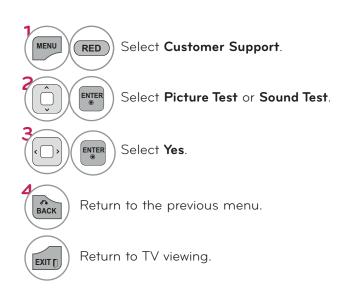
- If the TV is connected to the internet and it finds a software update on the LG server, the update popup menu will appear automatically.
- If the updated digital software information is transmitted, the update popup menu will appear automatically.

- The software downloading time will vary depending on the software size and network conditions.
- During the software update procedure, do not turn off the TV or disconnect AC power, or disconnect the LAN cable.
- After software update, you can confirm the update software version at software Update menu.
- When update is completed, the TV will restart automatically in 5 seconds
- The TV functions may be improved or changed by software update.
- The available time or functionality of NetCast menu may be depends on your ISP network conditions.
- When an update is completed, some CHANNEL, PICTURE, and AUDIO menu settings may need resetting.
- This TV cannot be updated to previous software version.
- Use the "Check Update Version" button to update the latest software on the Network server manually.
- You cannot open NetCast while the software is being updated.

Picture Test/Sound Test

This function is a customer support function that can execute picture and sound tests.





Product/Service Info.

This function shows support and product information. Customer Service Center can differ by country.



Select Customer Support.



Select Product/Service Info..

You can check the various product/Service infomation based on your model.



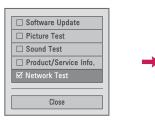
Return to the previous menu.

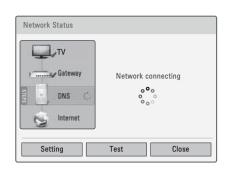


Return to TV viewing.

Network Test

Check the newtwork status.







Select Customer Support.



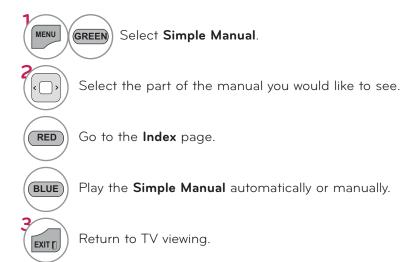
Select Network Test.



Check the newtwork status.

SIMPLE MANUAL

You can easily and effectively access the TV information by viewing a simple manual on the TV. During the Simple Manual operation, audio will be muted.



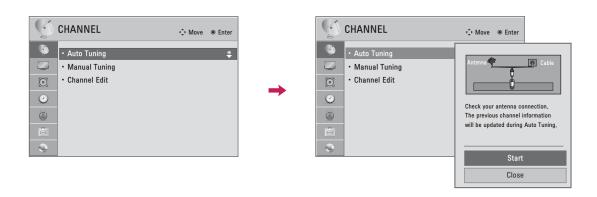
CHANNEL SETUP

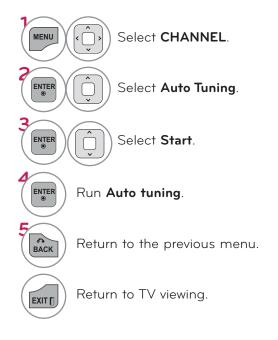
Auto Scan (Auto Tuning)

Automatically finds all channels available through antenna or cable inputs, and stores them in memory on the channel list.

Run this function if you change your residence or move the TV.

Auto Tuning memorizes only the channels available at the time.

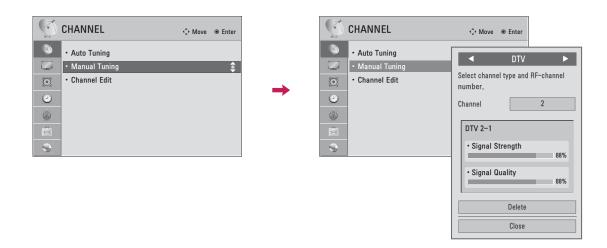


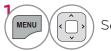


- The TV will ask for a password if parental control has been activated (LOCK Menu). Use the password you set up in the LOCK Menu to allow a channel search.
 The maximum number of channels the TV can store is 1000.
- Found channels are grouped in the order of DTV, TV, Cable DTV and Cable TV.

Add/Delete Channel (Manual Tuning)

When selecting DTV or Cable DTV input signal in **Manual Tuning**, you can view the on-screen signal strength monitor to see the quality of the signal being received.





Select CHANNEL.



Select Manual Tuning.



Select DTV, TV, Cable DTV, or Cable TV.



Select channel you want to add or delete.



Select Add or Delete.



Return to the previous menu.



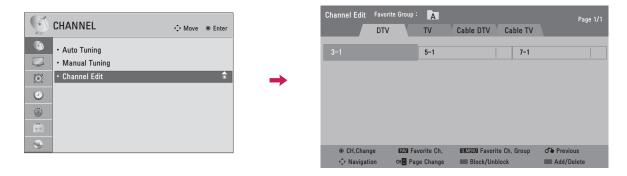
Return to TV viewing.

- The TV will ask for a password if parental control has been activated (LOCK Menu). Use the password you set up in the LOCK Menu to allow a channel search.
- The maximum number of channels the TV can store is 1000.

Channel Editing

The channels in the Channel Edit List are displayed in black and the channels deleted from the Channel Edit List are displayed in blue.

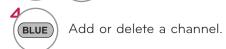
When a channel number is deleted, it means that you will be unable to select it using $CH \land V$ button during TV viewing. If you wish to select the deleted channel, directly enter the channel number with the NUMBER buttons or select it in the Channel Edit menu.











Block or unblock the channel.
You can block/unblock channels even if you select "Lock system-Off" in the LOCK menu.

Switch to the chosen channel number.

Move the pages when the channel list is too long.

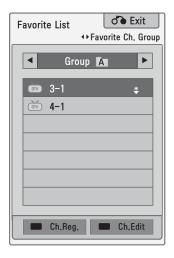
Return to the previous menu.

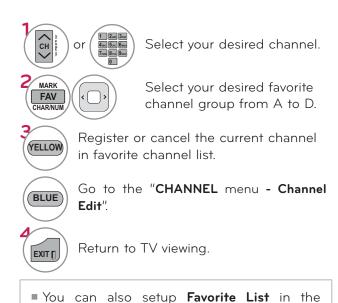


Keep pressing the ^ button and use the < or > buttons to move between DTV, TV, Cable DTV and Cable TV.

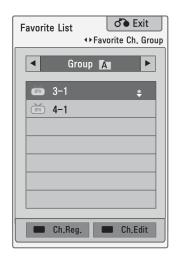
FAVORITE CHANNEL SETUP

Favorite Channels are a convenient feature that lets you quickly select channels of your choice without waiting for the TV to select all the in-between channels.





FAVORITE CHANNEL LIST

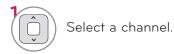


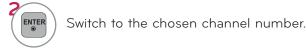
Displaying the favorite channel list



CHANNEL menu - Channel Edit.

Selecting a channel in the favorite channel list





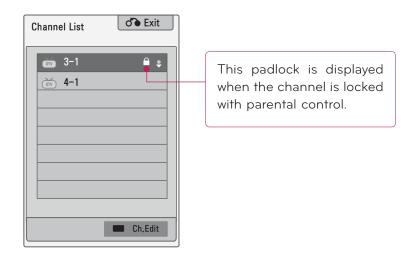
Paging through a favorite channel list





CHANNEL LIST

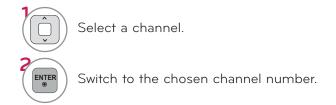
You can check which channels are stored in the memory by displaying the channel list.



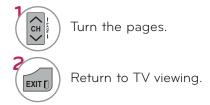
Displaying Channel List



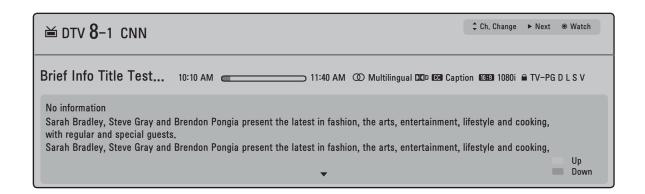
Selecting a channel in the channel list



Paging through a channel list



CHANNEL INFORMATION



Displaying Channel Information



Show the current channel program Information on the screen.



Show a previous or next channel's pro gram information



Return to TV viewing.

CHANNEL BRIEF INFORMATION

Brief Info shows the present screen information.

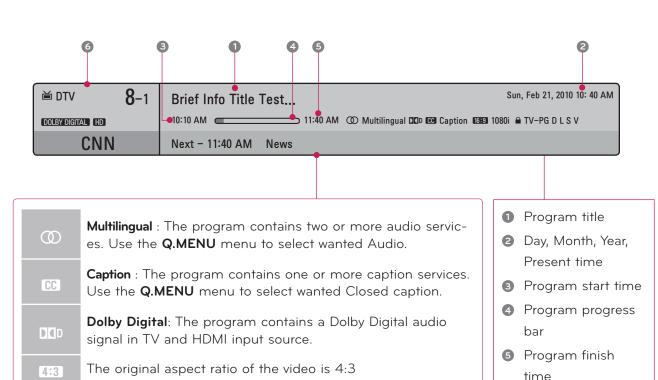


Shows the current channel's brief info screen.



16:9

Return to TV viewing.



Banner information

The original aspect ratio of the video is 16:9 (wide)

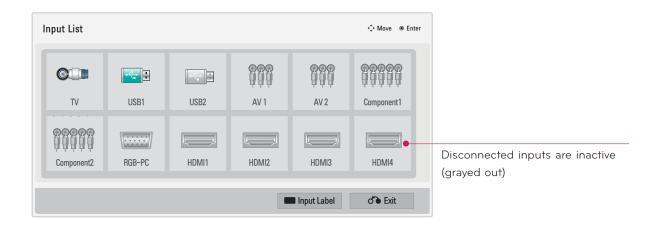
V-Chip: The program contains V-Chip information. Refer to the LOCK menu: A (Age), D (Dialogue), L (Language), S (Sex),

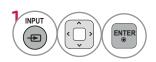
The video resolution is 720x480i The video resolution is 720x480p The video resolution is 1280x720p The video resolution is 1920x1080i The video resolution is 1920x1080p

V (Violence), FV (Fantasy Violence)

INPUT LIST

Only these input signals which are connected to a TV can be activated and selected.





Select the desired input source.

- You can also select the desired input source in the **INPUT** menu.
- When new external device is connected, this popup menu is displayed automatically.
 If selecting **Yes**, you can select input source that you want to appreciate.
- But, when selecting "SIMPLINK On", popup menu for HDMI input will not be displayed.

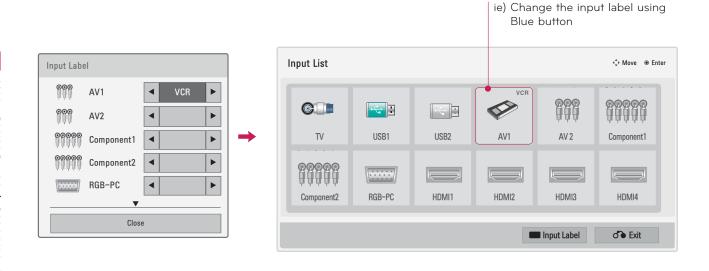


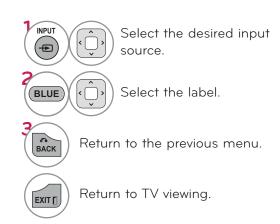
- TV: Select it to watch over-the-air, cable and digital cable broadcasts.
- USB: Select it to use movie, photo, or music files.
- AV: Select them to watch a VCR or other external equipment.
- **Component**: Select them to watch DVD or a Digital set-top box.
- RGB-PC: Select it to view PC input.
- HDMI: Select them to watch high definition devices.

WATCHING TV / CHANNEL CONTROL

INPUT LABEL

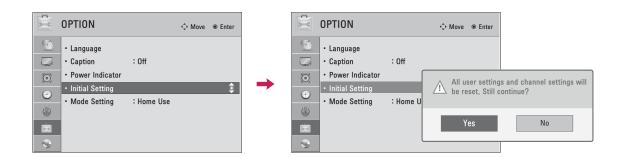
This indicates which device is connected to which input port.

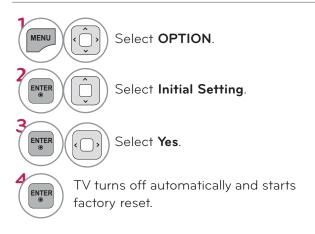




RESET TO FACTORY DEFAULT (INITIAL SETTING)

This function resets the TV to factory default and erases all stored channels.



