LG
Life's Good

OWNER'S MANUAL

LED LCD TV / PLASMA TV

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

LED LCD TV MODELS

32LV3700	32LV5500	32LW5700	47LW6500
42LV3700	42LV5500	42LW5700	55LW6500
47LV3700	47LV5500	47LW5700	47LW9800
	55LV5500	55LW5700	55LW9800

PLASMA TV MODELS

50PZ950E
60PZ950E

P/NO : SAC34134228 (1111-REV06)

www.lg.com

LICENSES

Supported licenses may differ by model. For more information about licenses, visit www.lg.com.

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ABOUT DIVX VIDEO-ON-DEMAND: This DivX Certified® device must be registered in order to play purchased DivX Video-on-Demand (VOD) movies. To obtain your registration code, locate the DivX VOD section in your device setup menu. Go to vod.divx.com for more information on how to complete your registration.

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"Covered by one or more of the following U.S. patents :
7,295,673; 7,460,668; 7,515,710; 7,519,274"

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NOTE

- Plasma : Plasma TV LCD : LED LCD TV, LCD TV
- Image shown may differ from your TV.
- Your TV's OSD (On Screen Display) may differ slightly from that shown in this manual.
- The available menus and options may differ from the input source or product model that you are using.

IMPORTANT SAFETY INSTRUCTIONS

Always comply with the following precautions to avoid dangerous situations and ensure peak performance of your product.

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.

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

- Do not use this apparatus near water.

- Clean only with a dry cloth.

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

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

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

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

- Only use attachments/accessories specified by the manufacturer.

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

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

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

- Never touch this apparatus or antenna during a thunder or lightning storm.
- When mounting a TV on the wall, make sure not to install the TV by hanging the power and signal cables on the back of the TV.
- Do not allow an impact shock or any objects to fall into the product, and do not drop anything onto the screen.
- CAUTION concerning the Power Cord (Can differ by country):
  It is recommended that appliances be placed upon a dedicated circuit; that is, a single outlet circuit which powers only that appliance and has no additional outlets or branch circuits. Check the specification page of this owner's manual to be certain. Do not connect too many appliances to the same AC power outlet as this could result in fire or electric shock. Do not overload wall outlets. Overloaded wall outlets, loose or damaged wall outlets, extension cords, frayed power cords, or damaged or cracked wire insulation are dangerous. Any of these conditions could result in electric shock or fire. Periodically examine the cord of your appliance, and if its appearance indicates damage or deterioration, unplug it, discontinue use of the appliance, and have the cord replaced with an exact replacement part by an authorized service. Protect the power cord from physical or mechanical abuse, such as being twisted, kinked, pinched, closed in a door, or walked upon. Pay particular attention to plugs, wall outlets, and the point where the cord exits the appliance. Do not move the TV with the power cord plugged in. Do not use a damaged or loose power cord. Be sure do grasp the plug when unplugging the power cord. Do not pull on the power cord to unplug the TV.

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

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

- **Grounding**
  Ensure that you connect the earth ground wire to prevent possible electric shock (i.e. a TV with a three-prong grounded AC plug must be connected to a three-prong grounded AC outlet). If grounding methods are not possible, have a qualified electrician install a separate circuit breaker. Do not try to ground the unit by connecting it to telephone wires, lightening rods, or gas pipes.

- **DISCONNECTING DEVICE FROM THE MAIN POWER**
  The power outlet must remain readily accessed in the event the device needs to be unplugged.
- As long as this unit is connected to the AC wall outlet, it is not disconnected from the AC power source even if the unit is turned off.
- Do not attempt to modify this product in any way without written authorization from LG Electronics. Unauthorized modification could void the user's authority to operate this product.
- **ANTENNAS Outdoor antenna grounding** (Can differ by country):
  If an outdoor antenna is installed, follow the precautions below. An outdoor antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits, or where it can come in contact with such power lines or circuits as death or serious injury can occur. Be sure the antenna system is grounded so as to provide some protection against voltage surges and built-up static charges. Section 810 of the National Electrical Code (NEC) in the U.S.A. provides information with respect to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna discharge unit, connection to grounding electrodes and requirements for the grounding electrode.
  Antenna grounding according to the National Electrical Code, ANSI/NFPA 70

