LG
Life's Good

The model and serial number of the TV is located on the back and/or one side of the TV.
Record it below should you ever need service.

MODEL _____

SERIAL _____

LG
Life's Good

OWNER'S MANUAL

LED LCD TV / LCD TV PLASMA TV

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

LED LCD TV		LCD TV		PLASMA TV
32LE5500	32LE7500	32LD650	32LD840	50PK550
42LE5500	42LE7500	42LD650	37LD840	60PK550
47LE5500	47LE7500	47LD650	42LD840	
55LE5500	55LE7500	55LD650	47LD840	50PK950
42LE8500	42LX6500			60PK950
	47LX6500			
	55LX6500			

P/NO : MFL59166618 (1005-REV02)

www.lg.com

WARNING / CAUTION

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

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

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

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 ma nufacturer's instructions.

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

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

6 Only use attachments/accessories specified by the manufacturer.

7 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.

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

9 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.

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

11 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.

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

13 CAUTION concerning the Power Cord:

It is recommend that appliances be placed upon a dedicated circuit; that is, a single outlet circuit which powers only that appliance and has no additional outlets or branch circuits. Check the specification page of this owner's manual to be certain.

Do not connect too many appliances to the same AC power outlet as this could result in fire or electric shock.

Do not overload wall outlets. Overloaded wall outlets, loose or damaged wall outlets, extension cords, frayed power cords, or damaged or cracked wire insulation are dangerous . Any of these conditions could result in electric shock or fire. Periodically examine the cord of your appliance, and if its appearance indicates damage or deterioration, unplug it, discontinue use of the appliance, and have the cord replaced with an exact replacement part by an authorized servicer. Protect the power cord from physical or mechanical abuse, such as being twisted, kinked, pinched, closed in a door, or walked upon. Pay particular attention to plugs, wall outlets, and the point where the cord exits the appliance.

Do not make the TV with the power cord plugged in. Do not use a damaged or loose power cord. Be sure do grasp the plug when unplugging the power cord. Do not pull on the power cord to unplug the TV.

14 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.

15 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).

16 **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.

17 **DISCONNECTING DEVICE FROM MAINS**

Mains plug is the disconnecting device. The plug must remain readily operable.

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

19 **Cleaning**

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

20 **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.

21 **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.

22 Take care not to touch the ventilation openings. When watching the TV for a long period, the ventilation openings may become hot.

23 If you smell smoke or other odors coming from the TV or hear strange sounds, unplug the power cord contact an authorized service center.

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

25 Keep the product away from direct sunlight.

26 **For LCD TV**

If the TV feels cold to the touch, there may be a small "flicker" when it is turned on. This is normal, there is nothing wrong with TV.

Some minute dot defects may be visible on the screen, appearing as tiny red, green, or blue spots. However, they have no adverse effect on the monitor's performance.

Avoid touching the LCD screen or holding your finger(s) against it for long periods of time. Doing so may produce some temporary distortion effects on the screen.

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.

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FEATURE OF THIS TV

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."

Listen to TV with wireless headset, or enjoy viewing your mobile phone photos on your TV.

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"

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 letter-boxed areas of your TV if you use the 4:3 aspect ratio setting for an extended period.

PREPARATION

ACCESSORIES

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

The accessories included may differ from the images below.

Owner's Manual

Nero MediaHome 4 Essentials CD

Remote Control, Batteries (AAA) (Some models)

RF Adapter (Some models)
You must connect it to the antenna wire after fixing in Antenna Input. This adapter is for supplied in Argentina.

Not included with all models

Polishing Cloth

* Wipe spots on the exterior only with the polishing cloth.
* Do not wipe roughly when removing stain. Excessive pressure may cause scratch 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.

Plasma TV

(For 50PK550)

x 3

x 4

(M5 x 14) (M4 x 28)

(For 50PK950)

x 4

x 4

(M4 x 14) (M4 x 28)

Screws for stand assembly
(Refer to P.22)

x 2

Cable Holder
(Refer to P.30)

Power Cord

(For50/60PK950)

Remote Control,
Batteries (AAA) (Some models)

Cable
Management Clip

Protection Cover
(Refer to P.23)

PREPARATION

32/42/47/55LD650, 32/37/42/47LD840

x 8
(M4 x 20)

Screws for stand assembly (Refer to P.24)

(For 32/42LD650, 32/37/42LD840)

Screw for stand fixing (Refer to P.34)

Protection Cover (Refer to P.25)

(For 32/37/42/47LD840)

Stand Rear Cover (Refer to P.24)

Power Cord

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

(42LE8500)

x 8
(M4 x 20)

(55LE5500, 55LE7500, 55LX6500)

x 4
(M4 x 24)

x 4
(M4 x 16)

(Other models)

x 8
(M4 x 16)

Screws for stand assembly (Refer to P.26)

Cable Holder (Refer to p.32)

x 2

Component gender cable, AV gender cable

(For 32LE5500/7500)

Screw for stand fixing (Refer to P.34)

(For 42/47/55LX6500)

3D Glasses

(For 32/42/47/55LE7500)

Cleansing Cloths (mitt)

* Wipe spots on the exterior only with the cleansing cloths.
* Do not wipe roughly when removing stains. Excessive pressure may cause scratches or discoloration.
* For cleaning front frame, please slowly wipe in one direction after spraying water 1-2 times on cleansing cloths. Please remove excessive moisture after cleaning. Excessive moisture may cause water stains on the frame.

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.

(Except 50/60PK550)

Wireless Media Box
(AN-WL100W)

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

FRONT PANEL INFORMATION

■ Image shown may differ from your TV.

Plasma TV

50/60PK550

Intelligent Sensor
Adjusts picture according to the surrounding conditions

Remote Control Sensor

Power/Standby Indicator
Illuminates red in standby mode.
The lighting is off while the TV remains on.

Touch Button
You can operate the button just by touching the button lightly with your finger.

POWER Button | INPUT Button | MENU Button | ENTER Button | VOLUME (+, -) Buttons | CHANNEL (∧,∨) Buttons

50/60PK950

SPEAKER
Intelligent Sensor
Adjusts picture according to the surrounding conditions
Remote Control Sensor
Power/Standby Indicator
Illuminates red in standby mode.
The lighting is off while the TV remains on.
Touch Button
You can operate the button just by touching the button lightly with your finger.
INPUT
MENU
ENTER
VOL
CH
POWER Button
INPUT Button
MENU Button
ENTER Button
VOLUME (+, -) Buttons
CHANNEL (∧,∨) Buttons

■ Image shown may differ from your TV.

32/42/47/55LD650

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

Remote Control Sensor

Intelligent Sensor

Adjusts picture according to the surrounding conditions

Power/Standby Indicator

(Can be adjusted using the **Power Indicator** in the OPTION menu.▶ **p.172**)

Emitter
(For 42/47/55LX6500)

It is the part equipped with the emitter exchanging signal with 3D glasses.

Please be careful not to block the screen with objects or people while watching a 3D Video.

Touch Button

Light the button by touching first. At this time, you can use the desired button.

CHANNEL (∨,∧) Buttons | VOLUME (-, +) Buttons | ENTER Button | MENU Button | INPUT Button | POWER Button

PREPARATION

■ Image shown may differ from your TV.

42LE8500

32/37/42/47LD840

Remote Control Sensor

Intelligent Sensor

Adjusts picture according to the surrounding conditions

Power/Standby Indicator

(Can be adjusted using the **Power Indicator** in the OPTION menu.▶ **p.172**)

BACK PANEL INFORMATION

■ Image shown may differ from your TV.

50/60PK550

50/60PK950

32/42/47/55LD650, 32/37/42/47LD840

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

⚠ CAUTION

For HDMI IN 4 and USB IN 1, 2

- For an optimal connection, HDMI cables and USB devices should have bezels less than 0.39 inches (10 mm) thick.

*A ≦ 0.39 inches (10 mm)

❶ **LAN**

Network connection for AccuWeather, Picasa, YouTube, etc.

Also used for photo and music files on local network.

❷ **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).

❸ **RGB IN (PC)**

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

AUDIO IN (RGB/DVI)

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

❹ **RS-232C IN (CONTROL & SERVICE) PORT**

Used by third party devices.

This port is used for service or Hotel mode.

❺ **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.

❻ **AV (Audio/Video) IN**

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

❼ **ANTENNA IN, CABLE IN**

Connect over-the air signals to this jack.

Connect cable signals to this jack.

❽ **COMPONENT IN**

Analog Connection.

Supports HD.

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

❾ **WIRELESS CONTROL**

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

❿ **USB INPUT**

Used for viewing photos, movies and listening to MP3s.

⓫ **HEADPHONE INPUT**

0.32 cm (1/8 inch) headphone jack

Impedance 16 Ω , Maximum audio out 15 mW

⓬ **Power Cord Socket**

For operation with AC power.

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

STAND INSTRUCTIONS (For 50/60PK550, 50/60PK950)

■ Image shown may differ from your TV.

INSTALLATION (For 50PK550)

1. Carefully place the TV screen side down on a cushioned surface to protect the screen from damage.

2. Assemble the parts of the **STAND BODY** with the **STAND BASE** of the TV.

3. Assemble the TV as shown.

4. Fix the 4 screws securely using the holes in the back of 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.

INSTALLATION (For 50PK950)

1. Carefully place the TV screen side down on a cushioned surface to protect the screen from damage.

2. Assemble the parts of the **STAND BODY** with the **STAND BASE** of the TV.

3. Assemble the parts of the **CABLE MANAGEMENT CLIP** with the **STAND BODY**.

4. Assemble the TV as shown.

5. Fix the 4 screws securely using the holes in the back of the TV.

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 from TV.

PROTECTION COVER

After removing the stand, install the included **PROTECTION COVER** over the hole for the stand.

Press the **PROTECTION COVER** into the TV until you hear it click.

When installing the wall mounting bracket, use the **PROTECTION COVER**.

STAND INSTRUCTIONS (For 32/42/47/55LD650, 32/37/42/47LD840)

■ Image shown may differ from your TV.

INSTALLATION

1. Carefully place the TV screen side down on a cushioned surface to protect the screen from damage.

2. Assemble the parts of the **STAND BODY** with the **STAND BASE** of the TV.

3. Assemble the TV as shown.

4. Install the 4 screws into the holes shown.

5. (For 32/37/42/47LD840)
Assemble the parts 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 from TV.

PROTECTION COVER

After removing the stand, install the included **PROTECTION COVER** over the hole for the stand.

Press the **PROTECTION COVER** into the TV until you hear it click.

STAND INSTRUCTIONS

(For 32/42/47/60LE5500, 32/42/47/55LE7500, 42LE8500, 42/47/55LX6500)

■ Image shown may differ from your TV.

INSTALLATION

1. Carefully place the TV screen side down on a cushioned surface to protect the screen from damage.

2. Assemble the parts of the **STAND BODY** with the **STAND BASE** of the TV.
   At this time, tighten the screws that hold the **STAND BODY** on.

3. Assemble the TV as shown.

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

5. Install the 4 screws into the holes shown.

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)	Standar Screw	Quantity	Wall Mounting Bracket (sold separately)
32LD650, 32LD840, 32LE5500, 32LE7500,	200 * 100	M4	4	LSW100B, LSW100BG
42/47LD650, 37/42/47LD840, 42/47LE5500, 42/47LE7500, 42LE8500, 42/47LX6500	200 * 200	M6	4	LSW200B, LSW200BG
55LD650, 55LE7500, 55LE5500, 55LX6500	400 * 400	M6	4	LSW400B, LSW400BG
50PK550, 50PK950	400 * 400	M6	4	AW-50PG60M AW-50PG60MS
60PK550, 60PK950	600 * 400	M8	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.

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.

(For 50/60PK950)

1. Connect the cables as necessary.
   To connect additional equipment, see the **EXTERNAL EQUIPMENT SETUP** section.

2. Install the **CABLE MANAGEMENT CLIP** into the TV until clicking sound.

HOW TO REMOVE THE CABLE MANAGEMENT CLIP

▶ Hold the **CABLE MANAGEMENT CLIP** with both hands and pull it backward as shown.

32/42/47/55LD650, 32/37/42/47LD840

1. Connect the cables as necessary.
   To connect additional equipment, see the **EXTERNAL EQUIPMENT SETUP** section.

2. Open the **CABLE MANAGEMENT CLIP** as shown.

3. Put the cables inside the **CABLE MANAGEMENT CLIP** and snap it closed.

■ Image shown may differ from your TV.

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

1. 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.

2. 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 4 inches on all four sides from the wall.

⚠ CAUTION

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

SWIVEL STAND

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

ATTACHING THE TV TO A DESK

(For 32/42LD650, 32/37/42LD840, 32LE5500, 32LE7500)

■ Image shown may differ from your TV.

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

⚠ WARNING

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

KENSINGTON SECURITY SYSTEM

■ This feature is not available for all models.

- The TV is equipped with a Kensington Security System connector on the back panel. Connect the Kensington Security System cable as shown below.
- For the detailed installation and use of the Kensington Security System, refer to the user's guide provided with the Kensington Security System.

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

NOTE: The Kensington Security System is an optional accessory.

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 bolts.
  * 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.

2. Cable

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

EXTERNAL EQUIPMENT SETUP

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

HD RECEIVER SETUP

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

Component Connection

1. How to connect

1. 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).
2. 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.

** Component3: For LED LCD TV*

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
720x576i	15.625*	50.00*
720x576p	31.25*	50.00*
1280x720p	37.50*	50.00*
	44.96	59.94
	45.00	60.00
1920x1080i	28.125*	50.00*
	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
	56.25*	50.00*
	67.432	59.94
	67.50	60.00

*Except Brazil

For LED LCD TV

DVI to HDMI Connection

1. How to connect

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

2. How to use

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

** HDMI3: Except 50/60PK550, 32/42/47/55LD650, 32/37/42/47LD840*

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.

HDMI Connection

1. How to connect

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

2. 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.

** HDMI4: Except 50/60PK550, 32/42/47/55LD650, 32/37/42/47LD840*

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, PCM

HDMI-DTV

Resolution	Horizontal Frequency(KHz)	Vertical Frequency(Hz)
720x480p	31.47	59.94
	31.50	60.00
720x576p	31.25*	50.00*
1280x720p	37.50*	50.00*
	44.96	59.94
	45.00	60.00
1920x1080i	28.125*	50.00*
	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
	56.25	50.00*
	67.432	59.94
	67.50	60.00

*Except Brazil

DVD SETUP

Component Connection

1. How to connect

1. 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).

2. 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**, or **Component3*** input source on the TV using the **INPUT** button on the remote control.
- Refer to the DVD player's manual for operating instructions.

** Component3: For LED LCD TV*

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	PB	PR
Video output ports on DVD player	Y Y Y Y	PB B-Y Cb Pb	PR R-Y Cr Pr

For LED LCD TV

Composite (RCA) Connection

1. How to connect

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

2. How to use

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

For LED LCD TV

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.

2. 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.

** HDMI4: Except 50/60PK550, 32/42/47/55LD650, 32/37/42/47LD840*

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, PCM

VCR SETUP

Antenna Connection

1. How to connect

1. Connect the RF antenna out socket of the VCR to the **ANTENNA/CABLE IN** socket on the TV.
2. 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

1. 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.

For LED LCD TV

OTHER A/V SOURCE SETUP

1. How to connect

1. 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.

EXTERNAL EQUIPMENT SETUP

USB CONNECTION

1. How to connect

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

2. How to use

- After connecting the **USB IN** jack, you use the USB function. (▶ p.123)

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.