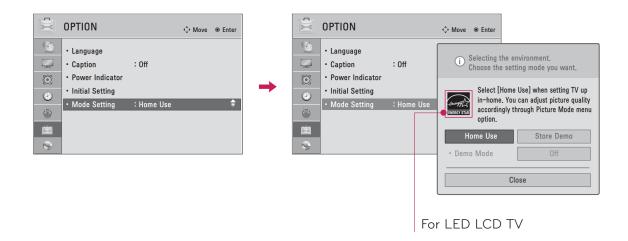


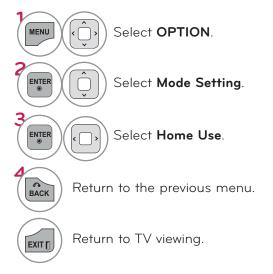
- When selecting "Lock System On" in the LOCK menu, the message to enter the password appears.
- If you forget your password, press "0-3-2-5" on the remote control.

WATCHING TV / CHANNEL CONTROL

MODE SETTING

Default selection is "Home Use". We recommend setting the TV to "Home Use" mode for the best picture in your home environment.

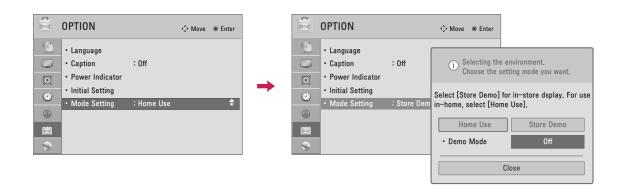


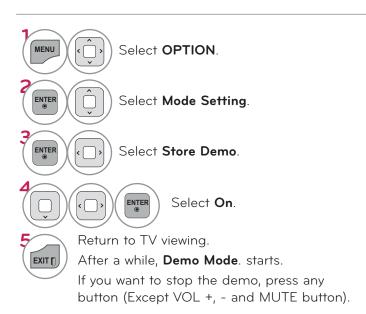


- "Store Demo" Mode is only intended for use in retail environments. Customers can adjust the "Picture menu Picture mode" manually while inspecting the TV, but the TV will automatically return to preset instore mode after 5 minutes.
- "Store Demo" Mode is an optimal setting for displaying at stores. "Store Demo" mode initializes the TV to set the image quality.

DEMO MODE

Displays a slide show to explain the various feature of this TV.



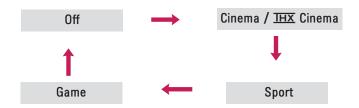


■ This feature is disabled in "Home Use".

WATCHING TV / CHANNEL CONTROL

AV MODE

AV Mode toggles through preset Video and Audio settings.





Press the **AV MODE** button repeatedly to select the desired source.



- If you select "Cinema / <u>IHX</u> Cinema" in AV mode, Cinema / <u>IHX</u> Cinema will be selected both for "PICTURE menu Picture Mode" and "AUDIO menu Sound Mode" respectively.
- If you select "Off" in AV mode, the "Picture Mode" and "Sound Mode" return to previous selected value.
- Off: Disables the AV MODE.
- Cinema / <u>THX</u> Cinema: Optimizes video and audio for watching movies.
- Sport: Optimizes video and audio for watching sports events.
- **Game**: Optimizes video and audio for playing games.

GAME

Allows you to enjoy the games installed on the TV.





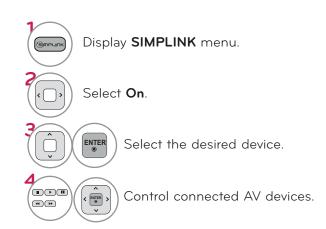
WATCHING TV / CHANNEL CONTROL

SIMPLINK

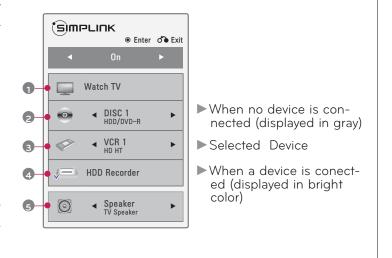
SIMPLINK allows you to control and play other AV devices connected with HDMI cable without additional cables and settings. This TV may work with devices with HDMI-CEC support, but only devices with the SIMPLINK logo are fully supported.

SIMPLINK can be turned on and off in the user menus.





- **1 TV viewing**: Switch to the previous TV channel regardless of the current mode.
- ② DISC playback: Select and play discs. When multiple discs are available, the disc devices are conveniently displayed at the bottom of the screen.
- **3 VCR playback**: Control the connected VCR.
- 4 HDD Recordings playback: Control recordings stored in HDD.
- Audio Out to Home Theater speaker/ Audio Out to TV: Select Home Theater speaker or TV speaker for Audio Out.



SIMPLINK Functions

- Direct Play: After connecting AV devices to the TV, you can directly control the devices and play media without additional settings.
- Select AV device: Enables you to select one of the AV devices connected to the TV.
- **Disc playback:** Control connected AV devices by pressing the ^ ∨⟨⟩, **ENTER**, ▶, ■, Ⅱ, ◀ and ▶ buttons.
- Power off all devices: When you power off the TV, all connected devices are turned off.
- Switch audio-out: Offers an easy way to switch audio-out.
- Sync Power on: When the equipment with Simplink function connected HDMI terminal starts to play, The TV will automatically turn on.

Note: To operate SIMPLINK, an High Speed HDMI cable with *CEC function should be used. (*CEC: Consumer Electronics Control).

(A device, which is connected to the TV through a HDMI cable but does not support SIMPLINK, does not provide this function)

NOTE

- ► Connect the HDMI/DVI IN or HDMI IN terminal of the TV to the rear terminal (HDMI terminal) of the SIMPLINK device with the HDMI cable
- ▶ When you switch the Input source with the INPUT button on the remote control, the SIMPLINK device will stop.
- ▶ When you select a device with home theater functionality, the sound output automatically switches to the home theater speakers and the TV speakers are turned off.
- ▶ If a connected SIMPLINK home theater system doesn't play the audio from the TV, connect the DIGITAL AUDIO OUT terminal on the back of the TV to the DIGITAL AUDIO IN terminal on the back of the SIMPLINK device with an OPTICAL cable.

3D VIDEO (FOR 42/47/55LX6500)

3D VIDEO

3D video is the technology of using the different view between the two eyes to make the screen on the TV to look as a 3D space.

Caution when viewing 3D Video

- ▶When viewing 3D video, watch the TV within effective viewing angle and distance.
 - If you exceed the viewing angle or distance, you may not be able to view the 3D video.
- If the receiving range is out of the specified range, the screen may not be viewable as 3D video
- If you watch the 3D video too closely for a long period of time, it may hurt you eyesight.
- ► Watching TV or game screen with the 3D video glasses for a long period of time can cause drowsiness or fatigue to your eyes.
 - If you feel headache, fatigue or drowsiness, stop watching TV and take a rest.
- ▶ Pregnant woman, senior, person with heart problem or frequent drowsiness should refrain from watching 3D video.
- ▶ Viewers can confuse 3D video as reality to be surprised or excited.
- ► When watching 3D video, do not leave any fragile or dangerous objects nearby. You can confuse the 3D video as reality and suddenly move to cause an injury.
- Especially special care is required for children watching the 3D video.
- ► Warning for photosensitization seizure
 - Specific image from the video game and light or specific pattern from the video can cause a seizure to some individuals. If you or anybody from your family has a history of epilepsy or seizure, please consult your doctor before watching 3D video.
 - Also the following symptoms can occur in unspecified conditions without any previous history.
 - If you experience dizziness, visual transition, visual or facial instability, unconscious action, convulsion, loss of conscience, confusion, loss of directional sense or nausea during or after watching the 3D video, immediately stop watching the 3D video and consult the doctor.

Risk of photosensitization seizure can be reduced with the following actions.

- Do not watch the 3D video when sleepy, tired or sick, and avoid watching the 3D video for a long period of time.

Caution when using 3D Glasses

- ▶3D glasses is sold separately. Refer to the 3D glasses manual for operating instructions.
- ▶ Do not use the 3D glasses to replace the general glasses, sunglasses or protective goggles. It can cause an injury.
- ▶ Do not store the 3D glasses in hot or cold location. It can be deformed. Do not use deformed glasses.
- ▶ Do not apply the force or drop the 3D glasses or import force to the 3D glasses.
- ▶ Because the lens (Polarized film) of 3D glasses is sensitive to scratches, always use a soft and clean cloth to wipe the product. Because any alien particle on the cloth can result in scratches, be cautious
- Do not scratch the surface of the lens (Polarized film) of 3D glasses with a sharp tool or wipe the lens with chemicals. The polarized film can be scratched and the video may not look normal when viewing the 3D image.

3D Video viewing range

	Maximum	Optimum
Viewing Distance	7 m (22.9 ft)	3 m - 7 m (9.8 fy - 22.9 ft)
Viewing Angle	140° (When the viewing distance is 3 m (22.9 ft)	

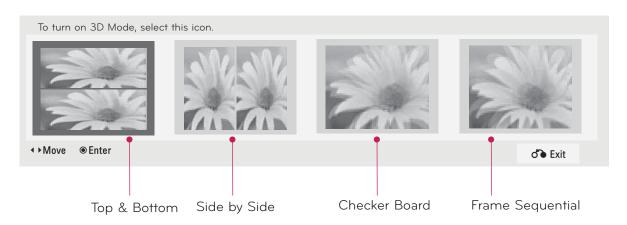
WATCHING THE 3D VIDEO

1 Play the title produced in 3D video. Refer to the following for 3D video input format supported.

	Signal	Resolution	Horizontal Frequency (kHz)	Vertical Frequency (Hz)	Playable 3D video format
	720p	1280x720	45.00	60.00	Top & Bottom, Side by Side HDMI (V. 1.4 with HDMI 3D) Frame Packing
	1080i		33.75		Top & Bottom, Side by Side
HDMI Input	1080p	1920X1080	67.50		Top & Bottom, Side by Side, Checker Board Single Frame Sequential
			27.00	24	Top & Bottom, Side by Side, Checker Board HDMI (V. 1.4 with HDMI 3D) Frame Packing
			33.75	30	Top & Bottom, Side by Side Checker Board
USB Input	1080p	1920X1080	33.75	30	Top & Bottom, Side by Side Checker Board

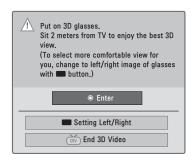


After selecting the shape as shown in the screen on TV, wear the 3D glasses.





Select Setting Left/Right.



L/R SELECT



Select Left/Right or Right/Left.

Select the screen with 3D video with better visibility.





Return to TV viewing.



- Specific menus may not work while watching the 3D video.
- ▶ 3D video does not work during external input lock, external input transition, editing **Input Label**, **USB** menu and **SIMPLINK**.

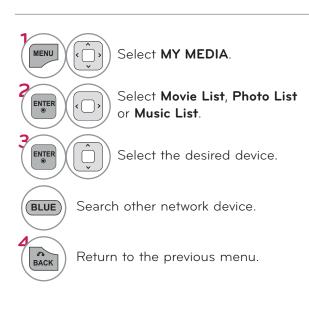
ENTRY MODE

The My Media menu will open automatically when you insert a USB drive. My Media can also be accessed by choosing My Media in the user menu.

After choosing the desired type of media, choose a device to open files from. The options are: USB device, or DLNA.







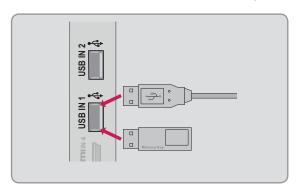
■ This TV can view JPG image files, HD DivX files and play MP3 audio files.



CONNECTION METHOD

USB Connection

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



Precautions when using the USB device

- ► Only a USB storage device is recognizable.
- Connecting a USB storage device through a USB hub is not supported.
- A USB storage device which uses its own driver may not be recognized.
- The recognition speed of a USB storage device may depend on each device.
- ▶ Please do not turn off the TV or unplug the USB device when the connected USB storage device is working. When such device is suddenly separated or unplugged, the stored files or the USB storage device may be damaged.
- ▶ Only use a USB storage device which has normal music files, image files, or movie files.
- ▶ Please use only a USB storage device which was formatted as a FAT 32 or NTFS file system provided with the Windows operating system. Others may not be recognized.
- Some USB storage devices require a power adapter. The power adapter must be connected in order to be seen by the TV.
- ▶ If a device is not recognized by the TV, try a different cable. Excessively long cables are not supported.
- Some USB storage devices may not be supported or operate properly.
- ▶ Please backup important files because data on USB device could be damaged. Data management is consumer's responsibility and as a result, the manufacturer does not cover data damage.
- ▶ If your USB memory device has multiple partitions, or if you use a USB multi-card reader, you can use up to 4 partitions or USB memory devices.
- File alignment method of USB storage device is similar to Window XP and file names can be up to 100 English characters.
- ► The recommended capacity is 1 TB or less for a USB external hard disk and 32 GB or less for USB memory.
- ▶ If a USB external hard disk with a "Energy Saving" function doesn't work, turn the hard disk off and on again to make it work properly. Refer to the user manual of the USB external hard disk.
- ►USB storage devices below USB 2.0 are supported as well. But they may not work properly in the
- Maximum of 999 folders or files can be recognized under one folder.
- If there are too many folders and files in one folder, it may not operate properly.

