LG
Life's Good

OWNER'S MANUAL

LED LCD TV / LCD TV

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

LED LCD TV MODELS

22LE5300
26LE5300
32LE5300
37LE5300
42LE5300
47LE5300
55LE5300

LCD TV MODELS

32LD460
37LD460
42LD460
47LD460

P/NO : MFL62883008 (1003-REV00)

www.lg.com

WARNING / CAUTION

WARNING / CAUTION

RISK OF ELECTRIC SHOCK
DO NOT OPEN

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

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

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

WARNING/CAUTION

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

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

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

7 Only use attachments/accessories specified by the manufacturer.

8 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.

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

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

SAFETY INSTRUCTIONS

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

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

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

14 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.

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

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

17 **GROUNDING**

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

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

18 **DISCONNECTING DEVICE FROM MAINS**

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

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

20 **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.

21 **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.

22 **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.

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

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

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

26 Keep the product away from direct sunlight.

27 **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

- Some of these features are not available on all models.

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

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, 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

Remote Control,
Batteries

RF Adapter
(Some models)

You must connect it to the antenna wire after fixing in Antenna Input. This adapter is only 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.

32/37/42/47LD460

x 8

(M4 x 20)

Screws for stand assembly
(Refer to P.17)

(For 32/37/42LD460)

Screw for stand fixing
(Refer to P.28)

Protection Cover
(Refer to P.18)

Power Cord

22/26LE5300

(For 26LE5300)

x 4

(M4 x 14)

x 4

(M4 x 20)

Screws for stand assembly
(Refer to P.19, 21)

Cable Holder
(Refer to p.26)

(For 26LE5300)

x 4

Ring spacers
(Refer to p.24)

AC/DC Adapter

Power Cord

32/37/42/47/55LE5300

(For 32LE5300)

(M4 x 22) (M4 x 16)

(For 37/42LE5300)

(M4 x 24) (M4 x 16)

(For 47/55LE5300)

(M4 x 26) (M4 x 16)

Screws for stand assembly
(Refer to P.21)

(For 32LE5300)

Screw for stand fixing
(Refer to P.28)

Cable Holder
(Refer to p.26)

Component gender cable,
AV gender cable

OPTIONAL EXTRAS (For 32/37/42/47/55LE5300)

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 or LCD TV.

Wireless Media Box
(AN-WL100W)

FRONT PANEL INFORMATION

■ Image shown may differ from your TV.

32/37/42/47LD460

PREPARATION

22/26/32/37/42/47/55LE5300

22/26LE5300

Remote Control Sensor

Power/Standby Indicator
(Can be adjusted using the **Power Indicator** in the OPTION menu.▶**p.108**)

32/37/42/47/55LE5300

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.108**)

22/26LE5300

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

32/37/42/47/55LE5300

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

BACK PANEL INFORMATION

■ Image shown may differ from your TV.

32/37/42/47LD460

PREPARATION

22/26LE5300

Power Connection

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

⚠ CAUTION

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

32/37/42/47/55LE5300

⚠ CAUTION

For HDMI IN 4 and USB IN

▶ 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 **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).

❷ **RGB IN (PC)**

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

AUDIO IN (RGB/DVI)

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

❸ **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.

❹ **RS-232C IN (CONTROL & SERVICE)**

Used by third party devices.

This port is used for service or Hotel mode.

❺ **AV (Audio/Video) IN**

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

❻ **ANTENNA/CABLE IN**

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

❼ **COMPONENT IN**

Analog Connection.

Supports HD.

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

❽ **USB INPUT**

Used for viewing videos, photos and listening to MP3s.

❾ **HEADPHONE**

0.32 cm (1/8 inch) headphone jack

Impedance 16 Ω , Maximum audio out 15 mW

❿ **Power Cord Socket**

For operation with AC power.

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

⓫ **DC-IN**

⓬ **WIRELESS CONTROL**

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

STAND INSTRUCTIONS (For 32/37/42/47LD460)

■ 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.

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 from the TV.

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 22LE5300)

■ 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. 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.

DETACHMENT

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

2. Remove the screws from the TV.

3. Detach the stand from TV.

STAND INSTRUCTIONS (For 26/32/37/42/47/55LE5300)

■ 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.

For 26LE5300

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.

For 26LE5300 Other models

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 from the TV.

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)
22LE5300 26LE5300	100 * 100	M4	4	LSW100B, LSW100BG
32LD460, 32LE5300	200 * 100	M4	4	LSW100B, LSW100BG
37LD460, 42LD460, 47LD460, 37LE5300, 42LE5300, 47LE5300	200 * 200	M6	4	LSW200B, LSW200BG
55LE5300	400 * 400	M6	4	LSW400B, LSW400BG

NOTE

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

  Do not use fasten the screws too strongly, this may damage the TV or cause the TV to a fall, leading to personal injury. LG is not liable for these kinds of accidents.
- LG is not liable for TV damage or personal injury when a non-VESA or non specified wall mount is used or the consumer fails to follow the TV installation instructions.