2. 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

1. Connect one end of the optical cable to the TV port of **OPTICAL DIGITAL AUDIO OUT**.
2. Connect the other end of the optical cable to the digital audio input on the audio equipment.
3. Set the "TV Speaker option - Off" in the AUDIO menu. (▶ **p.180**). See the external audio equipment instruction manual for operation.

NOTE

- When connecting with external audio equipment, such as amplifiers or speakers, you can turn the TV speakers off in the menu. (▶ **p.180**)

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 FOR LED TV/LCD TV)

(Except 50/60PK550)

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.

2. 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 the PC adjusts automatically to the TV's settings.

VGA (D-Sub 15 Pin) Connection

1. How to connect

1. Connect the VGA output of the PC to the **RGB IN (PC)** jack on the TV.
2. 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**, or **3*** jack on the TV.
2. Connect the PC audio output to the **AUDIO IN (RGB/DVI)** jack on the TV.

2. How to use

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

** HDMI3: Except 50/60PK550, 32/42/47/55LD650, 32/37/42/47LD840*

NOTE

- To get the 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.
- When selecting HDMI-PC, set the "Input Label - PC" in the OPTION menu.

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

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

Select **PICTURE**.

Select **Screen (RGB-PC)**.

Select **Resolution**.

Select the desired resolution.

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.

Select **PICTURE**.

Select **Screen (RGB-PC)**.

Select **Auto Config.**.

Select **Yes**.

Start Auto Configuration.

- 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.

Select **PICTURE**.

Select **Screen (RGB-PC)**.

Select **Position**, **Size**, or **Phase**.

Make appropriate adjustments.

- **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.

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.

Select **PICTURE**.

Select **Screen (RGB-PC)**.

Select **Reset**.

Select **Yes**.

Start **Reset**.

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

1 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.

⚠ 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.

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.
- When AP is set to include 802.11 n, and if Encryption is designated as WEP(64/128bit) or WPA(TKIP/AES), the connection may not be possible. There may be different connection methods according to the AP manufacturers.

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

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

1 Select **NETWORK**.

2 Select **Network Setting**.

3 Select **Wireless**.

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

5 Select **Setting from the AP list**.

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

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

8 Input the security key of AP.

9 Repeat step 4-5 on P.57

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.60.

2 RED 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.

4 ENTER Select **Connect**.

5 Repeat step 4-5 on P.57.

- 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.60.

2 ENTER Select **Simple setting (WPS-button mode)**.

3 ENTER Select **Connect**.

4 Repeat step 4-5 on P.57.

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.

- Example of the PC setting that supports a wireless network

1. Find a wireless network device in your PC.
2. 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.)

- PC Setting

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

---

1 Repeat step 1-3 on P.60.

2

Select **Setting AD-hoc network**.

3

Select **Enter**.

4

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.

5

Insert the IP address.

6

Network setting is completed.
Select **Close**.

Network Status

Wireless Connection

Wired Connection

1 Select **NETWORK**.

2 Select **Network Status**.

3 Check the newtwork status.

- **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.

POWER	Turns the TV on from standby or off to standby.
ENERGY SAVING	Adjusts the Energy Saving setting. ▶**p.162**
AV MODE	Toggles through preset Video and Audio modes. ▶**p.95**
INPUT	Rotates through inputs. ▶**p.90** Also switches the TV on from standby.
TV	Returns to the last TV channel.

NUMBER button	
- (DASH)	Used to enter a program number for multiple program channels such as 5-1, 5-2, etc.
LIST	Displays the channel table. ▶**p.82**
Q.VIEW	Tunes to the last channel viewed.

VOLUME UP/ DOWN	Adjusts the volume.
FAV	Set up desired favorite channels list. ▶**p.81**
MARK	Select the input to apply the Picture Wizard settings. ▶**p.161** Use to mark or unmark a photo/music/ movie. ▶**p. 131, 136, 142**
RATIO	Changes the aspect ratio. ▶**p.158**
3D	Used for viewing the 3D video. ▶**p.121**
CHAR/NUM, DELETE	Used to edit program title in REC.LIST and schedule list.
MUTE	Switches the sound on or off.
CHANNEL UP/DOWN	Changes the channel.
PAGE UP/DOWN	Moves from one full set of screen information to the next one.

MENU	Displays the main menu or clears all on-screen displays and return to TV viewing.
NETCAST	Select the desired NETCAST menu source ▶p.149
Q.MENU	Opens the list of Quick Menu options. ▶p.72
THUMBSTICK (Up/Down/Left Right/ENTER)	Navigates the on-screen menus and adjusts the system settings to your preference.
BACK	Allows the user to move return one step in an interactive application or other user interaction function.
GUIDE	Displays the program event according to time scheduler. ▶p.87
EXIT	Clears all on-screen displays and return to TV viewing.
L/R SELECT	Used for viewing the 3D video. ▶p.121
COLOR BUTTON	Access special functions in some menus.
USB, SMPLINK Control buttons	• Controls MY MEDIA menu (Movie List, Photo List, Music List). • Controls the SIMPLINK compatible devices.
INFO	Displays the information of watching program. ▶p.86
RATIO	Changes the aspect ratio. ▶p.158
SIMPLINK	See a list of AV devices connected to TV. When you toggle this button, the SIMPLINK menu appears at the screen. ▶p.96

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.

WATCHING TV / CHANNEL CONTROL

Simple Remote Control (For 50/60PK950)

POWER	Turns the TV on from standby or off to standby.
TV/INPUT	Rotates through inputs. Also switches the TV on from standby.
VOLUME UP/ DOWN	Adjusts the volume.
MUTE	Switches the sound on or off.
CHANNEL UP/DOWN	Changes the channel.

NUMBER button	
– (DASH)	Used to enter a program number for multiple program channels such as 2-1, 2-2, etc.
Q.VIEW	Tunes to the last channel viewed.

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

1. First, connect power cord correctly.
   At this moment, the TV switches to standby mode.
   - In standby mode to turn TV on, press the ⏻/ I, **INPUT**, **CH (∧ or ∨)** button on the TV or press the **POWER**, **INPUT**, **CH (∧ or ∨)**, **Number (0~9)** button on the remote control.
2. Select the viewing source by using the **INPUT** button on the remote control.
3. 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

1. Press the **CH (∧ or ∨)** or **NUMBER** buttons to select a channel number.

VOLUME ADJUSTMENT

Adjust the volume to suit your personal preference.

1. Press the **VOL (+ or -)** button to adjust the volume.
2. If you want to switch the sound off, press the **MUTE** button.
3. 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.

Step1. Selecting Language

Select Menu Language.

Step2. Mode setting

Select **Home Use**.

Step3. Power Indicator (For LED LCD TV)

1 Select **On** or **Off**.

2 ENTER

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

Step4. Time Zone (Depending on models)

1 Select **Time Zone** option.

2 Select **Daylight Saving** option.

3 ENTER

Step5. Auto Tuning

1 ENTER Check your antenna connection and start **Auto Tuning**.

WATCHING TV / CHANNEL CONTROL

ON-SCREEN MENUS SELECTION

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

1 MENU — Display each menu.

2 ENTER — Select a menu item.

3 ENTER — Accept the current selection.

4 EXIT — 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**.

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INPUT

Input List
Move
Enter
TV
USB1
USB2
AV 1
AV 2
Component1
Component2
Component3
RGB-PC
HDMI1
HDMI2
HDMI3
Input Label
Exit

BLUETOOTH

Exit
BLUETOOTH
Move
Enter
Bluetooth on
Bluetooth is off.
Select 'Bluetooth On' on the left to turn on Bluetooth.

MY MEDIA

MY MEDIA
Movie List
Photo List
Music List

GAME

GAME
JUMP
HOLE IN ONE
WHACK A MOLE
SUDOKU
COOKING BURGER
SAVING CRYSTAL
INVADER
URGENT SURVIVAL
Exit

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.
Multi Audio: Changes the audio language (Digital signal).
SAP: Selects MTS sound (Analog signal).
Sleep Timer: Select the amount of time before your TV turns off automatically.
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.

Display each menu.

Make appropriate adjustments.

Return to TV viewing.

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.
- When there is a new software update when you open NetCast, you will not be able to use NetCast without updating the software.
- 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.

1

Select **Customer Support**.

2

Select **Picture Test** or **Sound Test**.

3

Select **Yes**.

4

Return to the previous menu.

Return to TV viewing.

Product/Service Info.

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

1

Select **Customer Support**.

2

Select **Product/Service Info.**.
You can check the various product/Service infomation based on your model.

3

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.

1 MENU GREEN Select **Simple Manual**.

2 Select the part of the manual you would like to see.

RED Go to the **Index** page.

BLUE Play the **Simple Manual** automatically or manually.

3 EXIT Return to TV viewing.

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.

1 Select **CHANNEL**.

2 Select **Auto Tuning**.

3 Select **Start**.

4 Run **Auto tuning**.

5 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 500.
- Found channels are grouped in the order of DTV, TV, and Cable TV.

Add/Delete Channel (Manual Tuning)

When selecting 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**, 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 500.

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** ∧ ∨ 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.

1 Select **CHANNEL**.

2 Select **Channel Edit**.

3 Select a channel.

4

Add or delete a channel.

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.

5

Return to the previous menu.

Return to TV viewing.

- Keep pressing the ∧ button and use the ‹ or › buttons to move between DTV, TV, 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.

1 CH or Select your desired channel.

2 MARK FAV CHAR/NUM Select your desired favorite channel group from A to D.

3 YELLOW Register or cancel the current channel in favorite channel list.

BLUE Go to the "**CHANNEL** menu **- Channel Edit**".

4 EXIT Return to TV viewing.

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

FAVORITE CHANNEL LIST

Displaying the favorite channel list

1 MARK FAV CHAR/NUM Display the Favorite channel list.

Selecting a channel in the favorite channel list

1 Select a channel.

2 ENTER Switch to the chosen channel number.

Paging through a favorite channel list

1 CH Turn the pages.

2 BACK Return to TV viewing.

CHANNEL LIST

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

Displaying Channel List

1 Display the **Channel List**.

Tune to the "**CHANNEL** menu **- Channel Edit**".

Selecting a channel in the channel list

1 Select a channel.

2 Switch to the chosen channel number.

Paging through a channel list

1 Turn the pages.

2 Return to TV viewing.

SCAN OPTION

*This feature is not available for all models.

Whether to search all channels or the first channel of virtual channels is switched with CH ∧ ∨ button when one or more virtual channels exist at one physical channel.

Select **CHANNEL**.

Select **Scan Option**.

Select **Primary Channel** or **All Channels**.

Return to the previous menu.

Return to TV viewing.

- **Primary Channel**: Only scan the first channel of virtual channels.
- **All Channels**: Scan full channel.

SYSTEM COLOR

This function set color suited the each signal.
This feature is disable in digital channel.

1

Select **CHANNEL**.

2

Select **System Color**.

3

Select **Multi**, **PAL-M**, **PAL-N**, or **NTSC**.

4

Return to the previous menu.

Return to TV viewing.

CHANNEL BRIEF INFORMATION

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

1 ENTER Show the Brief Info on the screen.

2 ENTER Return to TV viewing.

	Multilingual : The program contains two or more audio services. Use the **Q.MENU** menu to select wanted Audio.
CC	**Caption** : The program contains one or more caption services. Use the **Q.MENU** menu to select wanted Closed caption.
D	**Dolby Digital**: The program contains a Dolby Digital audio signal in TV and HDMI input source.
4:3	The original aspect ratio of the video is 4:3
16:9	The original aspect ratio of the video is 16:9 (wide)
480i	The video resolution is 720x480i
480p	The video resolution is 720x480p
720p	The video resolution is 1280x720p
1080i	The video resolution is 1920x1080i
1080p	The video resolution is 1920x1080p
	Description
	Refer to the LOCK menu.

1. Program title
2. Day, Month, Year, Present time
3. Program start time
4. Program progress bar
5. Program finish time
6. Banner information

1

Shows current channel information

2
Shows next channel information.

3
Show other channel's program information

Channel Program Reservation

1

Show the current channel program Information on the screen.

2
Select a next channel program information

3

Select **Yes** or **No**.

4

Return to TV viewing.

EPG (ELECTRONIC PROGRAM GUIDE) (IN DIGITAL MODE)

This system has an Electronic Program Guide (EPG) to help your navigation through all the possible viewing options.

The EPG supplies information such as program listings, start and end times for all available services. In addition, detailed information about the program is often available in the EPG (the availability and amount of these program details will vary, depending on the particular broadcaster).

This function can be used only when the EPG information is broadcast by broadcasting companies.

The EPG displays the program details for next 8 days.

Display the **Program Guide**.

Select the desired program.

NOW/NEXT Guide Mode

You can view a program being broadcasted and one scheduled to follow.

Change EPG mode.

Enter Manual Timer mode.

Enter Schedule List mode.

When 'Now' is selected, it is moved to selected program and EPG disappears.

When 'Next' is selected, a reservation pop-up window appears.

Select NOW or NEXT Program.

Select the Broadcast Program.

Page Up/Down.

WATCHING TV / CHANNEL CONTROL

8 Day Guide Mode

Change EPG mode.

Enter Date setting mode.

Enter Manual Timer mode.

Enter Schedule List mode.

When 'Currently broadcasting program' is selected, it is moved to selected program and EPG disappears.
When 'Future broadcasting program' is selected, a reservation pop-up window appears.

Select Program.

Select the Broadcast Program.

Date Change Mode

Switch off Date setting mode.

Change to the selected date.

Select a date.

Switch off Date setting mode.

or

Switch off EPG.

Detailed Information Box

Text Up/Down.

Select Remind setting mode.

or

The detail information on or off.

Switch off EPG.

Remind Setting Mode

Switch off Manual Timer mode.

Select Remind function setting.

Select Start Time or Channel.

Change to Guide mode.

Change to Schedule List mode.

Save Timer Remind.

Schedule List Mode

If you've created a schedule list, a scheduled program is displayed at the scheduled time even when you are watching a different program at the time.

Change to Manual Timer mode.

Change to Guide mode.

Switch off **Schedule List**.

Select your desired Option (Modify/ Delete/Delete All).

Select **Schedule List**.

Page Up/Down.

INPUT LIST

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

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Disconnected inputs are inactive (grayed out)

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.

INPUT LABEL

This indicates which device is connected to which input port.

i.e)

i.e) Change the input label using Blue button

Select the desired input source.

Select the label.

Return to the previous menu.

Return to TV viewing.

MODE SETTING

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

Select **OPTION**.

Select **Mode Setting**.

Select **Home Use**.

Return to the previous menu.

Return to TV viewing.

- "**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.

DEMO MODE

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

Select **OPTION**.

Select **Mode Setting**.

Select **Store Demo**.

Select **On**.

Return to TV viewing.

After a while, **Demo Mode**. starts.

If you want to stop the demo, press any button (Except VOL +, - and MUTE button).

RESET TO FACTORY DEFAULT (INITIAL SETTING)

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

1

Select **OPTION**.

2

Select **Initial Setting**.

3

Select **Yes**.

4

TV turns off automatically and start factory reset.

- 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.

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 / THX Cinema**" in AV mode, **Cinema / THX 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 / THX 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.

Select **GAME**.

Select the desired game.

Enter the selected game mode.

Return to TV viewing.

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 Display **SIMPLINK** menu.

2 Select **On**.

3 Select the desired device.

4 Control connected AV devices.

❶ **TV viewing**: Switch to the previous TV channel regardless of the current mode.