DLNA

About DLNA

This TV is a DLNA Certified digital media product that can display and play movie, photo and music content from your DLNA Certified network device and DLNA server. The Digital Living Network Alliance (DLNA) is a cross-industry organization of consumer electronics, computing industry and mobile device companies. Digital Living provides consumers with easy sharing of digital media through a wired or wireless network in the home.

The DLNA certification logo makes it easy to find products that comply with the DLNA Interoperability Guidelines. This unit complies with DLNA Interoperability Guidelines v1.5. When a PC running DLNA server software or other DLNA compatible device is connected to this TV, some setting changes of software or other devices may be required. Please refer to the operating instructions for the software or device for more information.

• NOTE

- ▶ The supplied Nero MediaHome 4 Essentials CD-ROM is a customized software edition only for sharing files and folders to this TV.
- The supplied Nero MediaHome 4 Essentials software does not support following functions: Transcoding, Remote UI, TV control, Internet services and Apple iTunes
- This manual explains operations with the English version of Nero MediaHome 4 Essentials as examples. Follow the explanation referring to the actual operations of your language version.

Installing Nero MediaHome 4 Essentials

Nero MediaHome 4 Essentials is easy to use DLNA server software for Windows.

Requirement PC system before you install Nero MediaHome 4 Essentials

- Windows® XP (Service Pack 2 or higher), Windows Vista® (no Service Pack required), Windows® XP Media Center Edition 2005 (Service Pack 2 or higher), Windows Server® 2003
- Windows Vista® 64-bit edition (application runs in 32-bit mode)
- Hard drive space: 200 MB hard drive space for a typical installation of Nero MediaHome standalone
- 1.2 GHz Intel® Pentium® III or AMD Sempron™ 2200+ processors
- Memory: 256 MB RAM
- Graphics card with at least 32 MB video memory, minimum resolution of 800 x 600 pixels, and 16-bit color settings
- Windows® Internet Explorer® 6.0 or higher
- DirectX® 9.0c revision 30 (August 2006) or higher
- Network environment: 100 Mb Ethernet, WLAN (IEEE 802.11b/g/n)

- 1 Start up your computer, and insert the Nero MediaHome 4 Essentials CD-ROM into your computer's CD-ROM drive.
 - An installation wizard will walk you through the quick and uncomplicated installation process.
- 2 Close all Microsoft Windows programs and exit any anti-virus software that may be running.
- 3 Insert the Nero MediaHome 4 Essentials CD-ROM into your computer's CD-ROM drive.
- 4 Click **Nero MediaHome 4 Essentials**. The installation is prepared and the installation wizard appears.
- 5 Click the **Next** button to display the serial number input screen. Click **Next** to go to the next step.
- 6 If you accept all conditions, click I accept the License Conditions check box and click Next. Installation is not possible without this agreement.
- 7 Click **Typical** and click **Next**. The installation process is started.
- 8 If you want to take part in the anonymous collection of data, select the check box and click the **Next** button.
- 9 Click the **Exit** button to complete the installation.

Sharing files and folders

After installing Nero MediaHome, you must add folders you wish to share.

- 1 Double-click the Nero MediaHome 4 Essentials icon on the desktop.
- **2** Click **Network** icon on the left and define your network name in the **Network name** field. The Network name you enter will be recognized by your TV.
- 3 Click Shares icon on the left.
- 4 Click Local Folders tab on the Shared screen.
- 5 Click Add icon to open the Browse Folder window.
- 6 Select the folder containing the files you want to share. The selected folder is added to the list of shared folders.
- 7 Click Start Server icon to start the server.

NOTE

- If the shared folders or files are not displayed on the TV, click the folder on the Local Folders tab and click Rescan Folder at the More button.
- ▶ Visit www.nero.com for more information and software tools.

Playing back shared contents

You can display and play movie, photo and music content stored on your computer or other DLNA media servers.

1 Start the server on your computer or other device that connected on your home network.



Select MY MEDIA.



Select Movie List, Photo List or Music List.



Select the DLNA.

Depending on the media server, this TV may need to get the permission from the server.

If you want to re-scan available media server, press blue color button.

• NOTE

- ▶ To play the file on the media server, the TV and the media server must be connected to the same access point.
- ▶ Because the compatibility and available playback functions on the MY MEDIA menu are tested on the bundle DLNA server (Nero MediaHome 4 Essentials) environment, file requirements and playback functions on the MY MEDIA may differ depending on media servers.
- The file requirements on this page are not always compatible. There may have some restrictions by file features and media server's ability.
- ▶ Even the files that are not supported can be displayed in photo thumbnail or music thumbnail.
- Movie thumbnail is not supported in DLNA Movie.
- If there is an unplayable music file in the **MY MEDIA** menu, the TV will skip the file and play next file.
- The file information indicated on the screen may not always correct for music and movie files in **MY MEDIA** menu
- ▶ This TV only supports movie subtitle files supplied by Nero MediaHome 4.
- The subtitle file name and movie file name have to be the same and located at the same folder.
- If subtitle files have been added after a directory has been indexed already, the user has to remove and re-add the folder to the list of shares.
- ▶ The playback and operating quality of the MY MEDIA function may be affected by your home network condition.
- The files from removable media such as USB drive, DVD-drive etc. on your media server may not share properly.
- ► When playing the Media through DLNA connection, it does not support the DivX file play which is protected by DRM.
- ▶ Up to 200 folders in one folder and 999 including folders and files can be recognized.
- If there are too many folders and files in one folder, it may not operate properly.

MOVIE LIST

It displays all of the video files it recognizes.

The On-Screen Display on your model may be slightly different.

Supported movie file

- Resolution: under 1920 pixel (width) x 1080 pixel (height)
- Frame Rate: under 30 frame/sec (1920x1080), under 60 frame/sec (1280x720)
- Max bitrate of playable video file: 20 Mbps (Mega bit per second)
- Bit rate of audio format: within 32 kbps to 320 kbps (MP3)
- Supported external subtitle format: *.smi/*.srt/*.sub(MicroDVD,Subviewer1.0/2.0)/*.ass/*.ssa/*. txt(TMPlayer)/*.psb(PowerDivX)
- Supported Internal subtitle format: only XSUB (It is the subtitle format used in DivX6 files)

Precautions when playing the video files

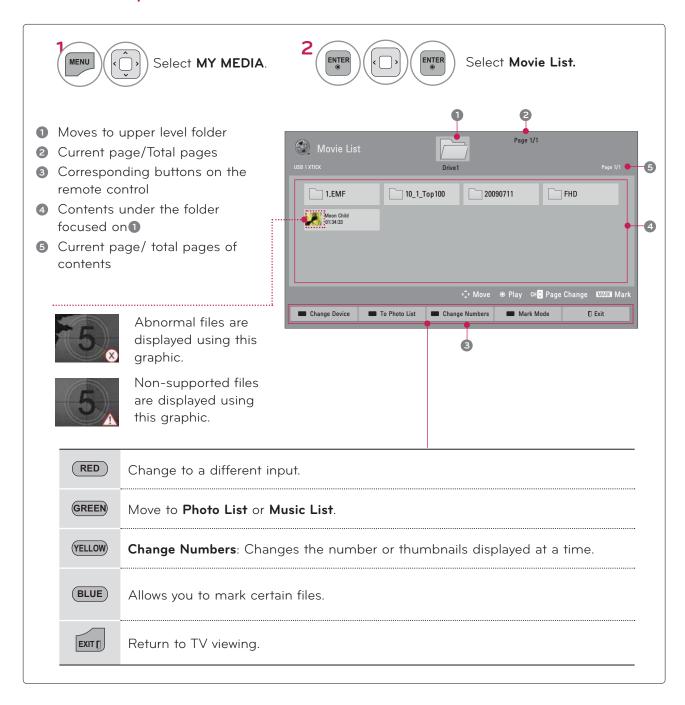
- Some user-created subtitles may not work properly.
- Some special characters are not supported in subtitles.
- ►HTML tags are not supported in subtitles.
- Time information in an external subtitle file should be arranged in ascending order to be played.
- Changing font and color in subtitles is not supported.
- ► Subtitles in languages other than one specified are not supported.
- ► Video files with subtitle files of 1 MB or larger may not be played properly.
- ▶ The screen may suffer temporary interruptions (image stoppage, faster playback, etc.) when the audio language is changed.
- ▶ A damaged video file may not be played correctly, or some functions may not be usable.
- ▶ Video files produced with some encoders may not be played correctly.
- If the video and audio structure of recorded file is not interleaved, the file not playback properly.
- ► Video with resolution higher than maximum resolution supported for each frame, cannot be guaranteed for smooth playback.
- ▶ Video files other than the specified types and formats may not work properly.
- The movie file encoded by the GMC (Global Motion Compensation) and Qpel (Quarterpel Motion Estimation) is not supported.
- Only 10000 sync blocks are supported within the subtitle file.
- ▶ We do not guarantee smooth playback of profiles encoded level 4.1 or higher in H.264/AVC.
- ▶ 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 its subtitle file must be located in the same folder.

 At this time, a video file name and its subtitle file name must be identical for it to be displayed.
- ► When you are watching a movie via the Movie List function, you can adjust the picture with the ENERGY SAVING and AV MODE button on the remote control. User setup for each picture mode is not supported.
- ▶ Trick Mode does not support other functions than ▶ if video files do not have index information.
- ▶When playing video file using network, the Trick mode is limited to 2-times speed.
- Video file names that contain special characters may not be playable.

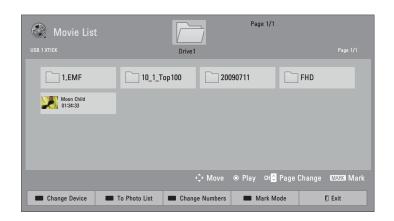
Supported Video Formats

File Extensions	Audio/ Video	Codec	Profile/Level Support	Explanation	
	Video	VC-1 Advanced Profile	Advanced Profile@Level 3 (e.g. 720p60, 1080i60, 1080p30)	Only streams compliant	
.asf .wmv .wma		VC-1 Simple and Main Profiles	Simple Profile@Medium Level (e.g. CIF, QVGA) Main Profile@High Level (e.g. 1080p30)	to SMPTE 421M VC-1 standard are supported.	
	Audio	WMA Standard WMA 9 Professional			
.divx .avi	Video	DivX3.11 DivX4 DivX5 DivX6 XViD H.264 / AVC	Advanced Simple Profile (e.g. 720p/1080i) Main Profile@ Level 4.1 High Profile@ Level 4.1 (e.g. 720p60, 1080i60, 1080p30)	Global motion compensation or quarterpel motion estimation does not supported. Streams using this syntax are not supported.	
	Audio	MPEG-1 Layer I, II MPEG-1 Layer III (MP3) Dolby Digital	(0.9. 120000, 1000,		
.mp4 .m4a	Video	H.264 / AVC	Main Profile@ Level 4.1 High Profile@ Level 4.1 (e.g. 720p60, 1080i60, 1080p30)	Global motion compensation or quarterpel motion estimation does	
.m4v		MPEG-4 Part 2	Advanced Simple Profile (e.g. 720p/1080i)	not supported. Streams using this syntax are not supported.	
.mkv	Audio Video	H.264 / AVC	AAC-LC and HE-AAC Main Profile@ Level 4.1 High Profile@ Level 4.1 (e.g. 720p60, 1080i60, 1080p30)	Most of the MKV content available is encoded by the open source x264 codec.	
	Audio	AAC Dolby Digital	AAC-LC and HE-AAC		
		H.264 / AVC	Main Profile@ Level 4.1 High Profile@ Level 4.1 (e.g. 720p60, 1080i60, 1080p30)		
	Video	MPEG-2	Main Profile@High Level(e.g. 720p60, 1080i60)		
.ts .trp .tp		VC-1	Simple Profile@Medium Level (e.g. CIF, QVGA) Main Profile@High Level (e.g. 1080p30) Advanced Profile@Level3 (e.g. 720p60, 1080i60, 1080p30)	Only streams compliant to SMPTE 421M VC-1 standard are supported.	
	Audio	MPEG-1 Layer I, II MPEG-1 Layer III (MP3) Dolby Digital			
.vob	Video	AAC MPEG-1	AAC-LC and HE-AAC		
	Audio	MPEG-2 Dolby Digital MPEG-1 Layer I, II DVD-LPCM	Main Profile@High Level (e.g. 720p60, 1080i60)		
.mpg	Video	MPEG-1	Main Profile@High Level (e.g. 720p60, 1080i60)	Only streams compliant configured properly for	
	Audio	MPEG-1 Layer I, II		TS, PS or ES	

Screen Components

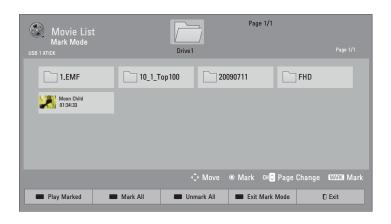


Movie Selection



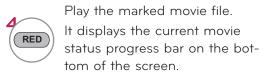
- Select the target folder or drive.
- Select the desired movie title.
- Play the movie file.
 - Use the CH (∧ ∨) button to navigate in the movie page.