NEC: National Electrical Code

- **Cleaning**
  When cleaning, unplug the power cord and wipe gently with a soft cloth to prevent scratching. Do not spray water or other liquids directly on the TV as electric shock may occur. Do not clean with chemicals such as alcohol, thinners or benzine.
- **Moving**
  Make sure the product is turned off, unplugged and all cables have been removed. It may take 2 or more people to carry larger TVs. Do not press or put stress on the front panel of the TV.
- **Ventilation**
  Install your TV where there is proper ventilation. Do not install in a confined space such as a bookcase. Do not cover the product with cloth or other materials while plugged. Do not install in excessively dusty places.
- If you smell smoke or other odours coming from the TV, unplug the power cord contact an authorized service center.
- Do not press strongly upon the panel with hand or sharp object such as nail, pencil or pen, or make a scratch on it.
- Keep the product away from direct sunlight.

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- **Dot Defect**
  The Plasma or LCD panel is a high technology product with resolution of two million to six million pixels. In a very few cases, you could see fine dots on the screen while you're viewing the TV. Those dots are deactivated pixels and do not affect the performance and reliability of the TV.
- **Generated Sound**
  "Cracking" noise: A cracking noise that occurs when watching or turning off the TV is generated by plastic thermal contraction due to temperature and humidity. This noise is common for products where thermal deformation is required.
  Electrical circuit humming/panel buzzing: A low level noise is generated from a high-speed switching circuit, which supplies a large amount of current to operate a product. It varies depending on the product.
  This generated sound does not affect the performance and reliability of the product.
- Take care not to touch the ventilation openings. When watching the TV for a long period, the ventilation openings may become hot. This does not affect the performance of the product or cause defects in the product.
- **Viewing 3D Imaging (For 3D TV)**
  - If you watch the 3D imaging too closely or for a long period of time, it may harm your eyesight.
  - Watching the TV or playing video games that incorporate 3D imaging with the 3D glasses for a long period of time can cause drowsiness, headaches or fatigue to you and/or your eyes. If you have a headache, or otherwise feel fatigued or drowsy, stop watching the TV and have a rest.
  - Pregnant woman, seniors, persons with heart problems or persons who experience frequent drowsiness should refrain from watching 3D TV.
  - Some 3D imaging may cause you to duck or dodge the image displayed in the video. Therefore, it is best if you do not watch 3D TV near fragile objects or near any objects that can be knocked over easily.
  - Please prevent children under the age of 5 from watching 3D TV. It may affect their vision development.
  - Warning for photosensitization seizure: Some viewers may experience a seizure or epilepsy when exposed to certain factors, including flashing lights or images in TV or video games. If you or anybody from your family has a history of epilepsy or seizure, please consult with your doctor before watching 3D TV.
    Also certain symptoms can occur in unspecified conditions without any previous history. If you experience any of the following symptoms, immediately stop watching the 3D imaging and consult a doctor: dizziness or light-headedness, visual transition or altered vision, visual or facial instability, such as eye or muscle twitching, unconscious action, convulsion, loss of conscience, confusion or disorientation, loss of directional sense, cramps, or nausea. Parents should monitor their children, including teenagers, for these symptoms as they may be more sensitive to the effects of watching 3D TV.
    Risk of photosensitization seizure can be reduced with the following actions.
  - Take frequent breaks from watching 3D TV.
  - For those who have vision that is different in each eye, they should watch the TV after taking vision correction measures.
  - Watch the TV so that your eyes are on the same level as the 3D screen and refrain from sitting too closely to the TV.
  - Do not watch the 3D imaging when tired or sick, and avoid watching the 3D imaging for a long period of time.
  - Do not wear the 3D glasses for any other purpose than viewing 3D imaging on a 3D TV.
  - Some viewers may feel disoriented after watching 3D TV. Therefore, after you watch 3D TV, take a moment to regain awareness of your situation before moving.