❷ **DISC playback**: Select and play discs. When multiple discs are available, the disc devices are conveniently displayed at the bottom of the screen.

❸ **VCR playback**: Control the connected VCR.

❹ **HDD Recordings playback**: Control recordings stored in HDD.

❺ **Audio Out to Home Theater speaker/ Audio Out to TV**: Select Home Theater speaker or TV speaker for Audio Out.

▶When no device is connected (displayed in gray)

▶Selected Device

▶When a device is conected (displayed in bright color)

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, ▶, ■, ❚❚, ◀◀ 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.

BLUETOOTH

(FOR 50/60PK950, 32/42/47/55LE5500, 32/42/47/55LE7500, 42LE8500, 42/47/55LX6500)

BLUETOOTH?

Bluetooth is a short distance networking technology using 2.4 GHz frequency to connect various types of information devices such as computers, cell phones and PDAs, as well as digital appliances through wireless connection, without having to connect any cable, to enable data exchange.

With the Bluetooth communication function, you can connect the Bluetooth enabled wireless headset or receive images(only JPEG), listen to music from the Bluetooth enabled cell phone using this TV.

- Communication Spec.: Bluetooth Specification Version 2.0 + EDR (Enhanced Data Rate)
- Output: Bluetooth Specification Power Class 2
- Maximum Communication Range: Line of open sight approx. 10 m (30 ft)
- Frequency Band: 2.4 GHz band (2.4 GHz to 2.4835 GHz)
- Bluetooth Module: RBFS-B921A(Plasma TV), RBFS-B721A(LCD/LED LCD TV) (LG Electronics)
- Compatible Bluetooth Profile : GAVDP(Generic Audio/Video Distribution Profile), A2DP(Advanced Audio Distribution Profile), OPP(Object Push Profile), BIP(Basic Imaging Profile), FTP(File Transfer Profile)

Precautions when using the Bluetooth

- ▶ Use within 7 m (-45°- 45°) range. If you use the device out of the range or within the range with obstacles, it can result in communication error.
- ▶ Communication error can occur depending on the surrounding devices.
- ▶ Products using the same frequency of 2.4 GHz (Wireless LAN, microwave oven etc.), can cause communication error by using the same frequency bandwidth.
- ▶ The device search time differs depending on the number of Bluetooth devices and the operating situation.
- ▶ The probability of search increases with less number of devices.
- ▶ Electromagnetic wave can be interfered with applicable wireless devices.
- ▶ Because applicable wireless devices have the possibility of electromagnetic wave interference, they cannot provide services related to human life.
- ▶ You can only connect one Bluetooth device at a time.
- ▶ You cannot receive photos(only JPEG) or listen to music from other Bluetooth devices while using the Bluetooth headset.
- ▶ For details of Bluetooth, refer to the user manual of the Bluetooth device.
- ▶ 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.
- ▶ Bluetooth can be used about 30 seconds after the power is turned on.
- ▶ Depending on the transmission processing method and performance of the headset used, the audio can be instantly disconnected.

QDID(Qualified Design Identity): B015199

SETTING THE BLUETOOTH

If you want to listen to the broadcasted sound using the Bluetooth headset or receive the jpeg images from an external device and view them on the TV, listen to music from cell phone(Bluetooth device), you can use the wireless communication without having to connect any cables.

1 Select **BLUETOOTH**.

2 Start **Bluetooth On**.

3 Return to the previous menu.

Return to TV viewing.

- You can use the BLUETOOTH menu by selecting "**Bluetooth on**".
  If you do not want to use the Bluetooth function, select "**Bluetooth off**".
- If it is connected to the external Bluetooth device, you can select "**Bluetooth off**" after disconnecting the device.

CONNECTING THE BLUETOOTH HEADSET

When you select the Bluetooth headset, you can listen to the TV audio in the Bluetooth headset through wireless communication.

You must pair it with any new Bluetooth device before the first use. For details, refer to the user manual of the applicable device.

A maximum of 12 devices can be paired.

When the unit is searching for the Bluetooth headset, other buttons except for the "Stop" (ENTER button) do not work.

Connecting a new Bluetooth headset

You can only search for the new Bluetooth headset only in the **Disconnected** condition.

When you run the search, it will show you the list of all Bluetooth headsets responding.

After new Bluetooth device is searched, the PIN number is validated to connect the device. For details, refer to the user manual of the applicable device.

1 Select **BLUETOOTH**.

2 Select **Search headset**.

3 Select the desired Bluetooth headset.

4 Select the desired Bluetooth headset PIN number. Refer to the user manual of the applicable device for the PIN number.

5 Connect the Bluetooth headset.

6 Return to the previous menu.

Return to TV viewing.

Connecting to Bluetooth headset already registered

Bluetooth headsets are listed in the order most recently used with the headset currently in use listed at the top. When connecting the Bluetooth device already registered, you can select and connect directly without any PIN validation.

1 MENU ENTER Select **BLUETOOTH**.

2 Select the Bluetooth headset.

3 ENTER Connect the Bluetooth headset.

4 BACK Return to the previous menu.

EXIT Return to TV viewing.

- After connecting/using the Bluetooth headset, the headset setting will be the **Disconnected** condition automatically when you turn off the power of the TV and then turn on.
- After connecting the Bluetooth headset, the TV speaker is switched to mute condition and the sound will only be generated from the headset.

Disconnecting the Bluetooth headset during use

1 MENU ENTER Select **BLUETOOTH**.

2 Select **Disconnect**.

3 ENTER Select **Disconnect**.

4 ENTER Disconnect the Bluetooth headset.

5 BACK Return to the previous menu.

EXIT Return to TV viewing.

When requesting to connect to TV from the Bluetooth headset

When the Bluetooth menu is "On" and there is a connection request from the headset, this message is dispalyed.

Not all headsets support this feature.(Refer to the user manual of the applicable Bluetooth headset.)

Some headset types may make an attempt at connection when they are turned off/on even though they are not included in the Registered Device list.

1

Select **Yes** or **No**.

NOTE

- ▶ LG recommends the following headset models.
  : Plantronics VOYAGER-855 / SONY HBH-DS970, HBH-DS980 / Motorola S605
  There might be an audio delay, depending on the buffer memory size of the headset.
- ▶ The stereo headsets officially certified to be Bluetooth compatible can be searched and connected.
- ▶ The stereo headsets that support A2DP functionality can be connected.
- ▶ If the surrounding environment of the TV is as follows, the device may not be searched or connected properly.
  -If there is strong electromagnetic interference.
  -If there are many Bluetooth devices.
  -If the headset is turned off, not in place or has an error.
  -Because products such as microwave oven, wireless LAN, plasma light, gas range etc., use the same frequency range, it can cause communication errors.
- ▶ Only one Bluetooth device can be connected at a time.
- ▶ Connection that is lost due to the TV being turned off etc. will not be automatically recovered. Try connecting the applicable device again.
- ▶ Some operations can be slower while operating the headset.
- ▶ Even if you choose simplink Home Theater after using the headset during Simplink operation, the unit will not automatically switch to Home Theater speakers.
- ▶ When the headset connection continuously fails, pair the device one more time.
- ▶ When a Bluetooth headset is in use, the Volume +/- and Mute keys do not work, and the Audio menu returns to the default value and is disabled.
- ▶ With Bluetooth set to On, if any registered devices are turned on, the TV will switch to Bluetooth mode automatically even though you are watching in another input mode. In this case, set Bluetooth to Off.

REMOVE THE BLUETOOTH DEVICE

When 12 devices are registered, you cannot register any more devices, and the external device will no longer be able to pair up with the TV. In this case, you should delete one (disconnect first if a device is connected to the TV) and then you can register another device.

"Remove device" will be available when selecting the device that is not connected to the TV.

1 Select **BLUETOOTH**.

2 Select **Remove Device**.

3 Select **Delete**.

4 Remove the Bluetooth device

5 Return to the previous menu.

Return to TV viewing.

MY BLUETOOTH INFORMATION

This function provides the My Bluetooth Information to the user.
"Edit" will be available when TV is not connected with any device.
You can edit the Setup TV PIN or Setup TV name.
You can check the TV address.
To accept connection from an external Bluetooth device or to connect to an external Bluetooth device, the PIN needs to be entered.
For details on how to set the PIN of the external Bluetooth device, refer to the user manual of the applicable device.
The TV PIN is composed of numbers of up to 16 digits.
The TV PIN must have more than 1 digit.

1

Select **BLUETOOTH**.

2

Select **My Info**.

3
Select **Setup TV PIN** or **Setup TV name**.

4

You can use an the alphabet A to Z, the number 0 to 9, and blank.

5

Save.

6

Return to the previous menu.

Return to TV viewing.

- Press the **DELETE** button to delete digits one by one.

VIEWING THE PHOTOS WITH BLUETOOTH DEVICE

You can view the photos(*.JPG) that were received from an external Bluetooth device to the TV.

To see the detailed informations about connecting the external Bluetooth device, refer to the user manual of the applicable device.

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

Select the each menu.

- ▶ ↻ **(Rotate)** : Rotate photos.
  - Every time you press **ENTER** button on ↻ **(Rotate)**, rotates the photo 90° clockwise.
- ▶ **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.

NOTE

- ▶ Supported maximum photo size is up to 10MB.
- ▶ You cannot receive the photos while using the Bluetooth headset or listening to the musics from Bluetooth device.
- ▶ On receiving the photos, press the **BACK** button to stop. At this time, all photos received will be deleted.
- ▶ Some Bluetooth devices may not support sending the photos.

LISTENING THE MUSICS WITH BLUETOOTH DEVICE

You can listen to the musics (A2DP) that were received from an external Bluetooth device to the TV.

To see the detailed informations about connecting the external Bluetooth device, refer to the user manual of the applicable device.

- Press the **VOL +** or **-** button to adjust the volume.
- If you wish to switch the sound off, press the **MUTE** button.
- Press the **BACK** button to return to normal TV viewing.

NOTE

- ▶ You cannot listen to the musics while using the Bluetooth headset or receiving the photos.
- ▶ Some Bluetooth devices may not support listening the music via TV speaker system.
- ▶ With some Bluetooth device, the sound can be slow or discontinued from time to time.

TIME MACHINE (For Brazil)

PRECAUTIONS WHEN USING THE USB DEVICE

- Only a USB storage device is recognizable.
- If the USB storage device is connected through a USB hub, the device is not recognizable.
- A USB storage device using an automatic recognition program may not be recognized.
- A USB storage device which uses its own driver may not be recognized.
- In case of several paritions or a card reader, up to four memory cards are concurrently recognizable.
- 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 FAT16, FAT32 or NTFS file system provided with the Windows operating system. In case of a storage device formatted as a different utility program which is not supported by Windows, it may not be recognized.
- Please connect power to a USB storage device which requires an external power supply. If not, the device may not be recognized.
- Please connect a USB storage device with cable is offered by USB maker. If connected with cable is not offered by USB maker or an excessively long cable, the device may not be recognized.
- Some USB storage devices may not be supported or operate properly.
- The TV will display up to 128 characters of a files name.
- Please backup important files because data on USB device may be damaged. Data management is consumer's responsibility and as a result, the manufacturer does not cover data damage.
- The recommended capacity is 1TB or less for a USB HDD and 40GB or over for USB memory.

  Any device with more than the recommended capacity may not work properly.
- Playing a movie 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.
- Please maintain the stability of external HDD by using the HDD benchmarking tool in order to guarantee smooth action of HDD.
- The HDD benchmarking tools is checking the performance of HDD that is read/write rate, access time, stability. It will be able to search at website and use easily it after download the HDD benchmarking tool.

TIME MACHINE (PAUSE & REPLAY OF LIVE TV)

This function allows the unit to automatically record live TV and make it available for viewing at any time.
With the Time Machine turned on, you may pause and rewind normal TV viewing at any time without missing any of the live broadcast.
Time Machine and Recording functions may not work if the signal strength is weak.
This function is **only operated after initializing USB Device.**

1 Connect the USB device to the **USB IN** or **USB IN1/ TimeMachine Ready** jacks on the side of TV.

2 To use the USB device (over 40 GB) for Timemachine, execute **USB Device Initialization**.

- It initializes the HDD connected to the USB as disk mode for Timemachine.
- It is activated only when the USB HDD available for Timemachine is connected.
- When **USB Device Initialization** is executed, all the data stored in the USB device is deleted.
- While performing **USB Device Initialization**, do not remove the USB device. It may cause error on the TV and the storage device.

i.e)

USB device Initialization

Select **OK** to initialize the USB device.

Select **OK**.

Select **On** or **Off**.

- When initialization is completed, a popup notice of completion is displayed and the connected USB HDD is available for Timemachine.
- Depending on the capacity of the USB device, the initialization time may vary.
- The initialized USB device is not recognized by the PC.
- When a USB device of less than 40 GB is connected, the USB Device Initialization is not activated.
- Supported maximum external HDD size for back-up is up to 1TB.

TIME MACHINE

Time Machine Mode change during using Time Machine

1 Show the **Time Machine** option menu.

2 Select **Time Machine Mode**.

3 Select **On** or **Off**.

4 Return to the previous menu.

Return to TV viewing.

- Time Machine Mode is available in DTV mode.

USB Device Reinitialization during using Time Machine

1 Show the **Time Machine** option menu.

2 Select **USB Device Initlaization**.

3 Return to the previous menu.

Return to TV viewing.

Time Machine Progress

After selecting **Time Machine Mode-On**, press the **ENTER** button.

- As soon as Time Machine starts, a progress bar indicating the current recording status is displayed in the bottom of the screen.
- It Press the **BACK** button to hide the 'Progress Bar' or press the **ENTER** button to display the 'Progress Bar'.
- This function is preserved even change a program on progressing the Time Machine.

The 'Progress Bar'?

This function indicates what Time Machine reviewing is possible, a current on-screen and live broadcasting position.

1. Preview
2. Current Status while using the Time Machine
3. Current operating function while using the Time Machine

   - Playback
   - Fast forward
   - Rewind
   - Pause
   - Direct view +
   - Direct view -
   - By one screen
   - Slow playback

4. Current location and progress time in playback
5. Total progress time of the Time Machine

NOTE

- In order to save hard-disk space, nothing is saved when there is no signal.
- Time Machine can be used for maximum of 2 hours.
- You can't do the channel change or input conversion on recording.
- When turning power on, it may take up to a maximum of 3 minutes to initialize the HDD.
- Recording or playing the recorded program may not initiate for a copy-protected program.
- Instant recording time is set to 3 hours and supported maximum time is up to 5 hours.

Playback during the Time Machine

During the Time Machine play, the following options are available.

Use of remote control

You can playback the temporarily saved part in various methods during the Time Machine.

	During playback, repeatedly, press the **REW** (◀◀) or **FF** (▶▶) button to speed up. ■ Every time you press the button, the search speed will increase by stage (up to 5 stages).
	During playback, press the Pause(❚❚) button. ■ Pause screen is displayed. ■ Every time you press the Pause(❚❚) button from the pause screen, it will move screen by screen (❚❚▶). ■ Press the Pause(❚❚) button and then use the **FF** (▶▶) button for slow motion (❚▶).
ENTER	When you move the cursor using the Time Machine (< , >) button during playback, and then press the ENTER button, the screen will directly play at the applicable screen where the cursor is located. (↷, ↶)
LIVE TV	To view the current live broadcast, press the **LIVE TV** button during playback.

RECORDING

Use this function when you cannot watch the desired program due to being out.

Start/Stop record

You can record the channel you are watching for three hours.

Start record

1 When watching the program, select it you wish to record.

2

Display the recording setting.

3

Start the recording.