CAUTION

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

For 26LE5300

Place the ring spacers on the set before installing the wall mounting bracket so that the inclination of the backside of the set can be adjusted perpendicularly.

CABLE MANAGEMENT

■ Image shown may differ from your TV.

32/37/42/47LD460

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.

22/26LE5300

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

32/37/42/47/55LE5300

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 (Except 22LE5300)

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.

PREPARATION

ATTACHING THE TV TO A DESK (For 32/37/42LD460, 32LE5300)

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.

PREPARATION

- 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)

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

If you do receive digital signals from a digital set-top box or other digital external device.

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** 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** 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 **Component** input source on the TV using the **INPUT** button on the remote control.

Y, CB/PB, CR/PR

Resolution	Horizontal Frequency(KHz)	Vertical Frequency(KHz)
720x480i	15.63	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
	33.75	60.00
	33.72	59.94
1920x1080p	56.250	50
	67.43	59.94
	67.5	60

HDMI Connection

1. How to connect

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

HDMI-DTV

Resolution	Horizontal Frequency(KHz)	Vertical Frequency(KHz)
720x480p	31.469	59.94
	31.5	60
720x576p	31.25	50
1280x720p	37.500	50
	44.96	59.94
	45	60
1920x1080i	33.72	59.94
	33.75	60
	28.125	50.00
1920x1080p	26.97	23.97
	27.00	24.00
	33.716	29.976
	33.75	30.00
	56.250	50
	67.43	59.94
	67.5	60

NOTE

- Check HDMI cable over version 1.3. If the HDMI cables don't support HDMI version 1.3, it can cause flickers or no screen display. In this case use the latest cables that support HDMI version 1.3.
- HDMI Audio Supported Format: AC3 (32KHz, 44.1KHz, 48KHz), Linear PCM (32KHz, 44.1KHz, 48KHz, 96KHz, 192KHz)

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** 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** input source on the TV using the **INPUT** button on the remote control.

NOTE

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

EXTERNAL EQUIPMENT SETUP

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** or **2** 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** or **2** jacks on the TV.

2. How to use

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

Component Input ports

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

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

Composite (RCA) Connection

1. How to connect

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

2. How to use

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

HDMI Connection

1. How to connect

1. Connect the HDMI output of the DVD to the **HDMI/DVI IN 1**, **2**, or **3** 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.

NOTE

- Check HDMI cable over version 1.3.
  If the HDMI cables don't support HDMI version 1.3, it can cause flickers or no screen display. In this case use the latest cables that support HDMI version 1.3.
- HDMI Audio Supported Format: AC3 (32KHz, 44.1KHz,48KHz), Linear PCM (32KHz, 44.1KHz,48KHz 96KHz, 192KHz)

EXTERNAL EQUIPMENT SETUP

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** input source on the TV using the **INPUT** button on the remote control.
- If connected to **AV IN 2**, select **AV2** input source on the TV.

NOTE

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

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 **AV** or **AV1/2*** input source on the TV using the **INPUT** button on the remote control.
- Operate the corresponding external equipment.

** AV2: Except 22/26LE5300*

EXTERNAL EQUIPMENT SETUP

USB CONNECTION

1. How to connect

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

2. How to use

- After connecting the **USB IN** jack, you use the USB function.

HEADPHONE SETUP

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.

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.115**). 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.115**)

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

(For 32/37/42/47/55LE5300)

You can connect between TV and external equipment wirelessly.

You can connect the Wireless Dongle to the TV to control the external input devices connected to Media Box wirelessly.

You can control the remote control of external device (VCR, DVD player etc.) connected to the Media box from the TV using the infrared controller called IR-Blaster.

For further information, refer to the optional "LG **Wireless Media Box** (Sold separately)" manual for operating instructions.

1. How to connect

1. Connect the **WIRELESS CONTROL** jack of the Wireless Dongle to the **WIRELESS CONTROL** jack on the TV.

2. Connect **HDMI OUT** jack of the Wireless 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 many 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** 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** input source on the TV using the **INPUT** button on the remote control.