Mark Mode





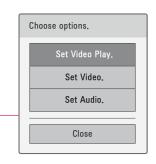
- Select the target folder or drive.
- Select the desired movie title.
- Mark FAV CHARINUM Mark your desired movie file.



When one or more movie files are marked, the marked movies will be played in sequence.

Playing the Movie







Show the ${\bf Option}\ {\bf menu}.$



Select **Set Video Play.**, **Set Video.**, or **Set Audio.**

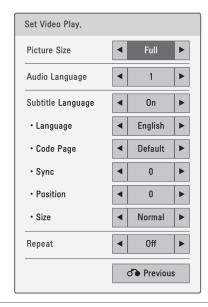
• NOTE

- When replaying a video file after stopping, you can play from where it stopped automatically.
- If you select "Yes" when playing the same file after the video file has been stopped, it will restart where it stopped previously.
- If continuous series files exist within the folder, the next file will automatically be played. But, this excludes cases when the Repeat function of Movie List Option is turned "On" (Refer to page 107) or when set as Marked Play.

Using the remote control

EXIT	Return to the previous menu.	
(4)	Select the required speed: x2, x4, x8, x16, x32 (backward/forward).	
II	Pauses the media player. If no buttons are pressed on the remote control for 10 minutes after pausing, the TV returns to the playback state.	
II >>	Displays slow motion.	
(<u>)</u>	Move to a specific frame forward or backward while playing a video. A cursor indicating the position can be viewed on the screen. It may not work properly for some movie files.	
•	Return to normal playback.	
BACK	Hide the menu on screen. To see the menu again, press ENTER button.	
ENERGY SAVING	Press the ENERGY SAVING button repeatedly to increase the brightness of your screen (Refer to p. 132).	
AV MODE	Press the AV MODE button repeatedly to select the desired source (Refer to p. 88).	

Set Video Play Menu Options





Select Picture Size, Audio Language, Subtitle Language, or Repeat.



Make appropriate adjustments.

Code Page

Subtitle Language Group	Supported Language	
Latin1	English, Spanish, French	
Korean	English, Korean	

■ **Picture Size**: Selects your desired picture format for videos.

Full Mode: Files are played in full screen mode regardless of the aspect ratio of video.

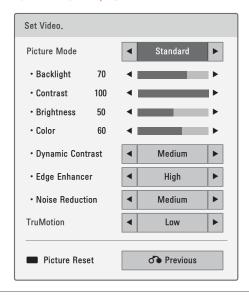
Original Mode: Files are played according to the aspect ratio of video.

- Audio Language: Changes the Language Group of the audio for video files. Files with a single audio track cannot be selected.
- **Subtitle Language**: The subtitles can be turned on or off.
- Language: Activated for SMI subtitles and can select the language within the subtitle.
- Code Page: Subtitle font selection. When set to default, contents are displayed in the language set in "Option Language Menu Language."
- **Sync**: When the video is not synchronized with the captions, it can be adjusted by 0.5 second.
- **Position**: Move the location of the subtitles.
- **Size**: Changes the subtitle font size.
- Repeat: Turn on/off repeat function of movie playback. When turned on, the file within the folder will be played back repeatedly. When turned off, if the next file name is similar to the previous file, it can be played sequentially.

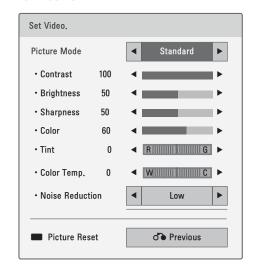
* Image shown may differ from your TV.

Set Video Menu Options

For LED LCD TV/LCD TV



For Plasma TV





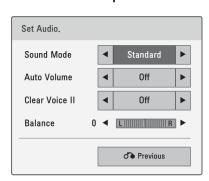
Make appropriate adjustments.

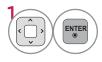
Then, select **Previous**.



Reset picture settings to default.

Set Audio Menu Options





Make appropriate adjustments.

Then, select Previous.

PHOTO LIST

The On-Screen Display on your model may be slightly different.

Supported photo file: *.JPG

- Baseline: 64 pixel (width) x 64 pixel (height) to 15360 pixel (width) x 8640 pixel (height)
- Progressive: 64 pixel (width) x 64 pixel (height) to 1920 pixel (width) x 1440 pixel (height)
- You can play JPEG files only.
- Non-supported files are displayed in the form of predefined icon.
- An error message occurs for corrupted files or file formats that cannot be played.
- Corrupted image files may not be displayed properly.
- It may take some time to view high-resolution images in full screen.

Screen Components

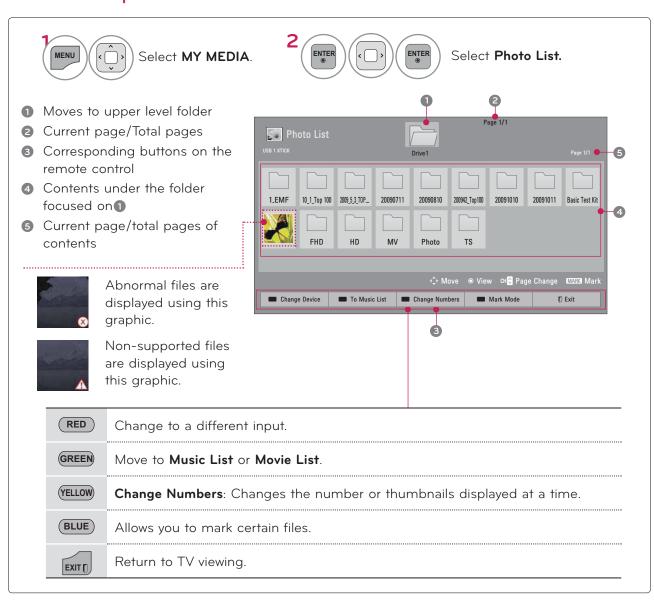
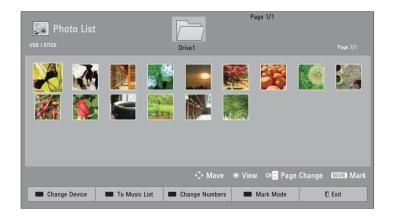


Photo Selection





■ Use the CH (∧ ∨) button to navigate in the photo page.

Mark Mode





- Select the target folder or drive.
- Select the desired photo files.
- MARK FAV CHARNUM Mark your desired photo files.
- View the marked photo files.

When one or more photos are marked, you can view individual photos or a slide show of the marked photos. If no photos are marked, you can view all photos individually or all photos in the folder in a slide show.

Full Screen Menu

More operations are available in full screen mode.





The aspect ratio of a photo may change the size of the photo displayed on the screen in full size.



Select the target folder or drive.





Select the desired photos.



The selected photo is displayed in full size.

■ Use the CH (∧ ∨) button to navigate in the photo page.





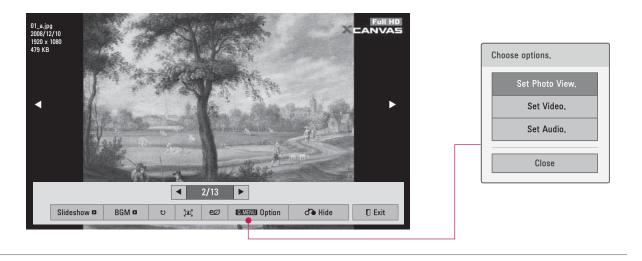
Select the **Slideshow**,

BGM, ひ (Rotate), 垣, / ・草, eの (Energy Saving), Option, or Hide.

■ Use 〈〉 button to select the previous or next photo.

- ▶ **Slideshow**: Selected photos are displayed during the slide show. If no photo is selected, all photos in the current folder are displayed during slide show.
 - Set the time interval of the slide show in Option-Set Photo View. menu (Refer to p. 113).
 - You can adjust **Option** by using the **Q.MENU** button on the remote control.
- ▶ BGM (Background Music): Listen to music while viewing photos in full size.
 - Set the BGM device and album in **Option-Set Photo View.** menu (Refer to p. 113).
 - You can adjust **Option** by using the **Q.MENU** button on the remote control.
- ▶ ひ (Rotate): Rotate photos.
 - Rotates the photo 90°, 180°, 270°, 360° clockwise.
 - Photos cannot be rotated if its width is greater than the available supported resolution height.
- ▶ [1] / Yiew the photo in full mode or original mode.
- ▶ €Ø (Energy Saving): Increase the brightness of your screen by using ENERGY SAVING button.
- ▶ Option: Set values for Slide Speed and BGM (Refer to p.113).
 - You cannot change **BGM** while BGM is playing.
 - You can only select the MP3 folder saved on the device that currently displays the photo.
- ▶ **Hide**: Hide the menu on the full-sized screen.
 - To see the menu again on the full-sized screen, press ENTER button to display.
- **Exit**: Move to the previous menu screen.

Using the Photo List Function



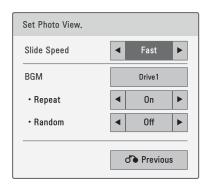


Show the **Option** menu.



Select **Set Photo View.**, **Set Video.**, or **Set Audio.**

Set Photo View Menu Options





Select Slide Speed or BGM.

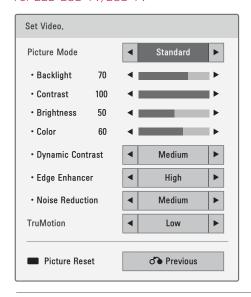


Make appropriate adjustments.

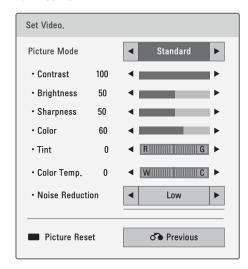
* Image shown may differ from your TV.

Set Video Menu Options

For LED LCD TV/LCD TV



For Plasma TV





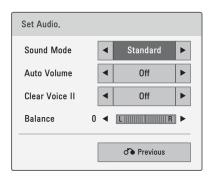
Make appropriate adjustments.

Then, select Previous.



Reset picture settings to default.

Set Audio Menu Options





Make appropriate adjustments.

Then, select Previous.

MUSIC LIST

This TV cannot play back copy-protected files.

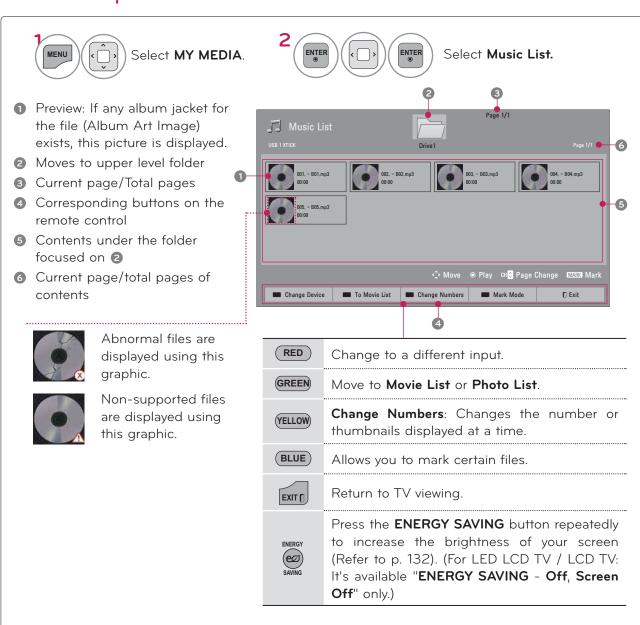
The On-Screen Display on your model may be slightly different.