Stop record

4

Select **Yes** to stop the recording.

5

Return to TV viewing.

Modify recording end time

You can shorten or extend the recording time.

During recording ,
Select the **Recording end time modify**.

Set the Recording End Time.

Select **Enter**.

NOTE

- When recording, if the available storage space is not sufficient, the recording will automatically Stop.
- Recordings of less than 10 seconds will not be saved.
- To save disk space while recording broadcasts, no data will be saved if there is no signal.
- The recording function will not initiate for a copy-protected program.
- The displayed time may differ slightly from the actual time.
- When there is no signal or a film source is being viewed, the displayed time may differ slightly from the actual time.

Manual record

This function is easy to register to reserved recording. Timer recording is set.

Select the **Select Recording date, time, channel**.

Select a date.

Select Repeat Option.

Select **Type**, **Start Time**, **End Time**, **Channel**.

Select a **Close**.

NOTE

- ▶ Recording is not possible with copy-protected programs.

  Program with copy protection : failed to record.

- ▶ When a poor quality external source is recorded the quality of the recording will not be optimal.
- ▶ Manual Recording available time is maximum 5 hours and minimum 2 minutes.
- ▶ When broadcasting station send the wrong time information, reserved recording may be failed.
- ▶ If different channels are set for the same time for on time and reserved recording, this TV is powered on to the reserved recording channel.
- ▶ If you turn off the power during the recording, the program being recorded may not be saved. Therefore it is good to press the **STOP** (■) button and check the reserved/recorded list, and then turn off the power.
- ▶ Recording cannot be reserved for a period less than 10 seconds.
- ▶ Because the title and time of the program for Record/Remind is based on the information transmitted from the broadcasting station, they may be different than the actual ones depending on the situation of the broadcasting station.
- ▶ Recording time may differ depending on resolution of input signal or USB HDD capacity.
- ▶ When it is time for the reserved recording to start and the power of the TV is turned off, the TV will turn on the power of the part required for the recording and proceed to the reservation.
- ▶ When it is time for the reserved recording to start and the Immediate recording is in progress, the recording of the program currently being recorded will be stopped and saved, and then proceed to the reserved recording.
- ▶ If the TV is unplugged once or turn off, the reserved recording will not work.

SCHEDULE

Schedule List

This function is used to show scheduled recordings. You can store up to 30 programs.

- **Modify**: Edit the contents of **Start date/Start time/End time/Title/Repeat**. You must press the BACK button to save the edited contents.
  This feature is disable in reserved reminding.
- **Delete**: Delete the selected item in the list.
- **Delete all**: Delete all items in the list.
- **Close**: Close the pop-up menu.

1 Select the **Schedule List**.

2 Select a desired program in the schedule list.

3 Select the desired Popup menu.

4 Return to TV viewing.

Schedule List Initialization

This function is to reset the schedule list.

1 Show the **Time Machine** option menu.

2 Select **Schedule List Initialization**.

3 Select **OK**.
Start the Schedule List Initialization.

RECORDED TV

You can view the recorded program list at a glance.
The recorded program stored in the USB device can be played.

Recorded TV List

RED	**Delete**: Delete the selected recorded programs.
GREEN	**Rename**: Edit recorded program title.
YELLOW	**Thumbnail List**: A method to view in 5 large program. **Simple List**: A method to view in simple list.
MARK FAV	Enter **Mark Mode**.

1

Select the **Recorded TV**.

2

Select a recorded program.

3

Return to TV viewing.

NOTE

- ▶ If there is a bad sector in the disk, part or all of the items of the Recording list can be deleted.
- ▶ Maximum number of recordings within the Recording list is 200. When the number of recordings in the Recording list is 200, you cannot record any more.
- ▶ When the full duration of the recording is played back, the screen will stay in the stopped condition for 10 seconds and then automatically end the playback.
- ▶ The recording can be played back even during the recording/reserved recording.
- ▶ During the playback of the recording, the hard disk can generate a certain level of noise. This noise is irrelevant from the performance and reliability of the product and is normal for a hard drive to have a certain level of noise.

Mark Mode

RED	**Delete Marked**: Delete the marked recorded programs.
GREEN	**Mark All**: Mark all recorded programs in the list.
YELLOW	**Unmark All**: Change marked recorded programs to unmarked recorded programs.
BLUE	**Play Marked**: Play the first selected file. Once recorded programs finishes playing, the next selected one will be played automatically.

1 Select a desired recorded program.

2 MARK / FAV / CHAR/NUM — Mark your desired recorded program.

3 BLUE — Play the marked recorded program.

Playing Recorded programs

You can play a selected program from the recorded list.

1 Play a recorded program.

When you press the **ENTER** button during the playback, the information of the recorded program you are current watching will be displayed at the top of the screen and a progress bar showing the current status of the playback at the bottom of the screen. (Playback status is displayed as follows.) To remove the progress bar, press the **ENTER** button.

- **Play on previous playtime**: Resumes playing at the previously stopped point.
- **Play from the start**: Playback of selected recorded programs.

1. Preview
2. Current Status
3. Current operating function
   - Playback
   - Fast forward
   - Rewind
   - Pause
   - Direct view +
   - Direct view -
   - By one screen
   - Slow playback
   - (Blue) Start repeat interval
   - (Yellow) Start clip-edit interval
   - (Blue) End repeat interval
   - (Yellow) End clip-edit interval
   - Repeating interval
4. Current playback progress time of the recorded content
5. Total playback time of the recorded content

Use of remote control

You can adjust various method during the recorded program play.

◀◀ ▶▶	During playback, repeatedly, press the **REW** (◀◀) or **FF** (▶▶) button to speed up. ■ Every time you press the button, the search speed will increase by stage (up to 5 stages).
GREEN	**Recorded TV**: Return to the Recorded TV List.
YELLOW	**Clip-Edit**: Press the **YELLOW** button at the starting point where you want to set the Interval clip-edit and press it again at the ending point. To save, select **Yes**. ■ The start of the Interval clip-edit is displayed as A and end of the Interval clip-edit as B in the recording progress bar at the bottom of the screen. Start and end of the Interval clip-edit can be set both in forward and reverse direction. ■ Interval shorter than 10 seconds cannot be save.
BLUE	**Repeat**: Press the **BLUE** button at the starting point where you want to set the Interval repeat and press it again at the ending point. To cancel the playback for the interval repeat, press the **BLUE** button one more time. ■ The start of the Interval repeat is displayed as A and end of the Interval repeat as B in the recording progress bar at the bottom of the screen. Start and end of the Interval repeat can be set both in forward and reverse direction. ■ Interval shorter than 10 seconds cannot be set. ■ When the Interval repeat is canceled, it will return to normal playback from the end point of the interval.
❚❚ ▶▶	During playback, press the Pause(❚❚) button. ■ Pause screen is displayed. ■ Every time you press the Pause(❚❚) button from the pause screen, it will move screen by screen (❚❚▶). ■ Press the Pause(❚❚) button and then use the **FF** (▶▶) button for slow motion (❚▶). ■ If you don't press any button 10 minutes after the pause, it will return to the playback.
< > ENTER	When you move the cursor using the Time Machine (< , >) button during playback, and then press the **ENTER** button, the screen will directly play at the applicable screen where the cursor is located. (↷, ↶)
LIVE TV	To view the current live broadcast, press the **LIVE TV** button during playback.

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

3D VIDEO

This TV can display 3D video when received from a compatible device. 3D video contains two pictures for each video frame formatted for each eye. Therefore, special 3D glasses are required to view 3D video.

- ▶On initial power on after turning the power on, the may need a few seconds to calibrate with the TV.
- ▶ It may take some time to see standard stereoscopic if you look at other places and stereoscopic again while watching stereoscopic.
- ▶ It may flicker slightly on TV while watching stereoscopic under 3 wavelength lamp fluorescent light(50 Hz~60 Hz) or around windows. If so, it is recommended to block the sun light with a curtain and to turn lights low.
- ▶When watching with other company's 3D glasses, the 3D video may not work normally.
- ▶If there is an obstacle between the emitter and the 3D glasses, 3D vision cannot be viewed normally.
- ▶Use TV as far as possible from other electronic equipments and IR equipments.

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. When watching while lying down, the screen may not be visible.
- ▶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.
- ▶Some 3D video may cause you to duck or dodge the image in the video. Do not watch 3D video near fragile objects or any objects that can be knocked over easily.
- ▶ Please prevent children under the age of 5 from watching 3D video. It may affect their vision development.
- ▶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.
  - Take 5-15 minutes of break for every 1 hour watched.
  - For anyone that has a difference in the vision between the eyes, watch after taking vision correction measures.
  - Watch at eye level with the 3D screen, directly in front of the screen.
  - When you feel fatigued, dizzy or have a headache, stop watching and take a break.
  - 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 are sold separately. Refer to the 3D glasses manual for operating instructions.
- ▶Do not use the 3D glasses to replace the corrective glasses, sunglasses or protective goggles.
- ▶Do not store the 3D glasses in hot or cold location.
- ▶Do not drop objects onto the 3D glasses. Do not drop or bend the glasses.
- ▶Since the lenses of the 3D glasses are easily scratched, make sure to clean only with a soft cloth. As the product may be scratched if there is any foreign material on the cloth, shake off any dust before using it.

3D VIDEO

3D Video viewing range

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

Viewing Distance	2 m - 7 m (6.5 ft - 22.9 ft)
Viewing Angle	120° (When the viewing distance is 2 m (6.5 ft)

WATCHING 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
HDMI Input	720p	1280x720	45.00	60.00	Top & Bottom, Side by Side HDMI (V. 1.4 with HDMI 3D) Frame Packing
	1080i	1920X1080	33.75		Top & Bottom, Side by Side
	1080p		67.50		Top & Bottom, Side by Side, Checker Board Single Frame Sequential
			27.00	24.00	Top & Bottom, Side by Side, Checker Board HDMI (V. 1.4 with HDMI 3D) Frame Packing
			33.75	30.00	Top & Bottom, Side by Side Checker Board
USB Input	1080p	1920X1080	33.75	30.00	Top & Bottom, Side by Side Checker Board

Media contents and a player need to support HDMI (V. 1.4 with HDMI 3D) Frame Packing to play Frame Packing format stereoscopic.
Video, which is input as HDMI (V. 1.4 with HDMI 3D) Frame Packing format, is switched into the stereoscopic screen automatically.

2

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

3

Select **Setting Left/Right**.

i.e)

4

Select **Left/Right** or **Right/Left**.
Select the screen with 3D video with better visibility.

5

Return to TV viewing.

NOTE

- ▶ Specific menus may not work while watching the 3D video.
- ▶ You can only choose→Standard → Movie → Game with the **AV MODE** button on remote control. **AV Mode** is set as **Standard** while playing stereoscopic.
- ▶ 3D video does not work during external input lock, external input transition, editing **Input Label**, **MY MEDIA** menu and **SIMPLINK**.

MY MEDIA

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.

1

Select **MY MEDIA**.

2

Select **Movie List**, **Photo List** or **Music List**.

3

Select the desired device.

Search other network device.

4

Return to the previous menu.

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

When removing the USB device

Select the **USB Device** menu before removing the USB device.

1

Select **USB Device**.

2

Select **Eject**.

CONNECTION METHOD

USB Connection

1 Connect the USB device to the **USB IN** jack on the TV.

i.e)

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 movie list.
- ▶ 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.

It can display and play movie, photo and music content from your 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.
- ▶ If there are too many folders and files in one folder, it may not operate properly.
- ▶ For the DLNA option, use the Nero MediaHome programme that is provided with the TV. However, we cannot guarantee that third party program will work perfectly.
- ▶ You can select a channel while viewing the small preview channel list on your TV screen.
- ▶ Check your network settings when the DLNA option does not work properly.
- ▶ If there is an abnormal operation or an error occurs in Nero Media Home, the DLNA option may not work properly. In this case, exit Nero Media Home and restart the programme. You can download the latest version of Nero Media Home by clicking the question mark at the bottom-left of the program.
- ▶ When the network is unstable, the device may be slower or may need to load during playback.
- ▶ When playing a video in DLNA mode, the Multi Audio and Closed Caption features are not supported.
- ▶ When selecting Full Screen in DLNA mode, the ratio of the outputted screen may differ from the original.
- ▶ When more than one TV is connected to a single server in DLNA mode, a file may not play properly, depending on the server performance.
- ▶ If the play time information is not provided by the server, it is displayed as "--:--:--."
- ▶ When using Movie List, DRM files in the DLNA server cannot be played.
- ▶ DLNA operation may not work properly according to the AP manufacturers.

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 stand-alone
- 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.

2

Select **MY MEDIA**.

3

Select **Movie List**, **Photo List** or **Music List**.

4

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
.asf .wmv	Video	VC-1 Advanced Profile	Advanced Profile@Level 3 (e.g. 720p60, 1080i60, 1080p30)	Only streams compliant to SMPTE 421M VC-1 standard are supported.
		VC-1 Simple and Main Profiles	Simple Profile@Medium Level (e.g. CIF, QVGA) Main Profile@High Level (e.g. 1080p30)	
	Audio	WMA Standard		
		WMA 9 Professional		
.divx .avi	Video	DivX3.11		Global motion compensation or quarterpel motion estimation does not supported. Streams using this syntax are not supported.
		DivX4 DivX5 DivX6	Advanced Simple Profile (e.g. 720p/1080i)	
		XViD		
		H.264 / AVC	Main Profile@ Level 4.1 High Profile@ Level 4.1 (e.g. 720p60, 1080i60, 1080p30)	
	Audio	MPEG-1 Layer I, II MPEG-1 Layer III (MP3) Dolby Digital		
.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 not supported. Streams using this syntax are not supported.
		MPEG-4 Part 2	Advanced Simple Profile (e.g. 720p/1080i)	
	Audio	AAC	AAC-LC and HE-AAC	
.mkv	Video	H.264 / AVC	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	AAC-LC and HE-AAC	
		Dolby Digital		
.ts .trp .tp	Video	H.264 / AVC	Main Profile@ Level 4.1 High Profile@ Level 4.1 (e.g. 720p60, 1080i60, 1080p30)	
		MPEG-2	Main Profile@High Level(e.g. 720p60, 1080i60)	
		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		
		AAC	AAC-LC and HE-AAC	
.vob	Video	MPEG-1		
		MPEG-2	Main Profile@High Level (e.g. 720p60, 1080i60)	
	Audio	Dolby Digital MPEG-1 Layer I, II DVD-LPCM		
.mpg	Video	MPEG-1	Main Profile@High Level (e.g. 720p60, 1080i60)	Only streams compliant configured properly for TS, PS or ES
	Audio	MPEG-1 Layer I, II		

Screen Components

1

Select **MY MEDIA**.

2

Select **Movie List.**

1. Moves to upper level folder
2. Current page/Total pages
3. Corresponding buttons on the remote control
4. Contents under the folder focused on 1
5. Current page/ total pages of contents

Abnormal files are displayed using this graphic.

Non-supported files are displayed using this graphic.

RED	Change to a different input.
GREEN	Move to **Photo List** or **Music List**.
YELLOW	**Change Numbers**: Changes the number or thumbnails displayed at a time.
BLUE	Allows you to mark certain files.
EXIT	Return to TV viewing.

Movie Selection

1 Select the target folder or drive.

2 Select the desired movie title.

3 Play the movie file.

- Use the CH (∧ ∨) button to navigate in the movie page.