NOTE

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

NOTE

- ▶ To get the best picture quality, adjust the PC graphics card to **1360x768**(for 22/26LE5300), **1920x1080**(Other models).
- ▶ Depending on the graphics card, DOS mode may not work if a HDMI to DVI Cable is in use.
- ▶ In PC mode, there may be noise associated with the resolution, vertical pattern, contrast or brightness. If noise is present, change the PC output to another resolution, change the refresh rate to another rate or adjust the brightness and contrast on the PICTURE menu until the picture is clear.
- ▶ Avoid keeping a fixed image on the screen for a long period of time. The fixed image may become permanently imprinted on the screen.
- ▶ The synchronization input form for Horizontal and Vertical frequencies is separate.
- ▶ Depending on the graphics card, some resolution settings may not allow the image to be positioned on the screen properly.
- ▶ If there are overscan in HDMI-PC 1920x1080, change aspect ratio to **Just scan**.
- ▶ When selecting HDMI-PC, set the "Input Label - PC" in the OPTION menu.

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

Resolution	Horizontal Frequency(KHz)	Vertical Frequency(KHz)
720x400	31.468	70.08
640x480	31.469	59.94
800x600	37.879	60.31
1024x768	48.363	60.00
1280x768	47.78	59.87
1360x768	47.72	59.8
1280x1024	63.595	60.0
1920x1080 (RGB-PC)	66.587	59.93
1920x1080 (HDMI-PC)	67.5	60

Except 22/26LE5300

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.

1. Select **PICTURE**.
2. Select **Screen (RGB-PC)**.
3. Select **Auto Config.**.
4. Select **Yes**.
5. 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 and especially if characters are still trembling, 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**.

WATCHING TV / CHANNEL CONTROL

REMOTE CONTROL FUNCTIONS

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

POWER	Turns the TV on from standby or off to standby.
ENERGY SAVING	Adjusts the Energy Saving setting. ►p.98
AV MODE	Toggles through preset Video and Audio modes. ►p.69
INPUT	Rotates through inputs. Also switches the TV on from standby. ►p.64
TV	Returns to the last TV channel.

NUMBER button	
LIST	Displays the channel table. ►p.61
Q.VIEW	Tunes to the last channel viewed.

MENU	Displays the main menu or clears all on-screen displays and return to TV viewing.
X.STUDIO	Select the Photo/Music/Movie list.
Q.MENU	Opens the list of Quick Menu options. ►p.55
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.
SIMPLINK	See a list of AV devices connected to TV. When you toggle this button, the SIMPLINK menu appears at the screen. ►p.70-71
EXIT	Clears all on-screen displays and return to TV viewing.

VOLUME UP/DOWN	Adjusts the volume.
FAV	Set up desired favorite channels list ▶p.61
MARK	Select the input to apply the Picture Wizard settings. Use to mark or unmark a photo/music/movie. ▶p.82, 88, 77
RATIO	Changes the aspect ratio.
MUTE	Switches the sound on or off. ▶p.50
CHANNEL UP/DOWN	Changes the channel.
PAGE UP/DOWN	Moves from one full set of screen information to the next one.

COLOR BUTTON	Access special functions in some menus.

USB, SIMPLINK Control buttons	• Controls MY MEDIA menu (Photo List, Music List, Movie List) • Controls the SIMPLINK compatible devices.

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

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 確認

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

Step4. Auto Tuning

1 ENTER

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

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. (For 32/37/42/47/55LE5300)

i.e)

INPUT

Input List
Move
Enter
TV
USB
Component
AV 1
AV 2
RGB-PC
HDMI1
HDMI2
HDMI3
Input Label
Exit

MY MEDIA

MY MEDIA
Movie List
Photo List
Music List

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.

SAP: Selects MTS sound.

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

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 is a customer support function that can see product/service information and customer service information.

1 MENU RED Select **Customer Support**.

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

3 BACK Return to the previous menu.

EXIT Return to TV viewing.

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 want to see.

RED Go to the **Index** page.

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

3 EXIT Return to TV viewing.

WATCHING TV / CHANNEL CONTROL

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.
- Memorizes all the available channels in the order of TV, and Cable TV.

Add/Delete Channel (Manual Tuning)

1

Select **CHANNEL**.

2

Select **Manual Tuning**.

3

Select **TV**, or **Cable TV**.

4
Select channel you want to add or delete.

5

Select **Add** or **Delete**.

6

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.

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 MENU — Select **CHANNEL**.

2 ENTER — Select **Channel Edit**.

3 ENTER — Select a channel.

4 BLUE — Add or delete a channel.

YELLOW — Block or unblock the channel.
You can register as block/unblock channel even though you select "Lock system-Off" in the LOCK menu.

ENTER — Switch to the chosen channel number.

CH — Move the pages when the channel list is too long.

5 BACK — Return to the previous menu.

EXIT — Return to TV viewing.

■ Keep pressing the ∧ button and use the ‹ or › buttons to move between 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 Select your desired channel.

2 Select your desired favorite channel group from A to D.

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

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

4 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 Display the Favorite channel list.

Selecting a channel in the favorite channel list

1 Select a channel.

2 Switch to the chosen channel number.

Paging through a favorite channel list

1 Turn the pages.

2 Return to TV viewing.

WATCHING TV / CHANNEL CONTROL

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.