Supported Music File: *.MP3

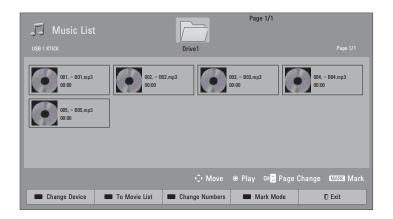
Bit rate range: 32 Kbps - 320 Kbps

- Sampling rate MPEG1 Layer3: 32 kHz, 44.1 kHz, 48 kHz
- Sampling rate MPEG2 Layer3: 16 kHz, 22.05 kHz, 24 kHz

Screen Components

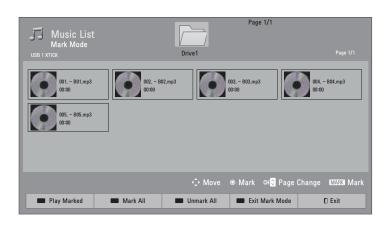


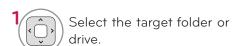
Music Selection



- Select the target folder or drive.
- Select the desired music file.
- Music files are played.
- Use the CH (∧ ∨) button to navigate in the music page.

Mark Mode

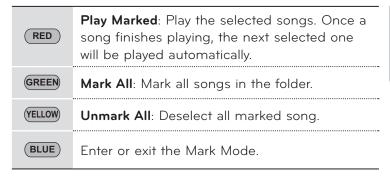






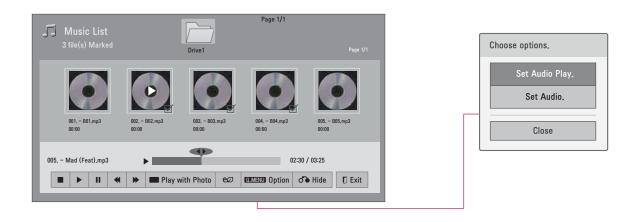






When one or more music files are marked, the marked music files will be played in sequence.

Using the Music List Function





Show the **Option** menu.

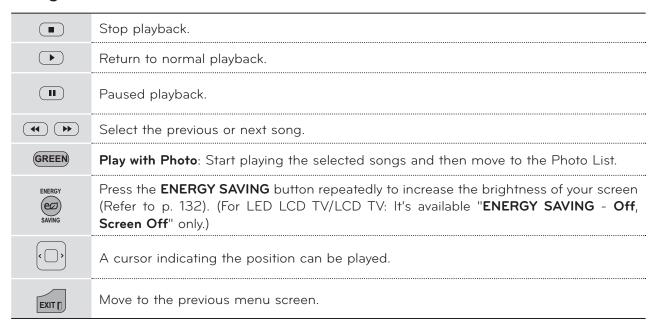


Select Set Audio Play. or Set Audio..

• NOTE

You can listen to the music only within the device currently played.

Using the remote control



Set Audio Play Menu Options



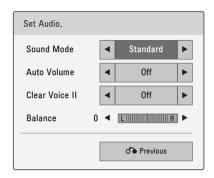


Select Repeat or Random.



Make appropriate adjustments.

Set Audio Menu Options





Select Sound Mode, Auto Volume, Clear Voice II or Balance.



Make appropriate adjustments.

If you don't press any buttons for a while, the play information box will float across the screen. This prevents screen pixel damage due to a fixed image remaining on the screen for a extended period of time.

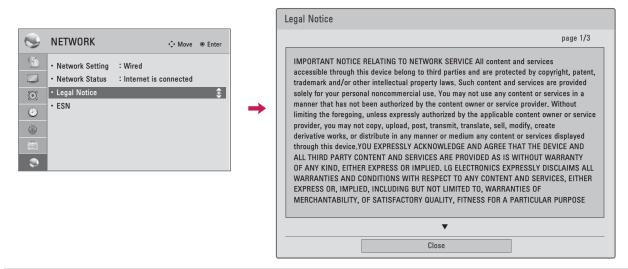


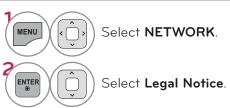


- A damaged or corrupted music does not play but displays 00:00 in playtime.
- ▶ Music files with copy-protection will not play.
- ightharpoonspice Press **ENTER** or \blacksquare button to stop the screen saver.

NETWORK

LEGAL NOTICE







IMPORTANT NOTICE RELATING TO NETWORK SERVICE

All content and services accessible through this device belong to third parties and are protected by copyright, patent, trademark and/or other intellectual property laws. Such content and services are provided solely for your personal noncommercial use. You may not use any content or services in a manner that has not been authorized by the content owner or service provider. Without limiting the foregoing, unless expressly authorized by the applicable content owner or service provider, you may not copy, upload, post, transmit, translate, sell, modify, create derivative works, or distribute in any manner or medium any content or services displayed through this device.

YOU EXPRESSLY ACKNOWLEDGE AND AGREE THAT THE DEVICE AND ALL THIRD PARTY CONTENT AND SERVICES ARE PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED. LG ELECTRONICS EXPRESSLY DISCLAIMS ALL WARRANTIES AND CONDITIONS WITH RESPECT TO ANY CONTENT AND SERVICES, EITHER EXPRESS OR, IMPLIED, INCLUDING BUT NOT LIMITED TO, WARRANTIES OF MERCHANTABILITY, OF SATISFACTORY QUALITY, FITNESS FOR A PARTICULAR PURPOSE, AND NON-INFRINGEMENT OF THIRD PARTY RIGHTS. LG DOES NOT GUARANTEE THE ACCURACY, VALIDITY, TIMELINESS, LEGALITY, OR COMPLETENESS OF ANY CONTENT OR SERVICE MADE AVAILABLE THROUGH THIS DEVICE AND DOES NOT WARRANT THAT THE DEVICE OR SERVICES WILL MEET YOUR REQUIREMENTS, OR THAT OPERATION OF THE

DEVICE OR SERVICES WILL BE UNINTERRUPTED OR ERROR-FREE. UNDER NO CIRCUMSTANCES, INCLUDING NEGLIGENCE, SHALL LG BE LIABLE, WHETHER IN CONTRACT OR TORT, FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL OR CONSEQUENTIAL DAMAGES, OR ANY OTHER DAMAGES ARISING OUT OF, ANY INFORMATION CONTAINED IN, OR ANY CONTENT OR SERVICE ACCESSED BY YOU OR ANY THIRD PARTY, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

Third party services may be changed, suspended, removed, terminated or interrupted, or access may be disabled at any time, without notice, and LG makes no representation or warranty that any content or service will remain available for any period of time. Content and services are transmitted by third parties by means of networks and transmission facilities over which LG has no control. LG may impose limits on the use of or access to certain services or content, in any case and without notice or liability. LG expressly disclaims any responsibility or liability for any change, interruption, disabling, removal of or suspension of any content or service made available through this device.

LG is neither responsible nor liable for customer service related to the content and services. Any question or request for service relating to the content or services should be made directly to the respective content and service providers.

NETCAST

NETCAST MENU

These services are provided by separate Content Provider.

NETCAST menu source can differ by country.

What is a NETCAST?

Stream movies, TV shows and video, or get up to the minute news, stock information or weather updates directly to your TV.



- To view the owner's manual that provided by the Content Provider, visit our website at http://www.lge.com.
- To see the activation method of Yahoo!, Netflix, or Vudu, click the Yahoo!, Netflix, Vudu in the CD manual (For USA).



Select **NETCAST** menu option.

■ Yahoo! (For USA)

Yahoo! TV Widgets give you the best of the Internet in perfect harmony with the simplicity and reliability of your TV. TV Widgets deliver a Cinematic internetTM experience by converting your favorite web services for viewing on the TV.

■ **Netflix** (For USA)

You can instantly watch movies (quite a few new releases) & TV episodes from Netflix streamed over the internet to your TV.

To become a Netflix member visit: www.netflix.com/IG

Note that this service is provided by the Content Provider, Netflix. It is dependent on Netflix to provide the data.

■ Vudu (For USA)

In order to make rental/purchase transactions on the Vudu service, a user must create an account on vudu.com.

That account is linked to a specific device, via a process called "activation". It is possible to have multiple devices associated with a single Vudu account.

Note that this service is provided by the Content Provider, Vudu. It is dependent on Vudu to provide the data.

YouTube

YouTube is a video sharing website where users can upload, view, and share video clips.



Enjoy Online Service.

Picasa

Picasa is an application from Google that appreciates digital image files.

NOTE

- ▶ The videos list searched from the TV may different with the list searched from a web browser on PC.
- ► The settings of this TV do not affect the YouTube's playback quality.
- ► The playback of videos may be paused, stopped or buffering occurring often depending on your broadband speed.
- ► For service that requires log in, join the applicable service on the website using the PC and log in through the TV to enjoy various additional functionalities.
- When you set the city you want with Setup by pressing the red button, the background of NetCast will be set to the weather of the selected city.
- ➤ For Plasma TV: If there is no user action 2 minutes following freezing image or video on screen, the screensaver will activate itself preventing fixed image remaining on screen.

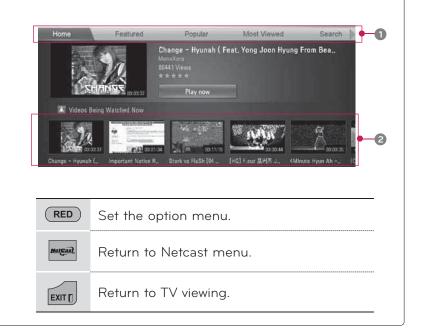
NETCAST

YOUTUBE

YouTube is a video sharing website where users can upload, view, and share video clips.

Screen Components

- 1 YouTube menu
- 2 Videos list





▶ When you press the Q.menu button while the Youtube video is playing in full mode, you can set the video options.

YouTube menu

Home: You can watch the popular video in real time. **Featured**: The featured videos list will be displayed.

Popular: The best rated videos list from YouTube server will be displayed.

Most Viewed: The most viewed videos list will be displayed.

Search: The keypad/keyboard menu will be displayed.

History: The videos list that you previously played will be displayed. Maximum of 20 videos can be stored.

Favorites: In sign-in status, this menu will be displayed the videos list that is arranged in the YouTube server with your account (Some videos may not appear on the **Favorites** list, even if the videos are arranged in the server).

Sign in (Sign Out): Displays the keypad/keyboard menu to sign in or returns to the sign-out status.

Using the remote control

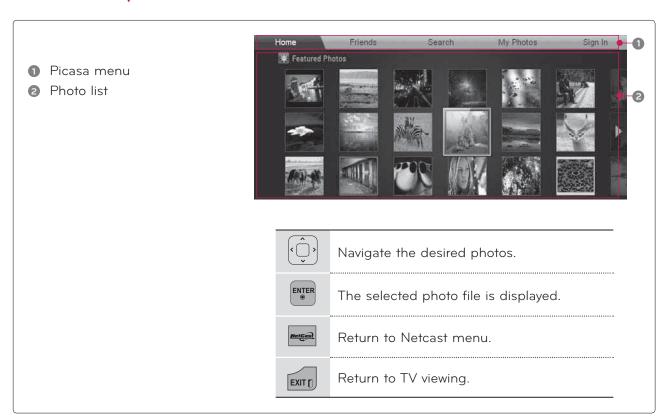
	Stops the video and displays related videos list.
II	Pause the video while it is playing.
•	Play the selected video.
<	Skip the playback forward or backward.
RED	Set the option menu.
NetCas	Return to Netcast menu.
EXIT	Return to TV viewing.

NETCAST

PICASA

Picasa is a photo organizing or sharing website where users can upload, view, and share photos.

Screen Components



Picasa menu

Home: The featured photos list will be displayed.

Friends: You can register users with the pictures you want as friends. You can add up to 10 friends.

Search: The keypad/keyboard menu will be displayed.

 $\textbf{My Photos} \hbox{:} \ \ \text{You can view the pictures uploaded to the Web. This function can only be used when you sign}$

in.

Sign in (Sign Out): Displays the keypad/keyboard menu to sign in or returns to the sign-out status.

TROUBLESHOOTING

Abnormal Operation			
The remote control doesn't work	 Check to see if there is any object between the product and the remote control causing obstruction. Ensure you are pointing the remote control directly at the TV. Ensure that the batteries are installed with correct polarity (+ to +, - to -) Ensure that the correct remote operating mode is set: TV, VCR etc. Install new batteries. 		
TV turns off suddenly	 Is the sleep timer set? Check the power control settings. Power interrupted. If there is no signal, the TV turns off automatically in 15 minutes. 		

Video Problems	Video Problems			
No picture &No sound	 Check whether the product is turned on. Try another channel. The problem may be with the broadcast. Is the power cord inserted into wall power outlet? Check your antenna direction and/or location. Test the wall power outlet, plug another product's power cord into the outlet where the product's power cord was plugged in. 			
Picture appears slowly after switching on	This is normal, the image is muted during the product startup process. Please contact your service center, if the picture has not appeared after five minutes.			
No or poor color or poor picture	 Adjust Color in menu option. Keep a sufficient distance between the product and the VCR. Try another channel. The problem may be with the broadcast. Are the video cables installed properly? Activate any function to restore the brightness of the picture. 			
Horizontal/vertical bars or picture shaking	Check for local interference such as an electrical appliance or power tool.			
Poor reception on some channels	 Station or cable product experiencing problems, tune to another station. Station signal is weak, reorient antenna to receive weaker station. Check for sources of possible interference. 			
Lines or streaks in pic- tures	■ Check antenna (Change the direction of the antenna).			
No picture when con- necting HDMI	If an HDMI cable doesn't support High Speed HDMI, it can cause flickers or no screen display. In this case use the latest cables that support High Speed HDMI.			