- LCD
  If the TV feels cold to the touch, there may be a small "flicker" when it is turned on. This is normal, there is nothing wrong with TV. Some minute dot defects may be visible on the screen, appearing as tiny red, green, or blue spots. However, they have no adverse effect on the TV's performance. Avoid touching the LCD screen or holding your finger(s) against it for long periods of time. Doing so may produce some temporary distortion effects on the screen.

DISPOSAL (Hg lamp only used in LCD TVs)

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

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ASSEMBLING AND PREPARING

Unpacking

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

Remote control,
Batteries (AAA)

Owner's manual

CD manual

Polishing cloth[1]
(Depending on model)

Cleansing Cloths (Mitt)[2]
(Depending on model)

Nero MediaHome 4 Essentials CD

Magic Motion Remote Control[3],
Strap,
Batteries (AA)
(Except LV3700, LV5500,
LW5700, LW6500 series)

1 Gently wipe the spots on the cabinet with the polishing cloth.
2 Wipe spots on the exterior only with the cleansing cloths.
Do not wipe roughly when removing stains. Excessive pressure may cause scratches or discoloration.
For cleaning front frame, please slowly wipe in one direction after spraying water 1-2 times on cleansing cloths. Please remove excessive moisture after cleaning. Excessive moisture may cause water stains on the frame.
3 Sold seperately for LV3700, LV5500, LW5700, LW6500 series.

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PZ950E series

M4 x 26 M5 x 14.5

Screw for assembly
(50PZ950E)

M4 x 28 M5 x 14.5

Screw for assembly
(60PZ950E)

Cable holder

Power cord holder

Protection cover,
Tape

Power cord

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

3D Glasses[1]
(AG-S250)

LV3700, LV5500, LW5700, LW6500, LW9800 series

M4 x 12

Screw for assembly
(LV3700, LV5500,
LW5700, LW6500 series)

M4 x 16

Screw for assembly
(LW9800 series)

Cable holder
(Depending on model)

Screw for fixing
(32LV3700, 32LV5500,
32LW5700)

Composite gender cable
(Except LV3700 series)

Component gender cable
(Except LV3700 series)

FPR 3D Glasses[1]
(LW5700, LW6500,
LW9800 series)

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

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CAUTION

- Do not use any unapproved items to ensure the safety and product life span.
- Any damages or injuries by using unapproved items are not covered by the warranty.
- In case of some model, the thin film on screen is a part of TV, So don't take it off.

NOTE

- The items supplied with your product may vary depending on the model.
- Product specifications or contents of this manual may be changed without prior notice due to upgrade of product functions.
- New features may be added to this TV in the future.
- (LCD) For an optimal connection, HDMI cables and USB devices should have bezels less than 10 mm thick and 18 mm width.

*A ≦ 10 mm
*B ≦ 18 mm

Optional Extras

Optional extras can be changed or modified for quality improvement without any notification.
Contact your dealer for buying these items.
These device only works with compatible LG LED LCD TV or Plasma TV.

Wireless Media Box[1]
(AN-WL100W)

3D Glasses[2]
(AG-S230, AG-S250, AG-S270)

Wireless LAN for Broadband
/DLNA Adaptor[3]
(AN-WF100)

Magic Motion Remote
(AN-MR200)

FPR 3D Glasses[4]
(AG-F2**)

Video Call Camera[5]
(AN-VC300)
(Depending on model)

1 Supports for LV5500, LW5700, LW6500, LW9800, PZ950E series
2 Supports for PZ950E series
3 Unnecessary for LW9800 series
4 Supports for LW5700, LW6500, LW9800 series
The model name or design may be changed depending on the upgrade of product functions, manufacturer's circumstances or policies.
5 Video Call Camera can be used with some LG TVs.
Video Call Camera is not available in every country.