Mark Mode

RED	**Play Marked**: Play the first selected file. Once a movie finishes playing, the next selected one will be played automatically.
GREEN	**Mark All**: Mark all files in the folder.
YELLOW	**Unmark All**: Deselect all marked files.
BLUE	Enter or exit the Mark Mode.

1 Select the target folder or drive.

2 Select the desired movie title.

3 Mark your desired movie file.

4 Play the marked movie file. It displays the current movie status progress bar on the bottom of the screen.

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

Using the Movie List Function

1 Q.MENU Show the **Option** menu.

2 ENTER 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 133) or when set as Marked Play.

Using the remote control

EXIT	Return to TV viewing.
◀◀ ▶▶	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.
◀ ▶	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. 162).
AV MODE	Press the **AV MODE** button repeatedly to select the desired source (Refer to p. 95).

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, Portuguese,

- **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

1

Make appropriate adjustments.
Then, select **Previous**.

Reset picture settings to default.

Set Audio Menu Options

1

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.

For 42/47/55LX6500

	File Extensions	Item	Profile
2D	jpeg jpg jpe	supproted file format	SOF0: baseline SOF1: Extend Sequential SOF2: Progressive
		photo size	Min: 64 x 64 Max - Normal Type: 15360 (W) x 8640 (H) Progressive Type: 1920 (W) x 1440 (H)
3D	mpo	supproted file format	mpo
		photo size	4:3 size: 3648 x 2736 2592 x 1944 2048 x 1536 3:2 size: 3648 x 2432

Screen Components

1

Select **MY MEDIA**.

2

Select **Photo List.**

1. Moves to upper level folder
2. Current page/Total pages
3. Corresponding buttons on the remote control
4. Contents under the folder focused on 1
5. Current page/total pages of contents

Abnormal files are displayed using this graphic.

Non-supported files are displayed using this graphic.

RED	Change to a different input.
GREEN	Move to **Music List** or **Movie List**.
YELLOW	**Change Numbers**: Changes the number or thumbnails displayed at a time.
BLUE	Allows you to mark certain files.
EXIT	Return to TV viewing.

Photo Selection

1 Select the target folder or drive.

2 Select the desired photos.

3 Photo file is displayed.

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

Mark Mode

1 Select the target folder or drive.

2 Select the desired photo files.

3 Mark your desired photo files.

4 View the marked photo files.

RED	**View Marked**: Display the selected photo.
GREEN	**Mark All**: Mark all photos on the screen.
YELLOW	**Unmark All**: Deselect all marked photos.
BLUE	Enter or exit the Mark Mode.

- 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.

How to View Photos

Detailed operations are available on full-sized photo view screen.

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

1 Select the target folder or drive.

2 Select the desired photos.

3 The selected photo is displayed in full size.

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

4 Select the **Slideshow**, **BGM**, ↻ **(Rotate)**, ⤢/⤡, ⊘ **(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. 139).
- 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 in **Option-Set Photo View.** menu (Refer to p. 139).
- You can adjust **Option** by using the **Q.MENU** button on the remote control.

▶ ↻ **(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.

▶ ⤢/⤡: View the photo in full mode or original mode.

▶ ⊘ **(Energy Saving)**: Increase the brightness of your screen by using ENERGY SAVING button.

▶ **Option** : Set values for **Slide Speed** and **BGM** (Refer to p.139).
- 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

1

Make appropriate adjustments.
Then, select **Previous**.

Reset picture settings to default.

Set Audio Menu Options

1

Make appropriate adjustments.
Then, select **Previous**.

MUSIC LIST

Purchased music files(*.MP3) may contain copyright restrictions. Playback of these files may not be supported by this TV.

The On Screen Display below may be different from your TV. Images are an example to assist with the TV operation.

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

1 MENU Select **MY MEDIA**.

2 ENTER ENTER Select **Music List.**

1. Preview: If any album jacket for the file (Album Art Image) exists, this picture is displayed.
2. Moves to upper level folder
3. Current page/Total pages
4. Corresponding buttons on the remote control
5. Contents under the folder focused on 1
6. Current page/total pages of contents

Abnormal files are displayed using this graphic.

Non-supported files are displayed using this graphic.

RED	Change to a different input.
GREEN	Move to **Movie List** or **Photo List**.
YELLOW	**Change Numbers**: Changes the number or thumbnails displayed at a time.
BLUE	Allows you to mark certain files.
EXIT	Return to TV viewing.
ENERGY SAVING	Press the **ENERGY SAVING** button repeatedly to increase the brightness of your screen (Refer to p.162). (For LED LCD TV/LCD TV: It's available "**ENERGY SAVING - Off**, **Screen Off**" only.)

Music Selection

1 Select the target folder or drive.

2 ENTER Select the desired music file.

3 ENTER Music files are played.

- Use the CH (∧ ∨) button to navigate in the music page.

Mark Mode

1 Select the target folder or drive.

2 ENTER Select the desired music file.

3 MARK FAV CHAR/NUM Mark your desired music file.

4 RED Play the marked music file.

RED	**Play Marked**: Play the selected songs. Once a song finishes playing, the next selected one will be played automatically.
GREEN	**Mark All**: Mark all songs in the folder.
YELLOW	**Unmark All**: Deselect all marked song.
BLUE	Enter or exit the Mark Mode.

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

Using the Music List Function

1 Q.MENU Show the **Option** menu.

2 ENTER Select **Set Audio Play** or **Set Audio.**

NOTE

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

Using the remote control

■	Stop the song.
▶	Return to normal playback.
❚❚	Paused the song.
◀◀ ▶▶	Select the previous or next song.
GREEN	**Play with Photo**: Start playing the selected songs and then move to the Photo List.
ENERGY SAVING	Press the **ENERGY SAVING** button repeatedly to increase the brightness of your screen (Refer to p. 162). (For LED LCD TV/LCD TV: It's available "**ENERGY SAVING** - **Off**, **Screen Off**" only.)
‹ ›	A cursor indicating the position can be played.
EXIT	Move to the previous menu screen.

Set Audio Play Menu Options

1 Select **Repeat** or **Random.**

2 Make appropriate adjustments.

Set Audio Menu Options

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

2 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.

NOTE

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

DIVX REGISTRATION CODE

Using the registration number, movies can be rented or purchased at www.divx.com/vod.
Only DivX files matched with the registration code of the purchased TV are playable.

1 Select **MY MEDIA**.

2 Select DivX Option.

3 Select **DivX Reg. Code**.

4 Display Divx Reg. Code.

NOTE

- When loading, some buttons may not work.
- If you use the DivX registration code of another device, the rented or purchased DivX file cannot be played. Therefore always use the DivX registration code assigned to this product.
- The video or audio of a file converted based on a standard other than the DivX codec standard may be corrupted or unable to be played.
- The DRM/*.tp/*.trp file in DLNA server is not played when Movie List is in operation.

DEACTIVATION

The purpose of deactivation is to allow deactivation of devices for users who have activated all the available devices through the web server and are blocked from activating more devices. DivX VOD allows the consumer to activate up to 6 devices under one account.

Delete the existing authentication information to receive a new DivX user authentication for TV. Once this function is executed, a DivX user authentication is required again to see DivX DRM files.

1 MENU — Select **MY MEDIA**.

2 ENTER BLUE — Select DivX Option.

3 — Select **Deactivation**.

4 ENTER — Select **Yes**.

5 ENTER — Display **Deactivation**.

LEGAL NOTICE

1

Select **NETWORK**.

2

Select **Legal Notice**.

3

Check Legal notice.

4

Return to TV viewing.

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 non-commercial 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.

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NETCAST

NETCAST MENU

These services are provided by separate Content Provider.
Please visit the content providers web site for specific information on their services. (But, some content manual maybe not provide depending on Content Provider).
* NETCAST menu source can differ by country.

1 Select **NETCAST** menu option.

2 Enjoy **Online Service**.

■ To select Weather of area, press the RED button.

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.
- ▶ To view the owner's manual that provided by the Content Provider, visit our website at **http://www.lg.com**.
- ▶ 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.

EMOL

You can use a various emol contents.

Screen Components

❶ emol menu
❷ Title article display

	Navigate the desired article.
ENTER	The selected article is displayed.
NetCast	Return to Netcast menu.
EXIT	Return to TV viewing.

- If you want to more information, visit www.emol.com
- This web site may be changed without prior notice.

UOL

You can use a various UOL contents.

Screen Components

❶ UOL menu
❷ Title article display

	Navigate the desired article.
ENTER	The selected article is displayed.
Netcast	Return to Netcast menu.
EXIT	Return to TV viewing.

- If you want to more information, visit **www.uol.com.br**.
- This web site may be changed without prior notice.

TERRA TV

You can use a various terratv contents.

Screen Components

❶ terratv menu
❷ Videos list

	Navigate the desired video.
ENTER	The selected video is displayed.
NetCast	Return to Netcast menu.
EXIT	Return to TV viewing.

- If you want to more information, visit **http://terratv.terra.com**.
- This web site may be changed without prior notice.

BAZUCA

You can watch movies from bazuca streamed over the internet to your TV.

Screen Components

1. bazuca menu
2. Movie poster

	Navigate the desired video.
ENTER	The selected video is displayed.
Netcast	Return to Netcast menu.
EXIT	Return to TV viewing.

- If you want to more information, visit **http://www.bazuca.com**.
- This web site may be changed without prior notice.

ACCUWEATHER

Accuweather is the program to view the weather of the city the user wants.

Screen Components

1. AccuWeather menu
2. Weather list by city

RED	Change between Celsius and Fahrenheit.
^ < > v	Move the focus to the menu you want.
ENTER	Select the focused menu.
Netcast	Return to Netcast menu.
EXIT	Return to TV viewing.

Service menu

Home: The weather of selected city is displayed.

Favorite City: Frequently checked cities can be registered to check the weather.

NOTE

- By default, New York, London and Paris are registered and the user can add/delete cities from Favorite City.
- LG is not responsible for the accuracy of the weather forecast.
- Applicable weather information can differ from the actual weather depending on the information provided by Accuweather.

PICASA

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

Screen Components

❶ Picasa menu
❷ Photo list

	Navigate the desired photos.
ENTER	The selected photo file is displayed.
NetCast	Return to Netcast menu.
EXIT	Return to TV viewing.

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.

My Photos: 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.

YOUTUBE

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

Screen Components

❶ YouTube menu
❷ Videos list

RED	Set the option menu.
NetCast	Return to Netcast menu.
EXIT	Return to TV viewing.

NOTE

- ▶ When you press the Q.menu button while the Youtube video is playing in full mode, you can set the video options.
- ▶ The playback of YouTube's videos may be paused, stopped or buffering occurring often depending on your broadband speed.

  We recommend a minimum connection speed of 1.5 Mbps. For the best playback condition, a connection speed of 4.0 Mbps is required. Sometimes your broadband speed varies based on your ISP's network conditions. Contact your ISP if you have problems maintaining a fast connection that is reliable, or if you want to increase your connection speed. Many ISPs offer a variety of broadband speed 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.
❚❚	Pause the video while it is playing.
▶	Play the selected video.
‹ ▢ ›	Skip the playback forward or backward.
RED	Set the option menu.
Netcast	Return to Netcast menu.
EXIT	Return to TV viewing.

PICTURE CONTROL

PICTURE SIZE (ASPECT RATIO) CONTROL

This feature lets you choose the way an analog picture with a 4:3 aspect ratio is displayed on your TV. You can select a different aspect ratio depending on input source (analog broadcasting, digital broadcasting, aux).

1

Select **PICTURE**.

2

Select **Aspect Ratio**.

3

Select the desired picture format.

4

Return to the previous menu.

Return to TV viewing.

- You can also adjust **Aspect Ratio** in the **Q.MENU**.
- Press the **RATIO** button repeatedly to select the desired picture format.

When adjusting **Zoom** or **Cinema Zoom** in Q.MENU

1

Select **Aspect Ratio**.

2

Select **Zoom** or **Cinema Zoom**.

3

Adjust proportion of Zoom or Cinema Zoom. The Cinema Zoom adjustment range is 1-16.

4

Move the image on the screen.

16:9

Adjust the picture horizontally, in a linear proportion to fill the entire screen.

Just Scan

Normally the edges of video signals are cropped 1-2%. Just Scan turns off this cropping and shows the complete video.

Notes: If there is noise on the edges of the original signal, it will be visible when Just Scan is activated.

Just Scan operates only in DTV/Component/HDMI-DTV/DVI-DTV (720p/1080i/1080p) input source.

Set By Program

Selects the proper picture proportion to match the source's image.

(4:3➞ 4:3)

(16:9 ➞ 16:9)

4:3

Choose 4:3 when you want to view a picture with an original 4:3 aspect ratio.

Zoom

Choose Zoom when you want to view the picture without any alteration. However, the top and bottom portions of the picture will be cropped.

Zoom 2

With this function, when the SD screen is sent to the HD with black at the left side and the right side, this screen can be extended to be fully displayed with no black area.

It is enabled only at the DTV HD broadcasting (It is the reference for displaying 'HD' at the channel banner if the height is greater than 480).

Cinema Zoom

Choose Cinema Zoom when you want to enlarge the picture in correct proportion.

This enlarges an image with cinemascope aspect ratio (2.35:1) without distortion.

Note: When enlarging or reducing the picture, the image may become distorted.

PICTURE WIZARD

This feature lets you adjust the picture quality of the original image. Use this to calibrate the screen quality by adjusting the Black and White Level etc. You can calibrate the screen quality by easily following each step. When you adjust the image to **Low**, **Recommended** or **High**, you can see the example of the changes you made.

1

Select **PICTURE**.

2

Select **Picture Wizard**.

3

Adjust **Picture Wizard**.

4

Adjust **Standard/ Preferred**.

■ If you select **Preferred**, OSD (On Screen Display) differ from that shown in this manual.

5

Adjust **Black Level**.

6

Adjust **White Level**.

7

Adjust **Tint**.

8

Adjust **Color**.

9

Adjust **Horizontal Sharpness**.

10

Adjust **Vertical Sharpness**.

For LED LCD TV/LCD TV

11

Adjust **Backlight**.

i.e)

12

Select input source to apply the settings.

13

Save.

14

Finish the Picture Wizard.

- If you stop the Picture Wizard before the final step, the changes will not be saved to the TV.
- Once the **Picture Wizard** sets the picture quality, **Energy Saving** is changed to **Off** automatically.
- To reset changes made by **Picture Wizard**, operate **Picture Reset** when **Picture Mode** is on **Expert1**.

ENERGY SAVING

It reduces the TV's power consumption.

You can increase the brightness of your screen by adjusting the **Energy Saving** level or by adjusting the **Picture Mode**.

LED LCD TV, LCD TV

Plasma TV

1 Select **PICTURE**.

2 Select **Energy Saving**.

3 Select your desired options.

4 Return to the previous menu.

Return to TV viewing.

- When selecting **Screen off**, the screen will turn off after 3 seconds. Pressing any button of the remote controller will turn on the screen again.
- If you adjust "**Energy Saving-Auto**, **Maximum**", **Backlight** option will not work (For LED LCD TV/LCD TV).
- When selecting "**Energy Saving - Off**, **Minimum**, or **Medium**, you can adjust **Backlight** feature (For LED LCD TV/LCD TV).
- If you adjust "Energy Saving-Intelligent Sensor", Sharpness, Color, Color Temperature feature will not work. (For Plasma TV)
- When selecting **Auto**, **Backlight** is automatically adjusted through **Intelligent Sensor** according to the surrounding conditions. (For LED LCD TV/LCD TV)
- When selecting **Off**, **Energy Saving** is not used.
- Press the **ENERGY SAVING** button repeatedly to select the appropriate Energy Saving.