Audio Problems		
No output from one of the speakers	■ Adjust Balance in menu option.	
Unusual sound from inside the product	A change in ambient humidity or temperature may result in an unusual noise when the product is turned on or off and does not indicate a fault with the product.	
No sound when connecting HDMI/USB	 Check High Speed HDMI cable. Check USB cable over version 2.0. Use normal MP3 file. *This feature is not available for all models. 	

PC Mode Problems			
The signal is out of range	Adjust resolution, horizontal frequency, or vertical frequency on the PC.Check the input source.		
Vertical bar or stripe on background & Horizontal Noise & Incorrect position	 Activate the Auto configure feature or adjust size, phase, or H/V position. (Option) 		
Screen color is unsta- ble or single color	Check the signal cable.Reinstall the PC video card.		
When connecting the HDMI cable to the PC, there is no audio.	Check the manual for the video card in the PC to see if it supports HDMI audio and how to set it up properly.		

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

MAINTENANCE

Early malfunctions can be prevented. Careful and regular cleaning can extend the amount of time you can enjoy your new TV.

Caution: Be sure to turn the power off and unplug the power cord before you begin any cleaning.

Cleaning the Screen

- Here's a great way to keep the dust off your screen for a while. Wet a soft cloth in a mixture of lukewarm water and a little fabric softener or dish washing detergent. Wring the cloth until it's almost dry, and then use it to wipe the screen.
- Make sure the excess water is off the screen, and then let it air-dry before you turn on your TV.

Cleaning the Cabinet

- To remove dirt or dust, wipe the cabinet with a soft, dry, lint-free cloth.
- Please be sure not to use a wet cloth.

Extended Absence

A CAUTION

▶ If you expect to leave your TV dormant for a long time (such as a vacation), it's a good idea to unplug the power cord to protect against possible damage from lightning or power surges.

MODELS		32LE5400 (32LE5400-UC)	42LE5400 (42LE5400-UC) 42LE5500 (42LE5500-UA) 42LX6500 (42LX6500-UB)
Dimensions (Width x	With stand	784.6 mm x 558.1 mm x 221.0 mm (30.8 inch x 21.9 inch x 8.7 inch)	1016.0 mm x 692.0 mm x 270.0 mm (40.0 inch x 27.2 inch x 10.6 inch)
Height x Depth)	Without stand	784.6 mm x 499.5 mm x 39.9 mm (30.8 inch x 19.6 inch x 1.5 inch)	1016.0 mm x 630.0 mm x 29.3 mm (40.0 inch x 24.8 inch x 1.1 inch)
Weight	With stand	12.6 kg (27.7 lbs)	19.5 kg (42.9 lbs)
	Without stand	10.5 kg (23.1 lbs)	16.7 kg (36.8 lbs)

MODELS		47LE5400 (47LE5400-UC) 47LE5500 (47LE5500-UA) 47LX6500 (47LX6500-UB)	55LE5400 (55LE5400-UC) 55LE5500 (55LE5500-UA) 55LX6500 (55LX6500-UB)
Dimensions (Width x	With stand	1126.6 mm x 757.9 mm x 284.4 mm (44.3 inch x 29.8 inch x 11.1 inch)	1306.0 mm x 867.0 mm x 345.0 mm (51.4 inch x 34.1 inch x 13.5 inch)
Height x Depth)	Without stand	1126.6 mm x 692.0 mm x 29.3 mm (44.3 inch x 27.2 inch x 1.1 inch)	1306.0 mm x 797.0 mm x 30.7 mm (51.4 inch x 31.3 inch x 1.2 inch)
Weight	With stand	22.9 kg (50.4 lbs)	34.5 kg (76.0 lbs)
	Without stand	19.6 kg (43.2 lbs)	28.8 kg (63.4 lbs)

Power requirement		AC 120 V ~ 50 / 60 Hz		
Television System		NTSC-M, ATSC, 64 & 256 QAM		
Program Coverage		VHF 2-13, UHF 14-69, CATV 1-135, DTV 2-69, CADTV 1-135		
External Antenna Impedance		75 Ω		
Environment	Operating Temperature	0 °C to 40 °C (32 °F to 104 °F)		
condition	Operating Humidity	Less than 80 %		
	Storage Temperature	-20 °C to 60 °C (-4 °F to 140 °F)		
	Storage Humidity	Less than 85 %		

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

IR CODES

*This feature is not available for all models.

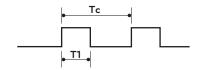
1. How to Connect

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

2. Remote Control IR Codes

■ Output waveform

Single pulse, modulated with 37.917 KHz signal at 455 KHz



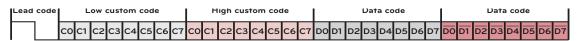
Carrier frequency

FCAR = 1/TC = fOSC/12

Duty ratio = T1/TC = 1/3

■ Configuration of frame

1st frame



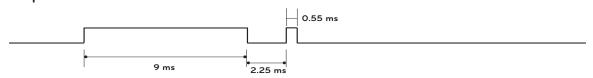
Repeat frame



■ Lead code



■ Repeat code



■ Bit description: Tf



■ Frame interval: Tf

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



Code (Hexa)	Function	Note	Code (Hexa)	Function	Note
00	CH ^	Remote Control Button	во	•	Remote Control Button
01	CH V	Remote Control Button	B1		Remote Control Button
02	VOL +	Remote Control Button	ВА	II	Remote Control Button
03	VOL -	Remote Control Button	D6	TV	Discrete IR Code
06	>	Remote Control Button			(TV Input Selection)
07	<	Remote Control Button	C4	POWER ON	Discrete IR Code
08	Ф	Remote Control Button			(Only Power On)
		(Power On/Off)	C5	POWER OFF	Discrete IR Code
09	MUTE/DELETE	Remote Control Button			(Only Power Off)
ОВ	INPUT	Remote Control Button	5A	AV1	Discrete IR Code
OF	TV	Remote Control Button			(AV1 Input Selection)
10-19	Number 0-9	Remote Control Button	DO	AV2	Discrete IR Code
1A	FLASHBK	Remote Control Button			(AV2 Input Selection)
1E	FAV/MARK	Remote Control Button	BF	COMPONENT1	Discrete IR Code
28	BACK	Remote Control Button			(Component1 Input Selection)
30	AV MODE	Remote Control Button	D4	COMPONENT2	Discrete IR Code
40	^	Remote Control Button			(Component2 Input Selection)
41	v	Remote Control Button	D5	RGB-PC	Discrete IR Code
43	MENU	Remote Control Button			(RGB-PC Input Selection)
44	ENTER	Remote Control Button	CE	HDMI1	Discrete IR Code
45	Q.MENU	Remote Control Button			(HDMI1 Input Selection)
4C	- (Dash)/LIST	Remote Control Button	CC	HDMI2	Discrete IR Code
5B	EXIT	Remote Control Button			(HDMI2 Input Selection)
58	WIDGETS	Remote Control Button	E9	HDMI3	Discrete IR Code
59	NETCAST	Remote Control Button			(HDMI3 Input Selection)
61	BLUE	Remote Control Button	DA	HDMI4	Discrete IR Code
63	YELLOW	Remote Control Button			(HDMI4 Input Selection)
71	GREEN	Remote Control Button	76	Ratio 4:3	Discrete IR Code
72	RED	Remote Control Button			(Only 4:3 Mode)
79	RATIO	Remote Control Button	77	Ratio 16:9	Discrete IR Code
7E	SIMPLINK	Remote Control Button	٨٦	D-#- 7	(Only 16:9 Mode)
8E	*	Remote Control Button	AF	Ratio Zoom	Discrete IR Code
8F	4	Remote Control Button			(Only Zoom Mode)
95	ENERGY SAVING	Remote Control Button			
AA	INFO	Remote Control Button			

[■] Use this feature depending on your models.

OPEN SOURCE LICENSE

GNU GENERAL PUBLIC LICENSE

Version 2, June 1991

Copyright (C) 1989, 1991 Free Software Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA

Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change free software - to make sure the software is free for all its users. This General Public License applies to most of the Free Software Foundation's software and to any other program whose authors commit to using it. (Some other free software foundation software is covered by the GNU Lesser General Public License instead.) You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs; and that you know you can do these things.

To protect your rights, we need to make restrictions that forbid anyone to deny you these rights or to ask you to surrender the rights. These restrictions translate to certain responsibilities for you if you distribute copies of the software, or if you modify it.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must give the recipients all the rights that you have. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights.

We protect your rights with two steps: (1) copyright the software, and (2) offer you this license which gives you legal permission to copy, distribute and/or modify the software.

Also, for each author's protection and ours, we want to make certain that everyone understands that there is no warranty for this free software. If the software is modified by someone else and passed on, we want its recipients to know that what they have is not the original, so that any problems introduced by others will not reflect on the original authors' reputations.

Finally, any free program is threatened constantly by software patents. We wish to avoid the danger that redistributors of a free program will individually obtain patent licenses, in effect making the program proprietary. To prevent this, we have made it clear that any patent must be

licensed for everyone's free use or not licensed at all.

The precise terms and conditions for copying, distribution and modification follow.

GNU GENERAL PUBLIC LICENSE TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

O. This license applies to any program or other work which contains a notice placed by the copyright holder saying it may be distributed under the terms of this General Public License. The "Program", below, refers to any such program or work, and a "work based on the Program" means either the Program or any derivative work under copyright law: that is to say, a work containing the Program or a portion of it, either verbatim or with modifications and/or translated into another language. (Hereinafter, translation is included without limitation in the term "modification".) Each licensee is addressed as "you".

Activities other than copying, distribution and modification are not covered by this license; they are outside its scope. The act of running the Program is not restricted, and the output from the program is covered only if its contents constitute a work based on the program (independent of having been made by running the program). Whether that is true depends on what the program does.

 You may copy and distribute verbatim copies of the program's source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this license and to the absence of any warranty; and give any other recipients of the program a copy of this license along with the Program.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

- 2. You may modify your copy or copies of the program or any portion of it, thus forming a work based on the Program, and copy and distribute such modifications or work under the terms of section 1 above, provided that you also meet all of these conditions:
 - a) You must cause the modified files to carry prominent notices stating that you changed the files and the date of any change.

- b) You must cause any work that you distribute or publish, that in whole or in part contains or is derived from the Program or any part there of, to be licensed as a whole at no charge to all third parties under the terms of this license.
- c) If the modified program normally reads commands interactively when run, you must cause it, when started running for such interactive use in the most ordinary way, to print or display an announcement including an appropriate copyright notice and a notice that there is no warranty (or else, saying that you provide a warranty) and that users may redistribute the program under these conditions, and telling the user how to view a copy of this license. (Exception: if the Program itself is interactive but does not normally print such an announcement, your work based on the Program is not required to print an announcement.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Program, and can be reasonably considered independent and separate works in themselves, then this license, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Program, the distribution of the whole must be on the terms of this license, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the program.

In addition, mere aggregation of another work not based on the program with the Program (or with a work based on the program) on a volume of a storage or distribution medium does not bring the other work under the scope of this license.

- 3. You may copy and distribute the program (or a work based on it, under section 2) in object code or executable form under the terms of sections 1 and 2 above provided that you also do one of the following:
 - a) Accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of sections 1 and 2 above on a medium customarily used for software interchange; or,
 - b) Accompany it with a written offer, valid for at least three years, to give any third party, for a charge no more than your cost of physically performing source distribution, a complete machine-readable copy of the corresponding source code, to be distributed under the terms of sections 1 and 2 above on a medium customarily used for software interchange; or

c) Accompany it with the information you received as to the offer to distribute corresponding source code. (This alternative is allowed only for noncommercial distribution and only if you received the program in object code or executable form with such an offer, in accord with Subsection b above.)

The source code for a work means the preferred form of the work for making modifications to it. For an executable work, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the executable. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

If distribution of executable or object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place counts as distribution of the source code, even though third parties are not compelled to copy the source along with the object code.