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Parts and buttons

PZ950E series

Touch button[2]	Description
⏻ / I	Turns the power on or off.
INPUT	Changes the input source.
HOME	Accesses the Home menu, or saves your input and exits the menus.
ENTER ◉	Selects the highlighted menu option or confirms an input
- VOL +	Adjusts the volume level.
∨ CH ∧	Scrolls through the saved channels.

1 Intelligent sensor - Adjusts the image quality and brightness based on the surrounding environment.
2 All of the buttons are touch sensitive and can be operated through simple touch with your finger.

ENGLISH

LV5500, LW6500 series

Touch button[2]	Description
⏻ / I	Turns the power on or off.
INPUT	Changes the input source.
HOME	Accesses the Home menu, or saves your input and exits the menus.
ENTER ◉	Selects the highlighted menu option or confirms an input
- VOL +	Adjusts the volume level.
v CH ^	Scrolls through the saved channels.

1 Intelligent sensor - Adjusts the image quality and brightness based on the surrounding environment.
2 All of the buttons are touch sensitive and can be operated through simple touch with your finger.

NOTE

- You can set the power indicator light to on or off by selecting **OPTION** in the Home menu - SETUP.

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LW5700 series

ENGLISH

Button	Description
⏻ / I	Turns the power on or off.
INPUT	Changes the input source.
HOME	Accesses the Home menu, or saves your input and exits the menus.
ENTER ◉	Selects the highlighted menu option or confirms an input
- VOL +	Adjusts the volume level.
∨ CH ∧	Scrolls through the saved channels.

1 Intelligent sensor - Adjusts the image quality and brightness based on the surrounding environment.

NOTE

- You can set the power indicator light to on or off by selecting **OPTION** in the Home menu - SETUP.

LW9800 series

Touch button[2]	Description
⏻ / I	Turns the power on or off.
INPUT	Changes the input source.
HOME	Accesses the Home menu, or saves your input and exits the menus.
ENTER ◉	Selects the highlighted menu option or confirms an input
- VOL +	Adjusts the volume level.
v CH ^	Scrolls through the saved channels.

1 Intelligent sensor - Adjusts the image quality and brightness based on the surrounding environment.
2 All of the buttons are touch sensitive and can be operated through simple touch with your finger.

NOTE

- You can set the power indicator light to on or off by selecting **OPTION** in the Home menu - SETUP.

ENGLISH

LV3700 series

Touch button[2]	Description
⏻ / I	Turns the power on or off.
INPUT	Changes the input source.
HOME	Accesses the Home menu, or saves your input and exits the menus.
ENTER ◉	Selects the highlighted menu option or confirms an input
- VOL +	Adjusts the volume level.
∨ CH ∧	Scrolls through the saved channels.

1 Intelligent sensor - Adjusts the image quality and brightness based on the surrounding environment.
2 All of the buttons are touch sensitive and can be operated through simple touch with your finger.

NOTE

- You can set the power indicator light to on or off by selecting **OPTION** in the Home menu - SETUP.

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Lifting and moving the TV

When moving or lifting the TV, read the following to prevent the TV from being scratched or damaged and for safe transportation regardless of its type and size.

CAUTION

- Avoid touching the screen at all times, as this may result in damage to the screen.

- It is recommended to move the TV in the box or packing material that the TV originally came in.
- Before moving or lifting the TV, disconnect the power cord and all cables.
- When holding the TV, the screen should face away from you to avoid damage.

- Hold the top and bottom of the TV frame firmly. Make sure not to hold the transparent part, speaker, or speaker grill area.

- When transporting a large TV, there should be at least 2 people.
- When transporting the TV by hand, hold the TV as shown in the following illustration.

- When transporting the TV, do not expose the TV to jolts or excessive vibration.
- When transporting the TV, keep the TV upright, never turn the TV on its side or tilt towards the left or right.

Setting up the TV

Put your TV on a pedestal stand and mount the TV on a table or wall.