SYSTEM COLOR

This function set color suited the each signal.

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.

INPUT LIST

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

i.e)

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 and cable.
- **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

You can set a label for each input source when it's not in use.
This indicates which device is connected to which input port.

i.e)

ie) In case of changing 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.

1

Select **OPTION**.

2

Select **Mode Setting**.

3

Select **Store Demo**.

4

Select **On**.

5

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).

INITIAL SETTING (RESET TO FACTORY DEFAULT)

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**" in AV mode, **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**: Optimizes video and audio for watching movies.
- **Sport**: Optimizes video and audio for watching sports events.
- **Game**: Optimizes video and audio for playing games.

WATCHING TV / CHANNEL CONTROL

SIMPLINK

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

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

1 Display **SIMPLINK** menu.

2 Select **On**.

3 Select the desired device.

4 Control connected AV devices.

1. **TV viewing**: Switch to the previous TV channel regardless of the current mode.
2. **DISC playback**: Select and play discs. When multiple discs are available, the device type of discs are conveniently displayed at the bottom of the screen.
3. **VCR playback**: Control the connected VCR.
4. **HDD Recordings playback**: Control recordings stored in HDD.
5. **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 (display checked)

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 HDMI cable over Version 1.3 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.

MY MEDIA

ENTRY MODE

When the Pop Up menu does not appear, you can select Movie List, Photo List or Music List in the USB menu.

On USB device, you can not add a new folder or delete the existing folder.

1

Select **MY MEDIA**.

2

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

3

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**.

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 programme may not be recognized.
- 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.
- Please do not connect the USB storage device which was artificially maneuvered on the PC. The device may cause the product to malfunction or fail to be played. Never forget to use only 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 FAT32 file system, NTFS file system provided with the Windows operating system. In case of a storage device formatted as a different utility programme which is not supported by Windows, it may not be recognized.
- Please connect power to a USB storage device(over 0.5 A) which requires an external power supply. If not, the device may not be recognized.
- Please connect a USB storage device with the cable offered by the device maker.
- Some USB storage devices may not be supported or operated smoothly.
- File alignment method of USB storage device is similar to Window XP and filename can recognize up to 100 English characters.
- Be sure to back up important files since data stored in a USB memory device may be damaged. We will not be responsible for any data loss.
- If the USB HDD does not have an external power source, the USB device may not be detected. So be sure to connect the external power source. - Please use a power adaptor for an external power source. We do not guarantee an USB cable for an external power source.
- 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.
- If a USB memory device is connected to a USB multi-card reader, its volume data may not be detected.
- If the USB memory device does not work properly, disconnect and reconnect it.
- How fast a USB memory device is detected differs from device to device.
- If the USB is connected in Standby Mode, specific hard disk will automatically be loaded when the TV is turned on.
- The recommended capacity is 1 TB or less for a USB external hard disk and 32 GB or less for USB memory.
- Any device with more than the recommended capacity may not work properly.
- If a USB external hard disk with a "Energy Saving" function does not work, turn the hard disk off and on again to make it work properly.
- USB storage devices below USB 2.0 are supported as well. But they may not work properly in the movie list.
- Maximum Files/Folder: Less than 1000 (total number of files and folders)

MY MEDIA

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.

File / Extension name	Video Decoder	Audio Codec	Max Resolution
mpg, mpeg	MPEG1, MPEG2	MP2,MP3,AC3,LPCM	1920x1080@30p (only , Motion JPEG 640x480@30p)
dat	MPEG1	MP2	
ts,trp,tp	MPEG2, H.264, AVS, VC1	MP2,MP3,AC3,AAC,HEAAC	
vob	MPEG1, 2	MP2,MP3,AC3,LPCM	
mp4, mov	MPEG4,DivX 3.11, DivX 4.12, DivX 5.x, DivX 6, Xvid 1.00, Xvid 1.01, Xvid 1.02, Xvid 1.03, Xvid 1.10-beta1/2H.264	AAC,HEAAC,MP3	
mkv	H.264, MPEG-1,2,4	MP2,MP3,AC3,AAC HEAAC,LPCM	
divx, avi	MPEG2, MPEG4,DivX 3.11, DivX 4.DivX 5, DivX 6, Xvid 1.00, Xvid 1.01, Xvid 1.02, Xvid 1.03, Xvid 1.10-beta1/2H.264	MP2,MP3,AC3,LPCM,ADPCM, AAC,HEAAC	
Motion JPEG (avi, mp4, mkv)	JPEG	LPCM, ADPCM	
asf, wmv	VC1	WMA	
flv	Sorenson H.263, H264	MP3, AAC	

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.

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

Mark Mode

RED	**Play Marked**: Play the 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 movies.
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 in the bottom of the screen.