PRESET PICTURE SETTINGS (PICTURE MODE)

There are factory presets for picture settings available in the user menus. You can use a preset, change each setting manually, or use the Intelligent Sensor.

LED LCD TV, LCD TV

50/60PK550

50/60PK950

Select **PICTURE**.

Select **Picture Mode**.

Select your desired options.

Return to the previous menu.

Return to TV viewing.

- **Vivid**, **Standard**, **Cinema**, **Sport**, and **Game** Settings are preset for the optimum picture quality at the factory.
- **Vivid**: This is the mode to maximize the effect of the video in the retail store. Strengthen the contrast, brightness, color and sharpness for vivid picture.
- **Standard**: This is the mode to realize optimum viewing condition for the general user.
- **APS (Auto Power Saving)**: This is the mode to maximize reducing the power consumption without hurting the picture quality. This features is available only on Plasma TV.
- **Cinema**: This mode optimizes video for watching movies.
- THX Cinema: This is cinema quality mode to provide you the experience of watching a movie at home.

  When selecting THX **Cinema**, Aspect ratio changes to Just scan.
- THX **Bright Room**: This is the specification to optimize TV viewing in Bright Room.

  When selecting THX **Bright Room**, Aspect ratio changes to Just scan.
- **Sport**: This is the video mode to emphasize dynamic video and primary color (e.g, white, uniform, grass, sky blue etc.) by realizing the optimal screen for sports.
- **Game**: This is the mode to realize fast response speed in a fast gaming screen.
- **Expert**: This is the mode to adjust the video in detail for video quality expert and general user.
- You can also adjust **Picture Mode** in the **Q.MENU**.
- When selecting **Intelligent Sensor**, **Energy Saving** is changed to **Auto** automatically (For LED LCD TV/LCD TV).
- When selecting **Intelligent Sensor**, it changes Backlight, contrast, brightness, sharpness, color and tint automatically (For LED LCD TV/LCD TV).
- **Intelligent Sensor**: The most suitable picture is automatically adjusted according to the surrounding conditions.

MANUAL PICTURE ADJUSTMENT - USER MODE

Adjust the picture appearance to suit your preference and viewing situations.

1

Select **PICTURE**.

2

Select **Picture Mode**.

3

Select your desired menu option.

4

Select **Backlight** (For LED LCD TV/ LCD TV), **Contrast**, **Brightness**, **Sharpness**, **Color**, **Tint**, **Color Temp.**, or **Advanced Control**.

5

Make appropriate adjustments.

6

Return to the previous menu.

Return to TV viewing.

- **Backlight** (For LED LCD TV/LCD TV): This function adjusts the brightness of the backlight behind the LCD screen. Adjusting the backlight is recommended when setting the brightness of the TV. When decreasing the backlight, the brightness of the black becomes darker without any loss in video signal and the power consumption is reduced.
- **Backlight** can only be adjusted in " **Energy Saving - Off**, **Minimum**, or **Medium**".
- **Contrast**: Increase or decrease the gradient of the video signal. You may use Contrast when the bright part of the picture is saturated.
- **Brightness**: Adjusts the base level of the signal in the picture. You may use Brightness when the dark part of the picture is saturated.
- **Sharpness**: Adjusts the level of crispness in the edges between the light and dark areas of the picture. The lower the level, the softer the image.
- **Color**: Adjusts intensity of all colors.
- **Tint**: Adjusts the balance between red and green levels.
- **Color Temp.**: Set to warm to enhance hotter colors such as red, or set to cool to enhance cooler colors such as blue.

PICTURE IMPROVEMENT TECHNOLOGY (ADVANCED CONTORL)

Advanced Control allows you to adjust some of the advanced features of your LG display.

To reset to the factory default after making adjustments to each input source, execute the **Picture Reset** function for each Picture Mode.

LED LCD TV, LCD TV

Plasma TV

1 Select **PICTURE**.

2 Select **Advanced Control**.

3 Select your desired options.

4 Make appropriate adjustments.

5 Return to the previous menu.

Return to TV viewing.

EXPERT PICTURE CONTROL

Expert1 and **Expert2** provide even more advanced picture settings for users. Typical used by professionals for calibrating the TV.

LED LCD TV, LCD TV

Plasma TV

1 Select **PICTURE**.

2 Select **Picture Mode**.

3 Select **Expert1** or **Expert2**.

4 Select **Expert Control**.

5 Select your desired menu option.

6 Make appropriate adjustments.

7 Return to the previous menu.

Return to TV viewing.

*This feature is not available for all models.

Dynamic Contrast	■ Adjusts the contrast to keep it at the best level according to the brightness of the screen. The picture is improved by making bright parts brighter and dark parts darker.
Dynamic Color	■ Adjusts screen colors so that they look livelier, richer and clearer. This feature enhances hue, saturation and luminance so that red, blue, and green look more vivid.
Skin Color	■ It detects the skin area of video and adjusts it to express a natural skin color.
Noise Reduction	■ Reduces screen noise without compromising video quality.
Digital Noise Reduction	■ Removes noise caused by compressing video.
Gamma	■ You can adjust brightness of dark areas and middle gray level areas of the picture. Low : Make brighter and middle gray level areas of the picture brighter. Medium : Express original picture levels. High: Make dark and middle gray level areas of the picture darker.
Black Level	Low: The reflection of the screen gets darker. High: The reflection of the screen gets brighter. ■ Set black level of the screen to proper level. ■ This function is available in the following modes: AV (NTSC-M), HDMI or Component.
Clear White	■ Make the white area of screen brighter and more white.
Eye Care	■ Adjust the brightness of the screen to prevent the screen from being too bright. Dims extremely bright pictures. ■ This feature is enabled in "**Picture Mode**-**Standard**, **Sports**, **Game**".
Real Cinema or Film Mode	■ Makes video clips recorded in film look more natural by eliminating judder effect. ■ DVD and Blu-ray movies are filmed at 24 frames per second (fps). With LG Real Cinema, every frame is consistently processed 5 times in 1/24 of a second producing 120 fps with TruMotion or 2 times in 1/24 of a second producing 48 fps without TruMotion, thus totally eliminating the judder effect. ■ This function can also work when TruMotion is off.
Color Gamut	LED LCD TV/LCD TV: **Advanced Control** Plasma TV: **Advanced Control, Expert Control** Standard: Displays standard set of colors. Wide: Increase number of colors used. ■ Maximize the utilization of colors to increase color quality.
	LED LCD TV/LCD TV: **Expert Control** ■ Displays color domain of the signal. Standard: Displays standard set of colors. Wide: Increase number of colors used. EBU: Mode to display EBU standard color area. SMPTE: Mode to display SMPTE standard color area. BT709: Mode to display BT709 standard color area.

Edge Enhancer	■ Show clearer and distinctive yet natural edges in the video.
xvYCC	■ This produces richer colors. ■ This feature represents rich color as much as conventional video signal. ■ This function is enabled in "**Picture mode** - **Cinema / THX Cinema** / **THX Bright Room**, **isf Expert**" when a xvYCC signal is inputted through HDMI.
Color Filter	■ This function filters specific colors in the video. You can use the RGB filter to set color saturation and hue accurately.
Expert Pattern	■ This is a pattern used for expert adjustment. ■ This function is enabled in "**Picture mode** - **isf Expert**" when you watch DTV.
Color Temperature	■ Adjusts the overall color of the screen by changing the white baseline. a. Gamma : Select 1.9, 2.2, 2.4 b. Method : 2 Points - Pattern: Inner, Outer - Red/Green/Blue Contrast, Red/Green/Blue Brightness: The adjustment range is -50 - +50. c-1. Method : 10 Point IRE (**LED LCD TV**, **LCD TV**) - Pattern: Inner, Outer - IRE (Institute of Radio Engineers) is the unit to display the size of the video signal and can be set among 10, 20, 30 - 100. You can adjust Red, Green or Blue according to each setting. - Luminance: This function displays calculated luminance value for 2.2 gamma. You can input luminance value you want at 100 IRE, then the target luminance value for 2.2 gamma is displayed at every 10 steps from 10 IRE to 90 IRE. - Red/Green/Blue: The adjustment range is -50 - +50. c-2. Method : 20 Point IRE (**Plasma TV**) - IRE (Institute of Radio Engineers) is the unit to display the size of the video signal and can be set among 0, 5, 10, 15 - 100. You can adjust Red, Green or Blue according to each setting. - Red/Green/Blue: The adjustment range is -50 - +50. d. Apply to all inputs
Color Management System	■ A tool used by the experts to make adjustments by using the test patterns, this does not affect other colors but can be used to selectively adjust the 6 color areas (Red/Green/Blue/Cyan/Mgt/Yellow). Color difference may not be distinctive even when you make the adjustments for the general video. Adjusts Red/Green/Blue/Yellow/Cyan, Magenta. - Red/Green/Blue/Yellow/Cyan/Magenta Color: The adjustment range is -30 - +30. - Red/Green/Blue/Yellow/Cyan/Magenta Tint: The adjustment range is -30 - +30. - This feature is disabled in RGB-PC and HDMI-PC mode.

PICTURE RESET

Settings of the selected picture modes return to the default factory settings.

1 Select **PICTURE**.

2 Select **Picture Reset**.

3 Select **Yes**.

4 Initialize the adjusted value.

Return to TV viewing.

TRUMOTION - For LED LCD TV, LCD TV

Advance video technology that provides clearer, smoother images, even during fast action scenes creating a more stable structure for a crisper picture.

1

Select **PICTURE**.

2

Select **TruMotion**.

3

Select **Low**, **High**, **User**, or **Off**.

Adjustment for **TruMotion** (Judder and Blur) with selecting **User**

4

Select **Judder** or **Blur**.

5
Make appropriate adjustments.

6

Return to the previous menu.

Return to TV viewing.

- **Off**: Turn off **TruMotion** operation.
- **Low**: Provides smooth picture movement. Use this setting for standard use.
- **High**: Provides smoother picture movement.
- **Judder**: Adjusts noise of the screen.
- **Blur**: Adjusts after-image of the screen.
- **TruMotion** works with all inputs except PC mode.
- If you enable "**TruMotion**", noise may appear on the screen. If this occurs, set "**TruMotion**" to "**Off**".
- If you select "**Picture Mode-Game**" set "**TruMotion**" to "**Off**".

LED LOCAL DIMMING

- For 42/47/60LE5500, 42/47/55LE7500, 42LE8500, 42/47/55LX6500

After analyzing the signal of the input video by areas of the screen, it adjusts the backlight to improve the contrast ratio. This feature is disabled in "Picture Mode-Game".

1 Select **PICTURE**.

2 Select **LED Local Dimming**.

3 Select **On** or **Off**.

4 Return to the previous menu.

Return to TV viewing.

POWER INDICATOR - For LED LCD TV, LCD TV

Adjust the power/standby indicator light on the front of the TV.

1 Select **OPTION**.

2 Select **Power Indicator**.

3 Select **Standby Light** or **Power Light**.

4 Select your desired options.

5 Return to the previous menu.

Return to TV viewing.

- **Standby Light**: Determines whether to set the indicator light on the front of the TV to **On** or **Off** in standby mode.
- **Power Light**: Determines whether to set the indicator light on the front of the TV to **On** or **Off** when the power turns on.

IMAGE STICKING MINIMIZATION (ISM) METHOD - For Plasma TV

A frozen still picture displayed on the screen for prolonged periods can result in a ghost image. You can use Orbiter to help prevent image sticking. The other two functions are for removing a ghost image.

Select **OPTION**.

Select **ISM Method**.

Select **Normal**, **Orbiter**, **Color Wash**, or **White Wash**.

Return to TV viewing.

- **Normal**: If image sticking is never a problem, ISM is not necessary - set to Normal.
- **Orbiter**: To avoid a ghost image on the screen, the image will move every 2 minutes to help prevent ghost images. However, it is best not to allow any fixed image to remain on the screen.
- **Color Wash**: The color block with the screen moved a little and the white pattern are alternately displayed. It is difficult to see the after image on all colors.

  Once it has been corrected it will not be visible in any color.
- **White Wash**: White Wash removes ghost images from the screen. Use sparingly. Watch the TV normally for a while before using this feature to see if the ghost image disappears on its own.

NOTE

► An excessive ghosted image may be impossible to clear entirely with White Wash. To return to normal viewing, press the any button.

AUTO VOLUME

Auto Volume makes sure that the volume level remains consistent whether you are watching a commercial or a regular TV program.

Because each broadcasting station has its own signal conditions, volume adjustment may be needed every time the channel is changed. This feature allows users to enjoy stable volume levels by making automatic adjustments for each program.

1

Select **AUDIO**.

2

Select **Auto Volume**.

3

Select **On** or **Off**.

4

Return to the previous menu.

Return to TV viewing.

CLEAR VOICE II

By differentiating the human sound range from others, it improves the sound quality of voices.

1

Select **AUDIO**.

2

Select **Clear Voice II**.

3

Select **On** or **Off**.

Adjustment for Clear Voice Level with selecting **On**

4
Select **Level**.

5
Make appropriate adjustments.

6

Return to the previous menu.

Return to TV viewing.

BALANCE

Adjust the left/right sound of speaker to suit your taste and room situations.

1

Select **AUDIO**.

2

Select **Balance**.

3

Make appropriate adjustments.

4

Return to the previous menu.

Return to TV viewing.

PRESET SOUND SETTINGS (SOUND MODE)

Sound Mode lets you enjoy the best sound without any special adjustment using factory presets.

Select **AUDIO**.

Select **Sound Mode**.

Select **Standard**, **Music**, **Cinema**, **Sport**, or **Game**.

Return to the previous menu.

Return to TV viewing.

- **Standard**, **Music**, **Cinema**, **Sport**, and **Game** are preset for optimum sound quality at the factory.
- You can also adjust **Sound Mode** in the **Q.MENU**.
- **Standard**: Offers standard-quality sound.
- **Music**: Optimizes sound for listening to music.
- **Cinema**: Optimizes sound for watching movies.
- **Sport**: Optimizes sound for watching sports events.
- **Game**: Optimizes sound for playing games.

SOUND SETTING ADJUSTMENT - USER MODE

Adjust the sound to suit your taste and room situations.

1 Select **AUDIO**.

2 Select **Sound Mode**.

3 Select **Standard**, **Music**, **Cinema**, **Sport**, or **Game**.

4 Select **Infinite Sound**, **Treble**, or **Bass**.

5 Make appropriate adjustments.

6 Return to the previous menu.

Return to TV viewing.

- If sound quality or volume is not at the level you want, it is recommended to use a separate home theater system or amp to cope with different user environments.
- If you select "**Clear Voice II-On**", the **Infinite Sound** feature will not operate.
- **Infinite Sound**: Infinite Sound is a patented LG technology that solves the problem of playing 5.1 multi-channel content over two speakers.

AUDIO RESET

Settings of the selected Sound Mode return to the default factory settings.

Select **AUDIO**.

Select **Reset**.

Select **Yes**.

Initialize the adjusted value.

Return to TV viewing.

DIGITAL AUDIO OUT

This function is setting the Dolby digital/PCM to connect the audio outputs.

If you select "Digital Audio Out - Auto" when Dolby digital is available, SPDIF (Sony Philips Digital InterFace) output will be Dolby Digital.

If you select "Digital Audio Out - Auto" when Dolby digital is not available, SPDIF output will be PCM (Pulsecode modulation).

Select **AUDIO**.

Select **Digital Audio Out**.

Select **Auto** or **PCM**.

Return to the previous menu.

Return to TV viewing.