Attaching the stand

If you are not mounting the TV to a wall, use the following instructions to attach the stand.

PZ950E series

1 Lay the TV with the screen side down on a flat surface.

CAUTION

- Lay a foam mat or soft protective cloth on the surface to protect the screen from damage. Make sure no objects press against the screen.

2 Assemble the parts of the stand body with the stand base of the TV.

Model	Screw for assembly	Number of screws
50PZ950E	M5 x 14.5	3
60PZ950E	M5 x 14.5	4

ENGLISH

3 Secure the TV and the stand with the 4 screws.

Model	Screw for assembly	Number of screws
50PZ950E	M4 x 26	4
60PZ950E	M4 x 28	4

CAUTION

- Tighten the screws firmly to prevent the TV from tilting forward. Do not over tighten.

To detach the stand,

1 Lay the TV with the screen side down on a flat surface.

2 Remove the 4 screws and pull the stand away from the TV.

3 Push the supplied protection cover into the opening at the bottom of the TV until it locks in place.

Attach the protection cover tape.

- This will protect the opening from accumulating dust and dirt.
- When installing the wall mounting bracket, use the protection cover.

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LV3700, LV5500, LW5700, LW6500 series

1 Lay the TV with the screen side down on a flat surface.

CAUTION

- Lay a foam mat or soft protective cloth on the surface to protect the screen from damage. Make sure no objects press against the screen.

2 Assemble the parts of the stand body with the stand base of the TV.

Screw for assembly	Number of screws
M4 x 12	4

3 Assemble the TV as shown.

4 Secure the TV and the stand with the 4 screws.

Screw for assembly	Number of screws
M4 x 12	4

CAUTION

- Tighten the screws firmly to prevent the TV from tilting forward. Do not over tighten.

To detach the stand,

1 Lay the TV with the screen side down on a flat surface.

2 Remove the 4 screws and pull the stand away from the TV.

ENGLISH

LW9800 series

1 Lay the TV with the screen side down on a flat surface.

CAUTION

- Lay a foam mat or soft protective cloth on the surface to protect the screen from damage. Make sure no objects press against the screen.

2 Assemble the parts of the stand body with the stand base of the TV.

Screw for assembly	Number of screws
M4 x 16	4

3 Assemble the parts of the stand rear cover with the TV.

4 Secure the TV and the stand with the 4 screws.

Screw for assembly	Number of screws
M4 x 16	4

CAUTION

- Tighten the screws firmly to prevent the TV from tilting forward. Do not over tighten.

To detach the stand,

1 Lay the TV with the screen side down on a flat surface.

2 Remove the 4 screws and pull the stand away from the TV.

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Mounting on a table

1 Lift and tilt the TV into its upright position on a table.
- Leave a 10 cm (minimum) space from the wall for proper ventilation.

2 Connect the power cord to a wall outlet.

CAUTION
- Do not place the TV near or on sources of heat, as this may result in fire or other damage.

NOTE
- Swivel 20 degrees to the left or right and adjust the angle of the TV to suit your view.

Securing the TV to a table

(For 32LV3700, 32LV5500, 32LW5700)
Fix the TV to a table to prevent from tilting forward, damage, and potential injury.
Mount the TV on a table, and then insert and tighten the supplied screw on the rear of the stand.

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 TV may cause injury.

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Securing the TV to a wall (optional)

1 Insert and tighten the eye-bolts, or TV brackets and bolts on the back of the TV.
   - If there are bolts inserted at the eye-bolts position, remove the bolts first.

2 Mount the wall brackets with the bolts to the wall.
   Match the location of the wall bracket and the eye-bolts on the rear of the TV.

3 Connect the eye-bolts and wall brackets tightly with a sturdy rope.
   Make sure to keep the rope horizontal with the flat surface.

CAUTION

- Make sure that children do not climb on or hang on the TV.

NOTE

- Use a platform or cabinet that is strong and large enough to support the TV securely.
- Brackets, bolts and ropes are optional. You can obtain additional accessories from your local dealer.