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" 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 a 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 to display.
ENERGY SAVING	Press the **ENERGY SAVING** button repeatedly to increase the brightness of your screen (Refer to p. 98).
AV MODE	Press the **AV MODE** button repeatedly to select the desired source (Refer to p. 69).

Set Video Play menu option

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.
- **Audio Language**: Changes the Language Group of the audio for video files.
- **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, same font as general menu will be used.
- **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.

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

Set Video menu option

1

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

Reset picture settings to default.

Set Audio menu option

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.

Screen Components

1 MENU Select **MY MEDIA**.

2 ENTER ENTER 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.

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 files are displayed.

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

Mark Mode

1 Select the target folder or drive.

2 Select the desired photo files.

3 Mark your desired photo file.

4 View the marked photo file.

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.

How to view photo

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 navigation in the photo page.

4

Select the **Slideshow**, **BGM**, ↻ **(Rotate)**, Q **(Zoom In)**, e∅ **(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.
- 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.
- 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.
- Photo cannot be rotated if its width is greater than the available supported resolution height.

▶ Q **(Zoom In)**: View the photo by zoom in 2, 4 times by using Blue button.

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

▶ **Option** : Set values for **Slide Speed** and **BGM**.
- You cannot change **BGM** while BGM is playing.

▶ **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

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

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

NOTE

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

Set Photo View menu option

1 Select **Slide Speed** or **BGM**.

2 Make appropriate adjustments.

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

Set Video menu options

('TruMotion' dependent on model)

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

BLUE Reset picture settings to default.

Set Audio menu option

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 model.

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

MUSIC (*.MP3) supporting file
Bit rate 32 ~ 320
- Sampling rate MPEG1 Layer3 : 32kHz, 44.1kHz, 48kHz
- Sampling rate MPEG2 Layer3 : 16kHz, 22.05kHz, 24kHz
- Sampling rate MPEG2.5 Layer3 : 8kHz, 11.025kHz, 12kHz

Screen Components

1

Select **MY MEDIA**.

2

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 2
6. Current page/total pages of contents

Abnormal files are displayed using this graphic.

Non-supported files are displayed using this graphic.

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. 98).

MY MEDIA

Music Selection

1 Select the target folder or drive.

2 Select the desired music title.

3 Music files are played.

- Use the CH (∧ ∨) button to navigation in the movie page.
- When one or more movie files are marked, the marked movies will be played in sequence.

Mark Mode

1 Select the target folder or drive.

2 Select the desired movie title.

3 Mark your desired music file.

4 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.

Using the Music List Function

Show the **Option** menu.

Select **Set Audio Play** or **Set Audio.**

NOTE

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

Using the remote control

■	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.
‹ ›	A cursor indicating the position can be played on the screen.
EXIT	Move to the previous menu screen.

Set Audio Play menu option

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

2 Make appropriate adjustments.

Set Audio menu option

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.

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 allowed the consumer to activate up to 6 devices under one account, but to replace or deactivate any of those devices, the consumer had to contact DivX Support and request deletion. Now with this added feature, consumers will be able to deactivate the device themselves and hence better manage their DivX VOD devices.

1 Select **MY MEDIA**.

2 Select DivX Option.

3 Select **Deactivation**.

4 Select **Yes**.

5 Display **Deactivation**.

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.
HDMI/RGB-PC input only support 4:3 or 16:9 aspect ratio. But you can select all aspect ratios in HDMI-PC 1920X1080 input.
You can select a different aspect ratio depending on input source (analog 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.

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.

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 CONTROL

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**.

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**.

PICTURE CONTROL

ENERGY SAVING

It reduces the TV's power consumption by lowering the backlight level.

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

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1 Select **PICTURE**.

2 Select **Energy Saving**.

3 Select **Auto**, **Off**, **Minimum**, **Medium,** **Maximum,** or **Screen Off**.

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.
- When selecting "**Energy Saving - Off**, **Minimum**, or **Medium**, you can adjust **Backlight** feature
- When selecting **Auto**, **Backlight** is automatically adjusted through **Intelligent Sensor** according to the surrounding conditions.
- 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.

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1 Select **PICTURE**.

2 Select **Picture Mode**.

3 Select **Intelligent Sensor**, **Vivid**, **Standard**, **Cinema**, **Sport**, or **Game**.

4 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.
- **Cinema**: This mode optimizes video for watching movies.
- **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**.

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 **Vivid**, **Standard**, **Cinema**, **Sport**, or **Game**.

4 Select **Backlight**, **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**: This function adjusts the brightness of LCD panel, to control the brightness of the screen. Adjusting the backlight is recommended when setting the brightness of the set. 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 CONTROL)

You can calibrate the screen for each Picture Mode or set the video value according to the special video screen.