- 4. You may not copy, modify, sublicense, or distribute the Program except as expressly provided under this license. Any attempt otherwise to copy, modify, sublicense or distribute the Program is void, and will automatically terminate your rights under this license. However, parties who have received copies, or rights, from you under this license will not have their licenses terminated so long as such parties remain in full compliance.
- 5. You are not required to accept this license, since you have not signed it. However, nothing else grants you permission to modify or distribute the Program or its derivative works. These actions are prohibited by law if you do not accept this license. Therefore, by modifying or distributing the program (or any work based on the program), you indicate your acceptance of this license to do so, and all its terms and conditions for copying, distributing or modifying the program or works based on it.
- 6. Each time you redistribute the program (or any work based on the Program), the recipient automatically receives a license from the original licensor to copy, distribute or modify the Program subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties to this license.

7. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this license, they do not excuse you from the conditions of this license. If you cannot distribute so as to satisfy simultaneously your obligations under this license and any other pertinent obligations, then as a consequence you may not distribute the program at all. For example, if a patent license would not permit royalty-free redistribution of the program by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this license would be to refrain entirely from distribution of the program.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system, which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this license.

- 8. If the distribution and/or use of the program is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the program under this license may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this license incorporates the limitation as if written in the body of this license.
- The Free Software Foundation may publish revised and/ or new versions of the General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If

the program specifies a version number of this license which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the program does not specify a version number of this license, you may choose any version ever published by the Free Software Foundation.

10.If you wish to incorporate parts of the program into other free programs whose distribution conditions are different, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

NO WARRANTY

- 11. BECAUSE THE PROGRAM IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES **MERCHANTABILITY** AND **FITNESS** PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.
- 12.IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

END OF TERMS AND CONDITIONS

How to apply these terms to your new programs

If you develop a new program, and you want it to be of the greatest possible use to the public, the best way to achieve this is to make it free software which everyone can redistribute and change under these terms.

To do so, attach the following notices to the program. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

one line to give the program's name and a brief idea of what it does.

Copyright (C) <year> <name of author>

This program is free software; you can redistribute it and/ or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2 of the license, or (at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this program; if not, write to the Free Software Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA.

Also add information on how to contact you by electronic and paper mail.

If the program is interactive, make it output a short notice like this when it starts in an interactive mode:

Gnomovision version 69, Copyright (C) year name of author Gnomovision comes with ABSOLUTELY NO WARRANTY; for details type 'show w'. This is free software, and you are welcome to redistribute it under certain conditions; type 'show c' for details.

The hypothetical commands 'show w' and 'show c' should show the appropriate parts of the General Public License. Of course, the commands you use may be called something other than 'show w' and 'show c'; they could even be mouse-clicks or menu items-whatever suits your program.

You should also get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the program, if necessary. Here is a sample; alter the names:

Yoyodyne, Inc., hereby disclaims all copyright interest in the program 'Gnomovision' (which makes passes at compilers) written by James Hacker.

signature of Ty Coon, 1 April 1989 Ty Coon, President of Vice

This General Public License does not permit incorporating your program into proprietary programs. If your program is a subroutine library, you may consider it more useful to permit linking proprietary applications with the library. If this is what you want to do, use the GNU Lesser General Public License instead of this license.

GNU LESSER GENERAL PUBLIC LICENSE

Version 2.1, February 1999

Copyright (C) 1991, 1999 Free Software Foundation, Inc. 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

[This is the first released version of the Lesser GPL. It also counts as the successor of the GNU Library Public License, version 2, hence the version number 2.1.]

Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public Licenses are intended to guarantee your freedom to share and change free software - to make sure the software is free for all its users.

This license, the Lesser General Public License, applies to some specially designated software packages - typically libraries - of the Free Software Foundation and other authors who decide to use it. You can use it too, but we suggest you first think carefully about whether this license or the ordinary General Public License is the better strategy to use in any particular case, based on the explanations below.

When we speak of free software, we are referring to freedom of use, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish); that you receive source code or can get it if you want it; that you can change the software and use pieces of it in new free programs; and that you are informed that you can do these things.

To protect your rights, we need to make restrictions that forbid distributors to deny you these rights or to ask you to surrender these rights. These restrictions translate to certain responsibilities for you if you distribute copies of the library or if you modify it.

For example, if you distribute copies of the library, whether gratis or for a fee, you must give the recipients all the rights that we gave you. You must make sure that they, too, receive or can get the source code. If you link other code with the library, you must provide complete object files to the recipients, so that they can relink them with the library after making changes to the library and recompiling it. And you must show them these terms so they know their rights.

We protect your rights with a two-step method: (1) we copyright the library, and (2) we offer you this license, which gives you legal permission to copy, distribute and/or modify the library.

To protect each distributor, we want to make it very clear

that there is no warranty for the free library. Also, if the library is modified by someone else and passed on, the recipients should know that what they have is not the original version, so that the original author's reputation will not be affected by problems that might be introduced by others.

Finally, software patents pose a constant threat to the existence of any free program. We wish to make sure that a company cannot effectively restrict the users of a free program by obtaining a restrictive license from a patent holder. Therefore, we insist that any patent license obtained for a version of the library must be consistent with the full freedom of use specified in this license.

Most GNU software, including some libraries, is covered by the ordinary GNU General Public License. This license, the GNU Lesser General Public License, applies to certain designated libraries, and is quite different from the ordinary General Public License. We use this license for certain libraries in order to permit linking those libraries into nonfree programs.

When a program is linked with a library, whether statically or using a shared library, the combination of the two is legally speaking a combined work, a derivative of the original library. The ordinary General Public License therefore permits such linking only if the entire combination fits its criteria of freedom. The Lesser General Public License permits more lax criteria for linking other code with the library.

We call this license the "Lesser" General Public License because it does Less to protect the user's freedom than the ordinary General Public License. It also provides other free software developers Less of an advantage over competing non-free programs. These disadvantages are the reason we use the ordinary General Public License for many libraries. However, the Lesser license provides advantages in certain special circumstances.

For example, on rare occasions, there may be a special need to encourage the widest possible use of a certain library, so that it becomes a de-facto standard. To achieve this, non-free programs must be allowed to use the library. A more frequent case is that a free library does the same job as widely used non-free libraries. In this case, there is little to gain by limiting the free library to free software only, so we use the Lesser General Public License.

In other cases, permission to use a particular library in non-free programs enables a greater number of people to use a large body of free software. For example, permission to use the GNU C Library in non-free programs enables many more people to use the whole GNU operating system, as well as its variant, the GNU/Linux operating system.

Although the Lesser General Public License is Less protective of the users' freedom, it does ensure that the user of a program that is linked with the Library has the freedom and the wherewithal to run that program using a modified version of the Library.

The precise terms and conditions for copying, distribution and modification follow. Pay close attention to the difference between a "work based on the library" and a "work that uses the library". The former contains code derived from the library, whereas the latter must be combined with the library in order to run.

GNU LESSER GENERAL PUBLIC LICENSE TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

O. This license agreement applies to any software library or other program which contains a notice placed by the copyright holder or other authorized party saying it may be distributed under the terms of this Lesser General Public License (also called "this license"). Each license is addressed as "you".

A "library" means a collection of software functions and/or data prepared so as to be conveniently linked with application programs (which use some of those functions and data) to form executables.

The "Library", below, refers to any such software library or work which has been distributed under these terms. A "work based on the Library" means either the Library or any derivative work under copyright law: that is to say, a work containing the library or a portion of it, either verbatim or with modifications and/or translated straightforwardly into another language. (Hereinafter, translation is included without limitation in the term "modification")

"Source code" for a work means the preferred form of the work for making modifications to it. For a library, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the library.

Activities other than copying, distribution and modification are not covered by this license; they are outside its scope. The act of running a program using the Library is not restricted, and output from such a program is covered only if its contents constitute a work based on the library (independent of the use of the Library in a tool for writing it). Whether that is true depends on what the library does and what the program that uses the library does.

 You may copy and distribute verbatim copies of the library's complete source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this license and to the absence of any warranty; and distribute a copy of this license along with the Library.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

- 2. You may modify your copy or copies of the Library or any portion of it, thus forming a work based on the Library, and copy and distribute such modifications or work under the terms of section 1 above, provided that you also meet all of these conditions:
 - a) The modified work must itself be a software library.
 - b) You must cause the files modified to carry prominent notices stating that you changed the files and the date of any change.
 - c) You must cause the whole of the work to be licensed at no charge to all third parties under the terms of this license.
 - d) If a facility in the modified Library refers to a function or a table of data to be supplied by an application program that uses the facility, other than as an argument passed when the facility is invoked, then you must make a good faith effort to ensure that, in the event an application does not supply such function or table, the facility still operates, and performs whatever part of its purpose remains meaningful.

(For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the application. Therefore, Subsection 2d requires that any application-supplied function or table used by this function must be optional: if the application does not supply it, the square root function must still compute square roots.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the library, and can be reasonably considered independent and separate works in themselves, then this license, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the library, the distribution of the whole must be on the terms of this license, whose permissions for other licenses extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the library.

In addition, mere aggregation of another work not based on the library with the library (or with a work based on the library) on a volume of a storage or distribution medium does not bring the other work under the scope of this license.

- 3. You may opt to apply the terms of the ordinary GNU General Public License instead of this License to a given copy of the Library. To do this, you must alter all the notices that refer to this License, so that they refer to the ordinary GNU General Public License, version 2, instead of to this License. (If a newer version than version 2 of the ordinary GNU General Public License has appeared, then you can specify that version instead if you wish.) Do not make any other change in these notices.
 - Once this change is made in a given copy, it is irreversible for that copy, so the ordinary GNU General Public License applies to all subsequent copies and derivative works made from that copy.
 - This option is useful when you wish to copy part of the code of the library into a program that is not a library.
- 4. You may copy and distribute the library (or a portion or derivative of it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of sections 1 and 2 above on a medium customarily used for software interchange.
 - If distribution of object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place satisfies the requirement to distribute the source code, even though third parties are not compelled to copy the source along with the object code.
- 5. A program that contains no derivative of any portion of the Library, but is designed to work with the Library by being compiled or linked with it, is called a "work that uses the Library". Such a work, in isolation, is not a derivative work of the Library, and therefore falls outside the scope of this license.

However, linking a "work that uses the library" with the Library creates an executable that is a derivative of the Library (because it contains portions of the library), rather than a "work that uses the library". The executable is therefore covered by this license. Section 6 states terms for distribution of such executable.

When a "work that uses the library" uses material from a header file that is part of the library, the object code for the work may be a derivative work of the library even though the source code is not.

Whether this is true is especially significant if the work can be linked without the library, or if the work is itself a library. The threshold for this to be true is not precisely defined by law.

If such an object file uses only numerical parameters, data structure layouts and accessories, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executable containing this object code plus portions of

the library will still fall under Section 6.)

Otherwise, if the work is a derivative of the library, you may distribute the object code for the work under the terms of Section 6. Any executable containing that work also fall under Section 6, whether or not they are linked directly with the library itself.

6. As an exception to the sections above, you may also combine or link a "work that uses the library" with the library to produce a work containing portions of the library, and distribute that work under terms of your choice, provided that the terms permit modification of the work for the customer's own use and reverse engineering for debugging such modifications.

You must give prominent notice with each copy of the work that the library is used in it and that the Library and its use are covered by this license. You must supply a copy of this license. If the work during execution displays copyright notices, you must include the copyright notice for the library among them, as well as a reference directing the user to the copy of this license. Also, you must do one of these things:

- a) Accompany the work with the complete corresponding machine-readable source code for the library including whatever changes were used in the work (which must be distributed under Sections 1 and 2 above); and, if the work is an executable linked with the Library, with the complete machine-readable "work that uses the Library", as object code and/or source code, so that the user can modify the library and then relink to produce a modified executable containing the modified library. (It is understood that the user who changes the contents of definitions files in the library will not necessarily be able to recompile the application to use the modified definitions.)
- b) Use a suitable shared library mechanism for linking with the library. A suitable mechanism is one that (1) uses at run time a copy of the library already present on the user's computer system, rather than copying library functions into the executable, and (2) will operate properly with a modified version of the library, if the user installs one, as long as the modified version is interface-compatible with the version that the work was made with
- c) Accompany the work with a written offer, valid for at least three years, to give the same user the materials specified in Subsection 6, above, for a charge no more than the cost of performing this distribution.
- d) If distribution of the work is made by offering access to copy from a designated place, offer equivalent access to copy the above specified materials from the same place.
- e) Verify that the user has already received a copy of these materials or that you have already sent this user a copy.

For an executable, the required form of the "work that uses the library" must include any data and utility programs needed for reproducing the executable from it. However, as a special exception, the materials to be distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

It may happen that this requirement contradicts the license restrictions of other proprietary libraries that do not normally accompany the operating system. Such a contradiction means you cannot use both them and the library together in an executable that you distribute.