Item	Audio Input	Digital Audio output
Auto (Speaker On)	MPEG	PCM
	DD	DD
	HE-AAC	PCM
Auto (Speaker Off)	MPEG	PCM
	DD	DD
	HE-AAC	DD
PCM	PCM	PCM

To set "SPDIF OUT - Dolby Digital" in DTV input signal, select "Digital Audio Out - Auto" and "TV Speaker - Off".

SOUND & LANGUAGE CONTROL

TV SPEAKERS ON/OFF SETUP

If you wish to use an external Hi-Fi system, turn off the TV's internal speakers.

1

Select **AUDIO**.

2

Select **TV Speaker**.

3

Select **On** or **Off**.

4

Return to the previous menu.

Return to TV viewing.

STEREO/SAP BROADCAST SETUP

On analog signals, this TV can receive MTS stereo programs and any SAP (Secondary Audio Program) that accompanies the stereo program if the station transmits an additional sound signal. Mono sound is automatically used if the broadcast is only in Mono.

Analog TV

1 Q.MENU Select **SAP**.

2 ENTER Select **Mono**, **Stereo**, or **SAP**.

3 EXIT Return to TV viewing.

Digital TV

1 Q.MENU Select **Multi Audio**.

2 ENTER Select other languages.

3 EXIT Return to TV viewing.

SOUND & LANGUAGE CONTROL

AUDIO LANGUAGE

This feature operates only in DTV mode.

1

Select **OPTION**.

2

Select **Language**.

3

Select **Audio Language**.

4
Select your desired language.

5

Return to the previous menu.

Return to TV viewing.

ON-SCREEN MENUS LANGUAGE SELECTION

The menus can be shown on the screen in the selected language.

1

Select **OPTION**.

2

Select **Language**.

3

Select **Menu Language**.

4
Select your desired language.
From this point on, the on-screen menus will be shown in the selected language.

5

Return to the previous menu.

Return to TV viewing.

CAPTION MODE

Analog Broadcasting System Captions

Captions are provided to help the hearing impaired watch TV. Select a caption mode for displaying captioning information if provided on a program. Analog caption displays information at any position on the screen and is usually the program's dialog. Caption/Text, if provided by the broadcaster, would be available for both digital and analog channels on the Antenna/Cable. This TV is programmed to memorize the caption/text mode which was last set when you turned the power off. This function is only available when **Caption** Mode is set **On**.

1

Select **OPTION**.

2

Select **Caption**.

3

Select **Mode-On**.

4
Select **Analog**.

5
Select **CC1-2** or **Text1-2**.

6

Return to the previous menu.

Return to TV viewing.

- **CC**
  The term for the words that scroll across the bottom of the TV screen; usually the audio portion of the program provided for the hearing impaired.
- **Text**
  The term for the words that appear in a large black frame and almost cover the entire screen; usually messages provided by the broadcaster.

Digital Broadcasting System Captions

Choose the language you want the DTV Captions to appear in.
Other Languages can be chosen for digital sources only if they are included on the program.
This function in only available when **Caption** Mode is set **On**.

1

Select **OPTION**.

2

Select **Caption**.

3

Select **Mode-On**.

4
Select **Digital**.

5
Select your desired language.

6

Return to the previous menu.

Return to TV viewing.

TIME SETTING

CLOCK SETTING

Auto Clock Setup

The time is set automatically from a digital channel signal.
The digital channel signal includes information for the current time provided by the broadcasting station.
Set the clock manually if the current time is set incorrectly by the auto clock function.

1

Select **TIME**.

2

Select **Clock**.

3

Select **Auto**.

4
Select your viewing area time zone.

5
Select **Auto**, **Off**, or **On** (depending on whether or not your viewing area observes Daylight Saving time). (Depending on models)

6

Return to the previous menu.

Return to TV viewing.

Manual Clock Setup

If the current time setting is wrong, reset the clock manually.

1 Select **TIME**.

2 Select **Clock**.

3 Select **Manual**.

4 Select the Year, Month, Date, Hour, or Minute option.

5 Set the Year, Month, Date, Hour, or Minute option.

6 Return to the previous menu.

Return to TV viewing.

TIME SETTING

AUTO ON/OFF TIME SETTING

This function operates only if the current time has been set.

The **Off Time** function overrides the **On Time** function if they are both set to the same time.

The TV must be in standby mode for the **On Time** to work.

If you do not press any button within 2 hours after the TV turns on with the **On Time** function, the TV will automatically revert to standby mode.

1

Select **TIME**.

2

Select **Off Time** or **On Time**.

3

Select **Repeat**.

4
Select **Off**, **Once**, **Daily**, **Mon.~Fri.**, **Mon.~Sat.**, **Sat.~ Sun.**, or **Sun.**.

5
Select and set Hour or Minute.

6

Return to the previous menu.

Return to TV viewing.

- To cancel **On/Off Time** function, select **Off**.
- Only for **On Time** function

1
Select **Input.**

2
Select the desired input source.

3
When Selecting **TV**:
set the channel at turn-on.

4
Adjust to sound level at turn-on.

SLEEP TIMER SETTING

The Sleep Timer turns the TV off at the preset time.
Note that this setting is cleared when the TV is turned off.

1 Select **TIME**.

2 Select **Sleep Timer**.

3 Make appropriate adjustments.

4 Return to the previous menu.

Return to TV viewing.

- To cancel the **Sleep Timer**, select **Off**.
- You can also adjust **Sleep Timer** in the **Q.MENU**.

PARENTAL CONTROL / RATINGS

Parental Control can be used to block specific channels, ratings and other viewing sources.

The Parental Control Function (V-Chip) is used to block program viewing based on the ratings sent by the broadcasting station. The default setting is to allow all programs to be viewed. Viewing can be blocked by choosing the type of the program and the categories. It is also possible to block all program viewing for a time period. To use this function, the following must be done :

1. Set ratings and categories to be blocked.
2. Specify a password

SET PASSWORD & LOCK SYSTEM

Setting up Your Password

Set up blocking schemes to block specific channels, ratings, and external viewing sources.
A password is required to gain access to this menu.

Select **LOCK**.

Input the password.

- Enter the password as requested.
- The TV is set up with the initial password "0-0-0-0".
- If you forget your password, press "0-3-2-5" on the remote control.

Set Password

Change the password by inputting a new password twice.

1 Select **LOCK**.

2 Input the password.

3 Select **Set Password**.

4 Choose any 4 digits for your new password.
As soon as the 4 digits are entered, re-enter the same 4 digits on the **Confirm**.

5 Return to the previous menu.

Return to TV viewing.

Lock System

Enables or disables the blocking scheme you set up previously.

1 Select **LOCK**.

2 Input the password.

3 Select **Lock System**.

4 Select **On** or **Off**.

5 Return to the previous menu.

Return to TV viewing.

■ When you select **On**, the Lock System is enabled.

CHANNEL BLOCKING

Blocks any channels that you do not want to watch or that you do not want your children to watch.

1

Select **LOCK**.

2
Input the password.

3
Select **Block Channel**.

4

Select a channel to block or unblock.

5

Block or unblock a channel.

6

Return to the previous menu.

Return to TV viewing.

- If a channel is locked, enter the password to unlock it temporarily.

PARENTAL CONTROL / RATINGS

MOVIE RATING

Blocks movies according to the movie ratings limits specified, so children cannot view certain movies. You can set the ratings limit by blocking out all the movies with the ratings above a specified level. Keep in mind that the movie ratings limit only applies to movies shown on TV, not TV programs, such as soap operas.

1

Select **LOCK**.

2
Input the password.

3
Select **Rating**.

4

Select desired option.

5

Return to the previous menu.

Return to TV viewing.

EXTERNAL INPUT BLOCKING

Enables you to block an input.

ie)

1

Select **LOCK**.

2
Input the password.

3
Select **Input Block**.

4

Select input source.

5
Select **On** or **Off**.

6

Return to the previous menu.

Return to TV viewing.

KEY LOCK

This feature can be used to prevent unauthorized viewing by locking out the front panel controls, so that it can only be used with the remote control.

This TV is programmed to remember which option it was last set to even if you turn the TV off.

1 Select **LOCK**.

2 Input the password.

3 Select **Key Lock**.

4 Select **On** or **Off**.

5 Return to the previous menu.

Return to TV viewing.

- In Key Lock '**On**', if the TV is turned off, press the ⏻/ I, INPUT, CH (▲▼or ∧∨) button on the TV or POWER, INPUT, CH (∧∨) or NUMBER buttons on the remote control.
- With the **Key Lock On**, the display '⚠ **Key Lock**' appears on the screen if any button on the front panel is pressed while viewing the TV.

APPENDIX

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. *This feature is not available for all models.
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	
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 pictures	■ Check antenna (Change the direction of the antenna).
No picture when connecting HDMI	■ If the HDMI cables don'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 unstable 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 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 in Memo Pad, 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

1. 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.
2. 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

⚠ 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.

PRODUCT SPECIFICATIONS

MODELS		32LD650 (32LD650-SA)	42LD650 (42LD650-SA)
Dimensions (Width x Height x Depth)	With stand	797.0 mm x 555.0 mm x 207.0 mm (31.3 inch x 21.8 inch x 8.1 inch)	1024.0 mm x 685.0 mm x 261.0 mm (40.3 inch x 26.9 inch x 10.2 inch)
	Without stand	797.0 mm x 495.0 mm x 73.8 mm (31.3 inch x 19.4 inch x 2.9 inch)	1024.0 mm x 621.0 mm x 76.8 mm (40.3 inch x 24.4 inch x 3.0 inch)
Weight	With stand	8.7 kg (19.1 lbs)	15.5 kg (34.1 lbs)
	Without stand	7.6 kg (16.7 lbs)	13.9 kg (30.6 lbs)

MODELS		47LD650 (47LD650-SA)	55LD650 (55LD650-SA)
Dimensions (Width x Height x Depth)	With stand	1137.0 mm x 758.0 x 270.0 mm (44.7 inch x 29.8 inch x 10.6 inch)	1329.0 mm x 872.0 mm x 330.0 mm (52.3 inch x 34.3 inch x 12.9 inch)
	Without stand	1137.0 mm x 685.0 mm x 76.8 mm (44.7 inch x 26.9 inch x 3.0 inch)	1329.0 mm x 796.0 mm x 96.5 mm (52.3 inch x 31.3 inch x 3.7 inch)
Weight	With stand	20.3 kg (44.7 lbs)	33.0 kg (72.7 lbs)
	Without stand	18.3 kg (40.3 lbs)	29.8 kg (65.6 lbs)

Power requirement		AC 100-240V ~ 50/60Hz
Television System		NTSC, PAL-M/N, SBTVD
Program Coverage		VHF 2-13, UHF 14-69, CATV 1-135
External Antenna Impedance		75 Ω
Environment condition	Operating Temperature	0 °C - 40 °C (32 °F - 104°F)
	Operating Humidity	Less than 80%
	Storage Temperature	-20 °C - 60 °C (-4 °F - 140°F)
	Storage Humidity	Less than 85%

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

MODELS		**32LE5500** (32LE5500-SA)	**42LE5500** (42LE5500-SA) **42LX6500** (42LX6500-SD)
Dimensions (Width x Height x Depth)	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)
	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	12.7 kg (27.9 lbs)	19.5 kg (42.9 lbs)
	Without stand	10.5 kg (23.1 lbs)	16.7 kg (36.8 lbs)

MODELS		**47LE5500** (47LE5500-SA) **47LX6500** (47LX6500-SD)	**55LE5500** (55LE5500-SA) **55LX6500** (55LX6500-SD)
Dimensions (Width x Height x Depth)	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)
	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 29.3 mm (51.4 inch x 31.3 inch x 1.1 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 100-240V ~ 50/60Hz
Television System		NTSC, PAL-M/N, SBTVD
Program Coverage		VHF 2-13, UHF 14-69, CATV 1-135
External Antenna Impedance		75 Ω
Environment condition	Operating Temperature	32 ~ 104°F (0 ~ 40°C)
	Operating Humidity	Less than 80%
	Storage Temperature	-4 ~ 140°F (-20 ~ 60°C)
	Storage Humidity	Less than 85%

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

MODELS		32LE7500 (32LE7500-SA)	42LE7500 (42LE7500-SA)
Dimensions (Width x Height x Depth)	With stand	786.4 mm x 556.2 mm x 221.0 mm (30.9 inch x 21.8 inch x 8.7 inch)	1018.2 mm x 693.5 mm x 269.8 mm (40.0 inch x 27.3 inch x 10.6 inch)
	Without stand	786.4 mm x 500.4 mm x 39.9 mm (30.9 inch x 19.7 inch x 1.5 inch)	1018.2 mm x 630.7 mm x 29.3 mm (40.0 inch x 24.8 inch x 1.1 inch)
Weight	With stand	14.8 kg (32.6 lbs)	21.9 kg (48.2 lbs)
	Without stand	11.7 kg (25.7 lbs)	19.1 kg (42.1 lbs)

MODELS		47LE7500 (47LE7500-SA)	55LE7500 (55LE7500-SA)
Dimensions (Width x Height x Depth)	With stand	1128.6 mm x 758.9 mm x 284.4 mm (44.4 inch x 29.8 inch x 11.1 inch)	1306.0 mm x 869.0 mm x 328.0 mm (51.4 inch x 34.2 inch x 12.9 inch)
	Without stand	1128.6 mm x 693.3 mm x 29.8 mm (44.4 inch x 27.2 inch x 1.1 inch)	1306.0 mm x 797.4 mm x 31.2 mm (51.4 inch x 31.3 inch x 1.2 inch)
Weight	With stand	26.2 kg (57.7 lbs)	39.1 kg (86.2 lbs)
	Without stand	23.0 kg (50.7 lbs)	33.5 kg (73.8 lbs)

MODELS		42LE8500 (42LE8500-SA)
Dimensions (Width x Height x Depth)	With stand	1013.3 mm x 705.8 mm x 235.5 mm (39.8 inch x 27.7 inch x 9.2 inch)
	Without stand	1013.3 mm x 645.8 mm x 34.5 mm (39.8 inch x 25.4 inch x 1.3 inch)
Weight	With stand	27.2 kg (59.9 lbs)
	Without stand	23.1 kg (50.9 lbs)

Power requirement		AC 100-240V ~ 50/60Hz
Television System		NTSC, PAL-M/N, SBTVD
Program Coverage		VHF 2-13, UHF 14-69, CATV 1-135
External Antenna Impedance		75 Ω
Environment condition	Operating Temperature	32 ~ 104°F (0 ~ 40°C)
	Operating Humidity	Less than 80%
	Storage Temperature	-4 ~ 140°F (-20 ~ 60°C)
	Storage Humidity	Less than 85%

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

MODELS		32LD840 (32LD840-SA)	37LD840 (37LD840-SA)
Dimensions (Width x Height x Depth)	With stand	803.0 mm x 568.0 mm x 212.0 mm (31.6 inch x 22.3 inch x 8.3 inch)	922.0 mm x 640.0 mm x 260.0 mm (36.2 inch x 25.1 inch x 10.2 inch)
	Without stand	803.0 mm x 502.0 mm x 73.4 mm (31.6 inch x 19.7 inch x 2.8 inch)	922.0 mm x 568.0 mm x 77.3 mm (36.2 inch x 22.3 inch x 3.0 inch)
Weight	With stand	10.0 kg (22.0 lbs)	13.9 kg (30.6 lbs)
	Without stand	8.6 kg (18.9 lbs)	11.3 kg (24.9 lbs)