You can set the video seeing differently for each input.

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

Select **PICTURE**.

Select **Advanced Control**.

Select your desired options.

Make appropriate adjustments.

Return to the previous menu.

Return to TV viewing.

PICTURE CONTROL

EXPERT PICTURE CONTROL

By segmenting categories, **Expert1** and **Expert2** provide more categories which users can set as they see fit, offering the optimal picture quality for users.

This may also by used be a professional to help optimize the TV performance in the environment the TV is in.

1 MENU — Select **PICTURE**.

2 ENTER — Select **Picture Mode**.

3 ENTER — Select **Expert1** or **Expert2**.

4 ENTER — Select **Expert Control**.

5 ENTER — Select your desired menu option.

6 Make appropriate adjustments.

7 BACK — Return to the previous menu.

EXIT — 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, green and white look more vivid.
Skin Color	■ Expresses natural skin by detecting skin area of the video.
Noise Reduction	■ Reduces screen noise without compromising video quality.
Digital Noise Reduction	■ Removes noise regarding MPEG compressed video.
Gamma	■ You can adjust brightness of dark area and middle gray level area of the picture. Low or 1.9 : Make brighter and middle gray level area of the picture brighter. Medium or 2.2 : Express original picture levels. High or 2.4: Make dark and middle gray level area 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 brighter and clear the white area of screen.
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.
Color Gamut	**Advanced Control** Standard: Displays standard set of colors. Wide: Increase number of colors used. ■ Maximize the utilization of color 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.

PICTURE CONTROL

Edge Enhancer	■ Show clearer and distinctive yet natural edges in of the video. ■ This function is enabled in "**Picture Mode** - **Expert**".
xvYCC	■ This is produces richer colors. ■ This feature represents rich color as much as conventional video signal. ■ This function is enabled in "**Picture Mode** - **Cinema**, **Expert**" when a xvYCC signal is inputted through HDMI.
Color Filter	■ This is the function to filter the specific colors of the video. You can use the RGB filter to set color saturation and hue accurately. ■ This function is enabled in "**Picture Mode** - **Expert**".
Expert Pattern	■ This is the pattern necessary for expert adjustment.
Color Temperature	■ Adjusts the overall color of the screen by changing the color of white. a. Method : 2 Points - Pattern: Inner, Outer - Red/Green/Blue Contrast, Red/Green/Blue Brightness: The adjustment range is -50 - +50. b. Method : 10 Point IRE - 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, than 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.
Color Management System	■ As the 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 disable 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.

5

Return to TV viewing.

TRUMOTION (For 32/37/42/47/55LE5300)

Advance panel 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 42/47/55LE5300)

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.

PICTURE CONTROL

POWER INDICATOR

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.

SOUND & LANGUAGE CONTROL

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 MENU — Select **AUDIO**.

2 ENTER — Select **Auto Volume**.

3 ENTER — Select **On** or **Off**.

4 BACK — Return to the previous menu.

EXIT — 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.

SOUND & LANGUAGE CONTROL

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.

Select **AUDIO**.

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

Make appropriate adjustments.

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.

1 MENU — Select **AUDIO**.

2 ENTER — Select **Reset**.

3 ENTER — Select **Yes**.

4 ENTER — Initialize the adjusted value.

EXIT — Return to TV viewing.

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.

SOUND & LANGUAGE CONTROL

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.

Select **SAP**.

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

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

4

Return to the previous menu.

Return to TV viewing.

SOUND & LANGUAGE CONTROL

CAPTION MODE

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 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 **CC1-2** or **Text1-2**.

5

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.

TIME SETTING

CLOCK SETTING

You must set the time correctly before using on/off timer function.

1 Select **TIME**.

2 Select **Clock**.

3 Select the Month, Year, Date, Hour, or Minutes option.

4 Set the Year, Month, Date, Hour, or Minutes option.

5 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

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

SET PASSWORD & LOCK SYSTEM

Setting up Your Password

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

1

Select **LOCK**.

2
Input the password.

- Enter the password as requested.
- The TV is set up with the initial password "0-0-0-0".

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

EXTERNAL INPUT BLOCKING

Enables you to block an input.

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.

Select **LOCK**.

Select **Key Lock**.

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

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.
Power is suddenly turned off	■ 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	■ Check HDMI cable over version 1.3. The HDMI cables don't support HDMI version 1.3, it cause flickers or no screen display. In this case use the latest cables that support HDMI version 1.3.

Audio Problems	
Picture OK & No sound	■ 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.
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 HDMI cable over version 1.3. ■ 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.