Using the Kensington security system (optional)

The Kensington security system connector is located at the rear of the TV. For more information of installation and using, refer to the manual provided with the Kensington security system or visit *http://www.kensington.com*.

Connect the Kensington security system cable between the TV and a table.

NOTE

- The Kensington security system is optional. You can obtain additional accessories from your local dealer.

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Mounting on a wall

Attach an optional wall mount bracket at the rear of the TV carefully and install the wall mount bracket on a solid wall perpendicular to the floor. When you attach the TV to other building materials, please contact qualified personnel. LG recommends that wall mounting be performed by a qualified professional installer.

Make sure to use screws and wall mount bracket that meet the VESA standard. Standard dimensions for the wall mount kits are described in the following table.

Model	50PZ950E	60PZ950E
VESA	400 x 400	600 x 400
Standard screw	M6	M8
Number of screws	4	4
Wall mount bracket (optional)	PSW400B, PSW400BG,	PSW600B, PSW600BG

Model	32LV3700 32LV5500 32LW5700	42/47LV3700 42/47/55LV5500 42/47/55LW5700 47/55LW6500 47/55LW9800
VESA	200 x 100	400 x 400
Standard screw	M4	M6
Number of screws	4	4
Wall mount bracket (optional)	LSW100B, LSW100BG	LSW400B, LSW400BG

CAUTION

- Disconnect the power first, and then move or install the TV. Otherwise electric shock may occur.
- If you install the TV on a ceiling or slanted wall, it may fall and result in severe injury. Use an authorized LG wall mount bracket and contact the local dealer or qualified personnel.
- Do not over tighten the screws as this may cause damage to the TV and void your warranty.
- Use the screws and wall mount bracket that meet the VESA standard. Any damages or injuries by misuse or using an improper accessory are not covered by the warranty.

NOTE

- Use the screws that are listed on the VESA standard screw specifications.
- The wall mount kit includes an installation manual and necessary parts.
- The wall mount bracket is optional. You can obtain additional accessories from your local dealer.
- The length of screws may differ depending on the wall mount. Make sure to use the proper length.
- For more information, refer to the manual supplied with the wall mount bracket.

Tidying cables

PZ950E series

1 Install the power cord holder and power cord.
- It will help prevent the power cable from being removed by accident.

2 Gather and bind the cables with the cable holder.

CAUTION

- Do not move the TV by holding the cable holder and power cord holder, as the cable holders may break, and injuries and damage to the TV may occur.

LV3700, LV5500, LW5700, LW6500, LW9800 series

1 Gather and bind the cables with the cable holder on the TV back cover.

or

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REMOTE CONTROL

The descriptions in this manual are based on the buttons on the remote control.
Please read this manual carefully and use the TV correctly.
To replace batteries, open the battery cover, replace batteries (1.5 V AAA) matching the ⊕ and ⊖ ends to the label inside the compartment, and close the battery cover.
To remove the batteries, perform the installation actions in reverse.

CAUTION

- Do not mix old and new batteries, as this may damage the remote control.

Make sure to point the remote control toward the remote control sensor on the TV.

⏻ (POWER)
Turns the TV on or off.

LIGHT (Depending on model)
Illuminates the remote control buttons.

ENERGY SAVING (See p.92)
Adjusts the brightness of the screen to reduce energy consumption.

AV MODE (See p.40)
Selects an AV mode.

INPUT (See p.40)
Changes the input source; Turns the TV on.

TV/RAD
Selects Radio, TV, Cable TV or DTV program.

Alphanumeric buttons
Enters letters and numbers.

LIST (See p.37)
Accesses the saved channel list.

Q.VIEW
Alternates between the two last channels selected (pressing repeatedly).

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VOL
Adjusts the volume level.

MARK
Selects a menu or option.
FAV (See p.37)
Accesses your favorite channel list.
CHAR/NUM
Switches between Letter and Number input modes.