MODELS		42LD840 (42LD840-SA)	47LD840 (47LD840-SA)
Dimensions (Width x Height x Depth)	With stand	1030.0 mm x 701.0 mm x 260.0 mm (40.5 inch x 27.5 inch x 10.2 inch)	1143.0 mm x 765.0 mm x 260.0 mm (45.0 inch x 30.1 inch x 10.2 inch)
	Without stand	1030.0 mm x 628.0 mm x 76.4 mm (40.5 inch x 24.7 inch x 3.0 inch)	1143.0 mm x 692.0 mm x 76.4 mm (45.0 inch x 27.2 inch x 3.0 inch)
Weight	With stand	16.5 kg (36.3 lbs)	20.6 kg (45.4 lbs)
	Without stand	13.9 kg (30.6 lbs)	18.0 kg (39.6 lbs)

Power requirement		AC 100-240V ~ 50/60Hz
Television System		NTSC, PAL-M/N, SBTVD
Program Coverage		VHF 2-13, UHF 14-69, CATV 1-135
External Antenna Impedance		75 Ω
Environment condition	Operating Temperature	0 °C - 40 °C (32 °F - 104°F)
	Operating Humidity	Less than 80%
	Storage Temperature	-20 °C - 60 °C (-4 °F - 140°F)
	Storage Humidity	Less than 85%

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

MODELS		50PK550 (50PK550-SA)	60PK550 (60PK550-SA)
Dimensions (Width x Height x Depth)	With stand	1171.4 mm x 786.2 mm x 309.7 mm (46.1 inch x 30.9 inch x 12.1 inch)	1392.0 mm x 915.0 mm x 384.0 mm (54.8 inch x 36.0 inch x 15.1 inch)
	Without stand	1171.4 mm x 724.4 mm x 55.3 mm (46.1 inch x 28.5 inch x 2.1 inch)	1392.0 mm x 848.0 mm x 55.3 mm (54.8 inch x 33.3 inch x 2.1 inch)
Weight	With stand	31.0 kg (68.3 lbs)	45.9 kg (101.1 lbs)
	Without stand	28.6 kg (63.0 lbs)	41.4 kg (91.2 lbs)

Power requirement		AC 100-240V ~ 50/60Hz
Television System		NTSC, PAL-M/N, SBTVD
Program Coverage		VHF 2-13, UHF 14-69, CATV 1-135
External Antenna Impedance		75 Ω
Environment condition	Operating Temperature	32 ~ 104°F (0 ~ 40°C)
	Operating Humidity	Less than 80%
	Storage Temperature	-4 ~ 140°F (-20 ~ 60°C)
	Storage Humidity	Less than 85%

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

MODELS		50PK950 (50PK950-SA)	60PK950 (60PK950-SA)
Dimensions (Width x Height x Depth)	With stand	1190.0 mm x 804.5 mm x 294.5 mm (46.8 inch x 31.6 inch x 11.5 inch)	1408.8 mm x 937.9 mm x 384.0 mm (55.4 inch x 36.9 inch x 15.1 inch)
	Without stand	1190.0 mm x 737.0 mm x 52.4 mm (46.1 inch x 29.0 inch x 2.0 inch)	1408.8 mm x 860.7 mm x 52.4 mm (55.4 inch x 33.8 inch x 2.0 inch)
Weight	With stand	34.8 kg (76.7 lbs)	50.9 kg (112.2 lbs)
	Without stand	30.2 kg (66.5 lbs)	43.3 kg (95.4 lbs)

Power requirement		AC 100-240V ~ 50/60Hz
Television System		NTSC, PAL-M/N, SBTVD
Program Coverage		VHF 2-13, UHF 14-69, CATV 1-135
External Antenna Impedance		75 Ω
Environment condition	Operating Temperature	32 ~ 104°F (0 ~ 40°C)
	Operating Humidity	Less than 80%
	Storage Temperature	-4 ~ 140°F (-20 ~ 60°C)
	Storage Humidity	Less than 85%

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

IR CODES

Code (Hexa)	Function	Note	Code (Hexa)	Function	Note
08	⏻	Remote control Button (Power On/Off)	D6	TV	Discrete IR Code (TV Input Selection)
45	Q.MENU	Remote control Button	C4	POWER ON	Discrete IR Code (Only Power On)
43	MENU	Remote control Button			
0B	INPUT	Remote control Button	C5	POWER OFF	Discrete IR Code (Only Power Off)
10-19	Number Key 0-9	Remote control Button			
4C	- (Dash)/LIST	Remote control Button	5A	AV1	Discrete IR Code (AV1 Input Selection)
1A	Q.VIEW	Remote control Button			
09	MUTE/DELETE	Remote control Button	D0	AV2	Discrete IR Code (AV2 Input Selection)
02	VOL +	Remote control Button			
03	VOL -	Remote control Button	BF	COMPONENT1	Discrete IR Code (Component1 Input Selection)
00	CH ∧	Remote control Button			
01	CH ∨	Remote control Button	D4	COMPONENT2	Discrete IR Code (Component2 Input Selection)
1E	FAV/MARK	Remote control Button			
40	∧	Remote control Button	D5	RGB-PC	Discrete IR Code (RGB-PC Input Selection)
41	∨	Remote control Button			
07	‹	Remote control Button	CE	HDMI1	Discrete IR Code (HDMI1 Input Selection)
06	›	Remote control Button			
44	ENTER	Remote c ontrol Button	CC	HDMI2	Discrete IR Code (HDMI2 Input Selection)
28	BACK	Remote control Button			
79	RATIO	Remote control Button	E9	HDMI3	Discrete IR Code (HDMI3 Input Selection)
AB	GUIDE	Remote control Button			
95	ENERGY SAVING	Remote control Button	DA	HDMI4	Discrete IR Code (HDMI4 Input Selection)
7E	SIMPLINK	Remote control Button			
AA	INFO	Remote control Button	76	Ratio 4:3	Discrete IR Code (Only 4:3 Mode)
30	AV MODE	Remote control Button			
0F	TV	Remote control Button	77	Ratio 16:9	Discrete IR Code (Only 16:9 Mode)
59	NETCAST	Remote control Button			
5B	EXIT	Remote control Button	AF	Ratio Zoom	Discrete IR Code (Only Zoom Mode)
72	RED	Remote control Button			
71	GREEN	Remote control Button	B1	■	Remote control Button
63	YELLOW	Remote control Button	B0	▶	Remote control Button
61	BLUE, L/R SELECT	Remote control Button	BA	❚❚	Remote control Button
DC	3D	Remote Control Button	8F	◀◀	Remote control Button
			8E	▶▶	Remote control Button

■ Use this feature depending on your models.

EXTERNAL CONTROL THROUGH RS-232C

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

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

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

Type of Connector; D-Sub 9-Pin Male

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

Communication Parameters

- Baud rate : 9600 bps (UART)
- Data length : 8 bits
- Parity : None
- Stop bit : 1 bit
- Communication code : ASCII code
- Use a crossed (reverse) cable.

NOTE

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

RS-232C Configurations

7-Wire Configuration (Serial female-female NULL modem cable)

	PC	TV	
RXD	2	3	TXD
TXD	3	2	RXD
GND	5	5	GND
DTR	4	6	DSR
DSR	6	4	DTR
RTS	7	8	CTS
CTS	8	7	RTS
	D-Sub 9	D-Sub 9	

3-Wire Configurations (Not standard)

	PC	TV	
RXD	2	3	TXD
TXD	3	2	RXD
GND	5	5	GND
DTR	4	6	DTR
DSR	6	4	DSR
RTS	7	7	RTS
CTS	8	8	CTS
	D-Sub 9	D-Sub 9	

Set ID

Use this function to specify a TV ID number.
Refer to 'Real Data Mapping'.

1 Select **OPTION**.

2 Select **Set ID**.

3 Choose the desired TV ID number.
The adjustment range of Set ID is 1~99.

4 Return to the previous menu.

Return to TV viewing.

■ Real data mapping

0	Step 0
⋮	
A	Step 10 (Set ID 10)
⋮	
F	Step 15 (Set ID 15)
10	Step 16 (Set ID 16)
⋮	
63	Step 99 (Set ID 99)
64	Step 100

Command Reference List

	COMMAND1	COMMAND2	DATA (Hexadecimal)
01. Power	k	a	00 - 01
02. Input Select	x	b	▶ P.211
03. Aspect Ratio	k	c	▶ P.211
04. Screen Mute	k	d	00 - 01
05. Volume Mute	k	e	00 - 01
06. Volume Control	k	f	00 - 64
07. Contrast	k	g	00 - 64
08. Brightness	k	h	00 - 64
09. Color	k	i	00 - 64
10. Tint	k	j	00 - 64
11. Sharpness	k	k	00 - 64
12. OSD Select	k	l	00 - 01
13. Remote Control Lock Mode	k	m	00 - 01
14. Treble	k	r	00 - 64
15. Bass	k	s	00 - 64
16. Balance	k	t	00 - 64
17. Color Temperature	x	u	00 - 64
18. ISM Method	j	p	▶ P.212
19. Energy Saving	j	q	▶ P.212
20. Auto Configuration	j	u	▶ P.212
22. Channel Add/ Del	m	b	00 - 01
23. Key	m	c	▶ P.213
24. Backlight	m	g	00 - 64

For LED LCD TV/LCD TV

For Plasma TV

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

Transmission / Receiving Protocol

Transmission

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

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

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

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

[DATA] : To transmit the command data.
Transmit the 'FF' data to read status of command.

[Cr] : Carriage Return
ASCII code '0x0D'

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

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

OK Acknowledgement

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

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

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

* Data Format

[Command 2] : Use as command.

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

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

[OK] : Use the large character.

Error Acknowledgement

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

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

Data1: Illegal Code
Data2: Not supported function
Data3: Wait more time

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

* Data Format

[Command 2] : Use as command.

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

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

[NG] : Use the large character

01. Power (Command: k a)

To control Power On/Off of the TV.

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

Data 00: Power Off Data 01: Power On

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

* In a like manner, if other functions transmit 'FF' data based on this format, Acknowledgement data feed-back presents status about each function.
* Note: In this model, TV will send the Acknowledge after power on processing completion.

There might be a time delay between command and acknowledge.

02. Input Select (Command: x b)

To select input source for TV.

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

Data 00: DTV (Antenna)

Data 10: Analog (Antenna) Data 11: Analog (Cable)

Data 20: AV1 Data 21: AV 2

Data 40: Component1 Data 41: Component 2

Data 60: RGB-PC Data 90: HDMI1

Data 91: HDMI2 Data 92: HDMI3

Data 93: HDMI4

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

* Use the feature depending on your model.

03. Aspect Ratio (Command: k c)

To adjust the screen format.

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

Data 01: 4:3 Data 09: Just scan

Data 02: 16:9 Data 10: Cinema Zoom1

Data 04: Zoom ⋮

Data 05: Zoom2 Data 1F: Cinema Zoom16

Data 06: Set by program

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

04. Screen Mute (Command: k d)

To select screen mute on/off.

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

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

Data 01: Screen mute on (Picture off)

Data 10: Video-out Mute on

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

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

05. Volume Mute (Command: k e)

To control volume mute on/off.

You can also adjust mute using the MUTE button on remote control.

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

Data 00: Volume mute on (Volume off)

Data 01: Volume mute off (Volume on)

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

06. Volume Control (Command: k f)

To adjust volume.

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

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

Data Min: 00 - Max: 64 (*transmit by Hexadecimal code)

*Refer to 'Real data mapping'.

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

07. Contrast (Command: k g)

To adjust screen contrast.

You can also adjust contrast in the PICTURE menu.

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

Data Min: 00 - Max: 64 (*transmit by Hexadecimal code)

*Refer to 'Real data mapping'.

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

08. Brightness (Command: k h)

To adjust screen brightness.

You can also adjust brightness in the PICTURE menu.

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

Data Min: 00 - Max: 64 (*transmit by Hexadecimal code)

*Refer to 'Real data mapping'.

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

09. Color (Command: k i)

To adjust screen color.

You can also adjust color in the PICTURE menu.

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

Data Min: 00 - Max: 64 (*transmit by Hexadecimal code)

*Refer to 'Real data mapping'.

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

10. Tint (Command: k j)

To adjust screen tint.

You can also adjust tint in the PICTURE menu.

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

Data Red: 00 - Green: 64 (*transmit by Hexadecimal code)

*Refer to 'Real data mapping'.

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

11. Sharpness (Command: k k)

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

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

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

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

12. OSD Select (Command: k l)

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

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

Data 00: OSD off Data 01: OSD on

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

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

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

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

Data 00: Lock off Data 01: Lock on

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

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

14. Treble (Command: k r)

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

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

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

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

15. Bass (Command: k s)

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

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

Data Min: 00 - Max: 64 (*transmit by Hexadecimal code)

*Refer to 'Real data mapping'.

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

16. Balance (Command: k t)

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

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

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

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

17. Color Temperature (Command: x u)

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

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

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

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

18. ISM Method (Command: j p) (For Plasma TV)

To avoid having a fixed image remain on screen.

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

Data 02: Orbiter 04: White Wash
Data 08: Normal 20: Color Wash

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

19. Energy Saving (Command: j q)

To control the energy saving function.

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

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

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

20. Auto Configuration (Command: j u)

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

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

Data 01: To set

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

21. Channel Tuning (Command: m a)

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

Transmission [m][a][ ][Set ID][ ][Data00][ ][Data01]

[ ][Data02][ ][Data03][ ][Data04][ ][Data05][Cr]

Digital channels have a Physical, Major, and Minor channel number. The Physical number is the actual digital channel number, the Major is the number that the channel should be mapped to, and the Minor is the sub-channel. Since the tuner automatically maps the channel to the Major number, the Physical number is not required when sending a command.

Data 00: Physical Channel Number

Analog air: 01~69, Analog cable: 01~135

DTV air: 01~69

Data 01 & 02: Major Channel Number

Data 01: High byte Data 02: Low byte

Two bytes are available for the Major and Minor, normally only the second byte is used.

Data 03 & 04: Minor Channel Number

Not needed for NTSC.

Data5:

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

The table above lists the binary code which must be converted to Hexadecimal before sending. For example: The binary code to tune the sub source to an NTSC cable channel is "1000 0001", which translates to "81" in Hex.

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

*Tune Command Examples:

1. Tune to the analog (NTSC) cable channel 35.

   Data 00 = Physical of 35 = 23

   Data 01 & 02 = No Major = 00 00

   Data 03 & 04 = No Minor = 00 00

   Data 05 = 0000 0001 in binary = 01

   Total = ma 00 23 00 00 00 00 01

2. Tune to the digital local channel 30-3.

   Data 00 = Don't know Physical = 00

   Data 01 & 02 = Major is 30 = 00 1E

   Data 03 & 04 = Minor is 3 = 00 03

   Data 05 = 0010 0010 in binary = 22

   Total = ma 00 00 00 1E 00 03 22

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

22. Channel Add/Del (Command: m b)

To add and delete the channels.

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

Data 00: Channel Delete Data 01: Channel Add

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

23. Key (Command: m c)

To send IR remote control code.

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

See page 207.

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

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

24. Backlight (Command: m g) (For LED LCD TV/LCD TV)

To adjust screen backlight.

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

Data Min:00 ~ Max:64 (*transmit by Hexadecimal code)

*Refer to 'Real data mapping'.

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

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LED LCD TV / LCD TV PLASMA TV

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42LE5500	42LE7500	42LD650	60PK550
47LE5500	47LE7500	47LD650	
55LE5500	55LE7500	55LD650	50PK950
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