APPENDIX

PRODUCT SPECIFICATIONS

MODELS		32LD460 (32LD460-MA)	37LD460 (37LD460-MA)
Dimensions (Width x Height x Depth)	With stand	799.0 mm x 555.0 mm x 207.0 mm (31.4 inches x 21.8 inches x 8.1 inches)	916.0 mm x 625.0 mm x 261.0 mm (36.0 inches x 24.6 inches x 10.2 inches)
	Without stand	799.0 mm x 516.0 mm x 73.5 mm (31.4 inches x 20.3 inches x 2.8 inches)	916.0 mm x 584.0 mm x 77.4 mm (36.0 inches x 22.9 inches x 3.0 inches)
Weight	With stand	9.6 kg (21.1 lbs)	12.9 kg (28.4 lbs)
	Without stand	8.6 kg (18.9 lbs)	11.2 kg (24.6 lbs)

MODELS		42LD460 (42LD460-MA)	47LD460 (47LD460-MA)
Dimensions (Width x Height x Depth)	With stand	1023.0 mm x 685.0 mm x 261.0 mm (40.2 inches x 26.9 inches x 10.2 inches)	1136.0 mm x 757.0 mm x 270.0 mm (44.7 inches x 29.8 inches x 10.6 inches)
	Without stand	1023.0 mm x 644.0 mm x 76.6 mm (40.2 inches x 25.3 inches x 3.0 inches)	1136.0 mm x 706.0 mm x 76.5 mm (44.7 inches x 27.7 inches x 3.0 inches)
Weight	With stand	15.4 kg (33.9 lbs)	19.6 kg (43.2 lbs)
	Without stand	13.7 kg (30.2 lbs)	17.6 kg (38.8 lbs)

Power requirement		AC100-240V ~ 50/60Hz
Television System		NTSC, PAL-M/N
Program Coverage		VHF 2-13, UHF 14-69, CATV 1-135
External Antenna Impedance		75 ohm
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		22LE5300 (22LE5300-MA)	26LE5300 (26LE5300-MA)
Dimensions (Width x Height x Depth)	With stand	542.9 mm x 407.1 mm x 155.4 mm (21.4 inches x 16.0 inches x 6.1 inches)	652.0 mm x 480.8 mm x 191.4 mm (25.7 inches x 18.9 inches x 7.5 inches)
	Without stand	542.9 mm x 357.6 mm x 34.4 mm (21.4 inches x 14.1 inches x 1.4 inches)	652.0 mm x 420.3 mm x 34.4 mm (25.7 inches x 16.5 inches x 1.4 inches)
Weight	With stand	4.2 kg (9.3 lbs)	6.1 kg (13.4 lbs)
	Without stand	3.9 kg (8.6 lbs)	5.1 kg (11.2 lbs)

Power requirement		22LE5300: 24V ⎓, 1.7 A 26LE5300: 24V ⎓, 1.8 A
Adapter (DC Power)		In: AC100-240 V ~ 50/60 Hz Out: DC 24 V, 3.42 A
Television System		NTSC, PAL-M/N
Program Coverage		VHF 2-13, UHF 14-69, CATV 1-135
External Antenna Impedance		75 ohm
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.

APPENDIX

MODELS		32LE5300 (32LE5300-MA)	37LE5300 (37LE5300-MA)
Dimensions (Width x Height x Depth)	With stand	784.6 mm x 558.1 mm x 221.0 mm (30.9 inches x 22.0 inches x 8.7 inches)	905.0 mm x 630.0 mm x 270.0 mm (35.6 inches x 24.8 inches x 10.6 inches)
	Without stand	784.6 mm x 499.5 mm x 39.9 mm (30.9 inches x 19.7 inches x 1.6 inches)	905.0 mm x 568.0 mm x 39.9 mm (35.6 inches x 22.3 inches x 1.6 inches)
Weight	With stand	12.4 kg (27.3 lbs)	15.3 kg (33.7 lbs)
	Without stand	10.5 kg (23.1 lbs)	11.8 kg (26.0 lbs)

MODELS		42LE5300 (42LE5300-MA)	47LE5300 (47LE5300-MA)
Dimensions (Width x Height x Depth)	With stand	1016.0 mm x 692.0 mm x 270.0 mm (40.0 inches x 27.2 inches x 10.6 inches)	1126.6 mm x 757.9 mm x 284.4 mm (44.3 inches x 29.8 inches x 11.1 inches)
	Without stand	1016.0 mm x 630.0 mm x 29.3 mm (40.0 inches x 24.8 inches x 1.2 inches)	1126.6 mm x 692.0 mm x 29.3 mm (44.3 inches x 27.2 inches x 1.1 inches)
Weight	With stand	19.5 kg (42.9 lbs)	22.6 kg (49.8 lbs)
	Without stand	16.7 kg (36.8 lbs)	19.6 kg (43.2 lbs)