RATIO (See p.39)
Resizes an image.

3D (for 3D TV) (See p.88)
Uses for viewing 3D video.

MUTE
Mutes all sounds.
DELETE
Deletes letters and numbers.

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

Premium
Accesses the Premium menus.

Home (See p.35)
Accesses the Home menu.

Q. MENU (See p.41)
Accesses the quick menu.
3D OPTION (for 3D TV)
Used for viewing 3D video.

Navigation buttons (up/down/left/right)
Scrolls through menus or options.
ENTER
Selects menus or options and confirms your input.

BACK
Returns to the previous level.

GUIDE
Displays the program event according to time scheduler.

EXIT
Clears all on-screen displays and returns to TV viewing.

Color buttons
These access special functions in some menus.

LIVE TV
Returns to the LIVE TV.

INFO
Views the information of the current program and screen.

SIMPLINK (See p.118)
Accesses the AV devices connected to the TV.
Opens the SIMPLINK menu.

Control buttons
Controls the Premium contents, Smart Share menus, Time Machine, or the SIMPLINK compatible devices (USB, SIMPLINK, or Time Machine).

FREEZE (Plasma)
Freezes the current frame (Not supported when using USB Mode and Simplink.)

REC
Adjusts Time machine mode.

RATIO (See p.39)
Resizes an image.

SUBTITLE
Recalls your preferred subtitle in digital mode.
Selects "Caption- on or off" in analog mode.

Magic Motion Remote Control Functions

LV3700, LV5500, LW5700, LW6500 series: Supports the Magic Motion remote control, which is sold separately. Refer to the Magic Motion Remote Control manual for operating instructions.

Please read this manual carefully and use the TV correctly.
When the message "Magic motion remote control battery is low. Change the battery." is displayed, replace the battery.
To replace batteries, open the battery cover, replace batteries (1.5 V AA) matching ⊕ and ⊖ ends to the label inside the compartment, and close the battery cover. Be sure to point the remote control at the remote control sensor on the TV.
To remove the batteries, perform the installation actions in reverse.

CAUTION

- Do not mix old and new batteries, as this may damage the remote control.

Make sure to point the remote control at the remote control sensor on the TV.

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Registering Magic Motion Remote Control

The Magic Motion Remote Control operates by pairing with your TV.
Register the Magic Motion Remote Control to use it.

How to register the Magic Motion Remote Control

To register the remote control, press the **ENTER** button on the remote control while aiming it at your TV.

How to Re-register the Magic Motion Remote Control after Registration Failure

Reset the remote control by pressing and holding both the **ENTER** and **MUTE** buttons for 5 seconds. (Once the reset is complete, the light on the Pointer blinks.) Then repeat the above procedure to register the remote control.

How to use Magic Motion Remote Control

1 Press **ENTER** button if there is no pointer on your TV screen. The pointer will then appear on the screen.
If the pointer has not been used for a certain period of time, it will disappear.

2 You can move the pointer by aiming the Pointer Receiver of the remote control at your TV then move it left, right, up or down.
If the pointer does not work properly after clicking the **ENTER** button, leave the remote control for 10 seconds then use it again.

Precautions to Take when Using the Magic Motion Remote Control

- Use the remote control within the maximum communication distance (10 m). Using the remote control beyond this distance, or with an object obstructing it, may cause a communication failure.
- A communication failure may occur due to nearby devices. Electrical devices such as a microwave oven or wireless LAN product may cause interference, as this will use the same bandwidth (2.4 GHz) as the Magic Motion Remote Control.
- The Magic Motion Remote Control may be damaged or may malfunction if it is dropped or receives a heavy impact.
- When playing a game using the Magic Motion Remote Control, hold it securely by wrapping its strap around your wrist and adjusting the length with the adjustable ring.
- Take care not to bump into nearby furniture or other people when using the Magic Motion Remote Control.
- Manufacturer and installer cannot provide service related to human safety as the applicable wireless device has possibility of electric wave interference.
- It is recommended that an Access Point (AP) be located more than 1 m away from the TV. If the AP is installed closer than 1 m, the magic motion remote control may not perform as expected due to frequency interference.