- 7. You may place library facilities that are a work based on the library side-by-side in a single library together with other library facilities not covered by this license, and distribute such a combined library, provided that the separate distribution of the work based on the Library and of the other library facilities is otherwise permitted, and provided that you do these two things:
 - a) Accompany the combined library with a copy of the same work based on the Library, uncombined with any other library facilities. This must be distributed under the terms of the sections above.
 - b) Give prominent notice with the combined library of the fact that part of it is a work based on the library, and explaining where to find the accompanying uncombined form of the same work.
- 8. You may not copy, modify, sublicense, link with, or distribute the library except as expressly provided under this license. Any attempt otherwise to copy, modify, sublicense, link with, or distribute the library is void, and will automatically terminate your rights under this license. However, parties who have received copies, or rights, from you under this license will not have their licenses terminated so long as such parties remain in full compliance.
- 9. You are not required to accept this license, since you have not signed it. However, nothing else grants you permission to modify or distribute the library or its derivative works. These actions are prohibited by law if you do not accept this license. Therefore, by modifying or distributing the library (or any work based on the library), you indicate your acceptance of this license to do so, and all its terms and conditions for copying, distributing or modifying the library or works based on it.
- 10. Each time you redistribute the library (or any work based on the Library), the recipient automatically receives a license from the original licensor to copy, distribute, link with or modify the library subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein.

You are not responsible for enforcing compliance by third parties with this license.

11. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this license, they do not excuse you from the conditions of this license. If you cannot distribute so as to satisfy simultaneously your obligations under this license and any other pertinent obligations, then as a consequence you may not distribute the library at all. For example, if a patent license would not permit royalty-free redistribution of the library by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this license would be to refrain entirely from distribution of the library.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply, and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a license cannot impose that choice

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this license.

- 12. If the distribution and/or use of the library is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the library under this license may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this license incorporates the limitation as if written in the body of this license.
- 13. The Free Software Foundation may publish revised and/ or new versions of the Lesser General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the library specifies a version number of this license which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation.

If the library does not specify a license version number, you may choose any version ever published by the Free Software Foundation.

14. If you wish to incorporate parts of the library into other free programs whose distribution conditions are incompatible with these, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

NO WARRANTY

15.BECAUSE THE LIBRARY IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE LIBRARY, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE LIBRARY "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE LIBRARY IS WITH YOU. SHOULD THE LIBRARY PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

16.IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE LIBRARY AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE LIBRARY (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE LIBRARY TO OPERATE WITH ANY OTHER SOFTWARE), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

END OF TERMS AND CONDITIONS

How to apply these terms to your new libraries

If you develop a new library, and you want it to be of the greatest possible use to the public, we recommend making

it free software that everyone can redistribute and change. You can do so by permitting redistribution under these terms (or, alternatively, under the terms of the ordinary General Public License).

To apply these terms, attach the following notices to the library. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

one line to give the library's name and a brief idea of what it does

Copyright (C) <year> <name of author>

This library is free software; you can redistribute it and/or modify it under the terms of the GNU Lesser General Public License as published by the Free Software Foundation; either version 2.1 of the license, or (at your option) any later version.

This library is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU Lesser General Public License for more details.

You should have received a copy of the GNU Lesser General Public License along with this library; if not, write to the Free Software Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA

Also add information on how to contact you by electronic and paper mail.

You should also get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the library, if necessary. Here is a sample; alter the names:

Yoyodyne, Inc., hereby disclaims all copyright interest in the library 'Frob' (a library for tweaking knobs) written by James Random Hacker.

signature of Ty Coon, 1 April 1990 Ty Coon, President of Vice

MOZILLA PUBLIC LICENSE

Version 1.1

1.Definitions.

- 1.0.1. "Commercial use" means distribution or otherwise making the covered code available to a third party.
- 1.1. "Contributor" means each entity that creates or contributes to the creation of modifications.
- 12 "Contributor version" means the combination of the original code, prior modifications used by a contributor, and the modifications made by that particular contributor.
- "Covered code" means the original code or modifications or the combination of the original code and modifications, in each case including portions there-
- "Electronic distribution mechanism" means a mech-1.4. anism generally accepted in the software development community for the electronic transfer of data.
- 1.5. "Executable" means covered code in any form other than source code.
- "Initial developer" means the individual or entity 1.6. identified as the initial Developer in the Source Code notice required by exhibit A.
- "Larger work" means a work which combines covered 1.7. code or portions thereof with code not governed by the terms of this License.
- 18 "License" means this document.
- 1.8.1. "Licensable" means having the right to grant, to the maximum extent possible, whether at the time of the initial grant or subsequently acquired, any and all of the rights conveyed herein.
- "Modifications" means any addition to or deletion 1.9. from the substance or structure of either the original code or any previous modifications. When covered code is released as a series of files, a modification is:
 - A. Any addition to or deletion from the contents of a file containing original code or previous modifica-
 - B. Any new file that contains any part of the original code or previous modifications.
- 1.10. "Original code" means source code of computer software 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.
- 1.10.1. "Patent claims" means any patent claim(s), now owned or hereafter acquired, including without limitation, method, process, and apparatus claims, in any patent licensable by grantor.
- "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.
- "You" (or "Your") means an individual or a legal 1.12. 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.
- 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).

- (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.

3. 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 COVERED CODE IS FREE OF DEFECTS, MERCHANTABLE, FIT FOR A PARTICULAR PURPOSE OR NON-INFRINGING. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE COVERED CODE IS WITH YOU. SHOULD ANY COVERED CODE PROVE DEFECTIVE IN ANY RESPECT, YOU (NOT THE 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 grant-

- ed 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 DISTRIBUTOR OF COVERED CODE,OR ANY SUPPLIER OF ANY OF SUCH PARTIES, BE LIABLE TO ANY PERSON FOR ANY INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES OF ANY CHARACTER INCLUDING, WITHOUT LIMITATION, DAMAGES FOR LOSS OF GOODWILL, WORK STOPPAGE, COMPUTER FAILURE OR MALFUNCTION, OR ANY AND ALL OTHER COMMERCIAL DAMAGES OR LOSSES, EVEN IF SUCH PARTY SHALL HAVE BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. THIS LIMITATION OF LIABILITY SHALL NOT APPLY TO LIABILITY FOR DEATH OR PERSONAL INJURY RESULTING 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 DAMAGES, 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 C	Original C	ode is				
	Initial	Developer	of	the	Original	Code
		ed by			are Co	pyright
(C) _		·	All Ri	ghts R	eserved.	
Contr	ibutor(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.



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	
SFRIAI	

:: FCC Compliance Statement

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

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

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

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

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

NOTICE

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

:: Canadian DOC Notice

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

NOTICE

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

:: CE Conformity Notice (for Europe)

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

Compiance with these directives implies conformity to the following European Norms:

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

NOTICE

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

:: Low Radiation Compliance (MPR II)

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

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



Congratulations!

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

Why do we have environmentally labelled computers?

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

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

What does labelling involve?

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

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

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

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

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

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

TCO Development

SE-114 94 STOCKHOLM, Sweden Fax: +46 8 782 92 07

Email: development@tco.se

Information regarding TCO'99 approved and labelled products may also be obtained at

http://www.tcodevelopment.com

Ecological requirements

Flame retardants

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

Mercurv**

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)

TCODevelopment



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
 - o heavy metals such as cadmium, mercury and lead.

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

For more information, please visit www.tcodevelopment.com

English

Information for Environmental Preservation

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

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

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

Information for recycling

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

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

operation worldwide. Many parts will be reused and recycled, while harmful substances and heavy metals are treated by an environmentally friendly method.

If you want to find out more information about our recycling program, please contact your local LG vendor or a corporate representative of LG.

We set our vision and policies on a cleaner world by selecting the issue of the global environment as a task for corporate improvement. Please visit our website for more information about our 'green' policies.

http://www.lge.com/about/environment/html/Recycling.jsp

Deutsch

Informationen zur Erhaltung der Umwelt

Im Jahr 1994 verkündete LGE die 'LG Declaration for a Cleaner Environment' (LG Erklärung für eine sauberere Umwelt). Seitdem dient dieses Ideal als führendes Prinzip des Unternehmens. Diese Erklärung war die Basis für die Durchführung von

umweltfreundlichen Aktivitäten, wobei wirtschaftliche, umweltbezogene und soziale Aspekte in die Überlegungen mit einbezogen wurden.

Wir fördern Aktivitäten zum Schutz der Umwelt und die Entwicklung unserer Produkte ist darauf ausgerichtet, unserem Konzept bezüglich Umweltfreundlichkeit gerecht zu werden.

Wir sind darauf bedacht, den Anteil der in unseren Produkten enthaltenen schädlichen Materialien zu minimieren. So ist in unseren Monitoren beispielsweise kein Kadmium zu finden.

Informationen zum Thema Recycling

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

Bei LGE. werden alle ausrangierten Monitore in einem unter umweltbezogenen Aspekten geeigneten Verfahren recycelt. Augenblicklich sind weltweit mehrere Rücknahme- und Recyclingsysteme im Einsatz. Viele Teile werden wieder verwendet und recycelt. Schädliche Substanzen und Schwermetalle werden durch umweltverträgliche Verfahren behandelt.

Falls Sie mehr über unser Recyclingprogramm erfahren möchten, wenden Sie sich bitte an Ihren lokalen LG-Händler oder einen Unternehmensvertreter von LG.

Wir richten unsere Firmenpolitik auf eine sauberere Umwelt hin aus, indem wir umweltspezifische Aspekte als wichtigen Punkt in die Weiterentwicklung unseres Unternehmens einfließen lassen. Zusätzliche

Informationen über unsere 'grüne' Firmenpolitik erhalten Sie auf unserer Website.

http://www.lge.com/about/environment/html/Recycling.jsp

Français

Information sur la protection 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

Espanől

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 milieuvriendeliikheid 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 친화적인 경영을 전개하고 있습니다.

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

또한 제품에 포함되는 환경 위해 요소를 최소화하는 데에도 노력을 게욜리하지 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 친화적 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)



:: WEEE (for Europe)



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.
- 3.The correct disposal of your old appliance will help prevent potential negative consequences for the environment and human health.
- 4.For more detailed information about disposal of your old appliance, please contact your city office, waste disposal service or the shop where you purchased the product.

French

Élimination de votre ancien appareil

- 1.Ce symbole, représentant une poubelle sur roulettes barrée d'une croix, signifie que le produit est couvert par la directive européenne 2002/96/EC.
- 2.Les éléments électriques et électroniques doivent être jetés séparément, dans les 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.
- 2.Tutti i prodotti elettrici ed elettronici dovrebbero essere smaltiti separatamente rispetto alla raccolta differenziata municipale, mediante impianti di raccolta specifici designati dal governo o dalle autorità locali.
- 3.Il corretto smaltimento delle apparecchiature obsolete contribuisce a prevenire possibili conseguenze negative sulla salute umana e sull'ambiente.
- 4.Per informazioni più dettagliate sullo smaltimento delle apparecchiature obsolete, contattare il comune, il servizio di smaltimento rifiuti o il negozio in cui è stato acquistato il prodotto.

Swedish

Kassering av din gamla apparat

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

Dutch

Uw oude toestel wegdoen

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

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

Finnish

Vanhojen laitteiden hävittäminen

- 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.
- Vanhan laitteen asianmukainen hävittäminen ehkäisee mahdollisia ympäristöön ja terveyteen kohdistuvia haittavaikutuksia.
- Lisätietoa vanhan laitteen hävittämisestä saat ottamalla yhteyden paikallisiin viranomaisiin, kierrätyskeskukseen tai myymälään, josta ostit laitteen.

German

Entsorgung von Altgeräten

- Wenn dieses Symbol eines durchgestrichenen Abfalleimers auf einem Produkt angebracht ist, unterliegt dieses Produkt der europäischen Richtlinie 2002/96/EC.
- 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

- 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.
- Korrekt bortskaffelse af dit gamle apparat er med til at forhindre mulige skadevirkninger på miljøet og menneskelig sundhed.
- 4.Mere detaljerede oplysninger om bortskaffelse af dit gamle apparat kan fås ved at kontakte dit lokale kommunekontor, renovationsselskab eller den butik, hvor du købte produktet.

Greek

Απόρριψη της παλιάς σας συσκευής

- 1. Όταν ένα προϊόν διαθέτει το δύμβολο ενός διαγραμμένου κάλαθου απορριμμάτων, τότε το προϊόν καλύπτεται από την Ευρωπαϊκή Οδηγία 2002/96/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

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

Portuguese

Eliminação do seu antigo aparelho

- 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.
- A 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 direk-

- tivom 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 megfelelő 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 dyrektywa 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, przedsiębiorstwem 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.
- 4. Täpsemat informatsiooni selle kohta, kuhu ja millal saab ära anda oma kasutamiskõlbmatu elektri- ja elektroonikaseadme, küsige kohalikult omavalitsuselt, prügifirmalt või kaupluselt, kust seadme ostsita.

<u>Latvian</u>

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.
- 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.
- 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.