MODELS		55LE5300 (55LE5300-MA)
Dimensions (Width x Height x Depth)	With stand	1306.0 mm x 867.0 mm x 345.0 mm (51.4 inches x 34.1 inches x 13.5 inches)
	Without stand	1306.0 mm x 797.0 mm x 30.7 mm (51.4 inches x 31.3 inches x 1.2 inches)
Weight	With stand	34.0 kg (74.9 lbs)
	Without stand	28.8 kg (63.4 lbs)

Power requirement		AC100-240V ~ 50/60Hz
Television System		NTSC, PAL-M/N
Program Coverage		VHF 2-13, UHF 14-69, CATV 1-135
External Antenna Impedance		75 ohm
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)	95	ENERGY SAVING	Remote control Button
45	Q.MENU	Remote control Button	7E	SIMPLINK	Remote control Button
43	MENU	Remote control Button	7C	XSTUDIO	Remote control Button
0B	INPUT	Remote control Button	30	AV MODE	Remote control Button
10-19	Number Key 0-9	Remote control Button	0F	TV	Remote control Button
53	LIST	Remote control Button	5B	EXIT	Remote control Button
1A	Q.VIEW	Remote control Button	72	RED	Remote control Button
09	MUTE	Remote control Button	71	GREEN	Remote control Button
02	VOL +	Remote control Button	63	YELLOW	Remote control Button
03	VOL -	Remote control Button	61	BLUE	Remote control Button
00	CH ∧	Remote control Button	B1	■	Remote control Button
01	CH ∨	Remote control Button	B0	▶	Remote control Button
1E	FAV/MARK	Remote control Button	BA	⏸	Remote control Button
40	∧	Remote control Button	8F	⏪	Remote control Button
41	∨	Remote control Button	8E	⏩	Remote control Button
07	‹	Remote control Button			
06	›	Remote control Button			
44	ENTER	Remote c ontrol Button			
28	BACK	Remote control Button			
79	RATIO	Remote control Button			

EXTERNAL CONTROL THROUGH RS-232C

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

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

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

RS-232C Setup

i.e)

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.139
03. Aspect Ratio	k	c	▶ P.139
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
19. Energy Saving	j	q	▶ P.140
20. Auto Configuration	j	u	▶ P.140
22. Channel Add/ Del	m	b	00 - 01
23. Key	m	c	▶ P.141
24. Backlight	m	g	00 - 64

	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 06: Set by program Data 1F: Cinema Zoom16

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

04. Screen Mute (Command: k d)

To select screen mute on/off.

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

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

Data 01: Screen mute on (Picture off)

Data 10: Video-out Mute on

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

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

05. Volume Mute (Command: k e)

To control volume mute on/off.

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

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

Data 00: Volume mute on (Volume off)

Data 01: Volume mute off (Volume on)

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

06. Volume Control (Command: k f)

To adjust volume.

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

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

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

*Refer to 'Real data mapping'.

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

07. Contrast (Command: k g)

To adjust screen contrast.

You can also adjust contrast in the PICTURE menu.

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

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

*Refer to 'Real data mapping'.

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

08. Brightness (Command: k h)

To adjust screen brightness.

You can also adjust brightness in the PICTURE menu.

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

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

*Refer to 'Real data mapping'.

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

09. Color (Command: k i)

To adjust screen color.

You can also adjust color in the PICTURE menu.

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

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

*Refer to 'Real data mapping'.

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

10. Tint (Command: k j)

To adjust screen tint.

You can also adjust tint in the PICTURE menu.

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

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

*Refer to 'Real data mapping'.

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

11. Sharpness (Command: k k)

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

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

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

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

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]

Data 00: Physical Channel Number(Transmit by Hexadecimal code)
NTSC air: 02~45, NTSC cable: 01, 0e~7d
DTV air: 01~69

Data 01 & 02: Major Channel Number(two part) or Channel Number(one part)

Data 01: High byte Data 02: Low byte

Two part channel number. Major number-Minor number One part channel number.
In case of using one part channel number, minor channel does not need.

Data 03 & 04: Minor Channel Number
Not needed for NTSC.
Data 03 : High byte
Data 04 : Low byte

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

* Two/One part Channel: 6th bit

This bit is used in a cable-ready system.

* Two/One part Channel: 5th bit

If the channel band is NTSC air or NTSC cable, channel tuning can be done by only physical channel. In this case, using physical channel bit must be low(0).

Examples)

1. Analog channel: NTSC cable, channel number(35), main picture

Command: ma 00 23 xx xx xx xx 01

attribute(0x01): main picture, tow part(it's not mandatory), using physical channel, NTSC cable xx' data: don't care major and minor channel number in case analog channel tuning

Acknowledgement[a][ ][Set ID][ ][OK][Data00][Data01] [Data02][Data03][Data04] [Data05] [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 DeleteData 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 135.

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)

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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Record it below should you ever need service.

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