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WATCHING TV

Connecting to an antenna or cable

Connect an antenna or cable to watch TV while referring to the following. The illustrations may differ from the actual items and a RF cable is optional.

Connecting an antenna or basic cable

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

NOTE

- To improve the picture quality in a poor signal area, please purchase a signal amplifier and install properly.
- Use a signal splitter to use more than 2 TVs.
- If the antenna is not installed properly, contact your dealer for assistance.

CAUTION

- Make sure not to bend the copper wire of the RF cable.

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

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Turning the TV on for the first time

When you turn the TV on for the first time, the Factory Reset screen appears. Select a language and customize the basic settings.

1 Connect the power cord to a power outlet.

2 In Standby mode, press the power button on the remote control to turn the TV on.
The Factory Reset screen appears if you turn the TV on for the first time.

NOTE
- You can also access **Factory Reset** by accessing **OPTION** in the Home menu - SETUP.

3 Follow the on-screen instructions to customize your TV settings according to your preferences.

Language	Selects a language to display.
⇩	
Mode Setting	Selects **Home Use** for the home environment.
⇩	
Power Indicator	Sets the standby light. (For LED LCD TV)
⇩	
Network Setting	Sets your network to enable network-related feature on the TV. (For LW9800 series)
⇩	
Auto Tuning	Scans and saves available channels automatically.

NOTE
- To display images in the best quality for your home environment, select **Home Use**.
- **Store Demo** is suitable for the retail environment.
- If you select **Store Demo**, the any customized settings will switch back to the default settings of **Store Demo** in 5 minutes.
- Power Indicator feature is disabled in Store Demo mode.

4 When the basic settings are complete, press **ENTER**.

NOTE
- If you do not complete the Factory Reset, it will appear whenever the TV turns on.
- Disconnect the power cord from the power outlet when you do not use the TV for a long period of time.

5 To turn the TV off, press the power button on the remote control.

Watching TV

1 In Standby mode, press the power button on the remote control to turn the TV on.

2 Press **INPUT** and select **Antenna** or **Cable**.

3 Control the TV using the following buttons while you are watching TV.

Button	Description
CH (^, v)	Scrolls through saved channels.
LIST	Selects a channel on the saved or recent watched channel list.
0 - 9	Selects a channel by entering numbers.
VOL (+, -)	Adjusts the volume level.
MUTE	Mutes all sounds.
AV MODE[1]	Selects an AV mode (See p.40).
Q.MENU	Accesses the quick menus (See p.41).
Q.VIEW	Alternates between the last two channels selected.
RATIO	Resizes an image (See p.39).
FREEZE (Plasma)	Freezes the current frame while you are watching TV.

1 Each **AV Mode** has the optimized image and sound settings. If you select **Off**, the image and sound settings will be restored to the previously customized settings.

4 To turn the TV off, press the power button on the remote control.
The TV switches to Standby mode.

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Accessing Home Menu

1 Press **Home** to access the Home menu.

2 Press the Navigation buttons to scroll to one of the following menus and press **ENTER**.

3 Press the Navigation buttons to scroll to the setting or option you want and press **ENTER**.

4 When you are finished, press **EXIT**.

Option	Description
❶	Current Date, Time
❷	Channel program info
❸	Function card: You can enjoy various content files by selecting each card.
❹	Function card position
❺	Sign In
❻	Exit
❼	Current watching channel screen
❽	INPUT, SETUP, GUIDE menu.
❾	Launcher bar

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Managing channels

Setting up channels

Storing channels

To store channels automatically,

1 Press **Home** to access the Home menu.

2 Press the Navigation buttons to scroll to **SETUP** and press **ENTER**.

3 Press the Navigation buttons to scroll to **SETUP** and press **ENTER**.

4 Press the Navigation buttons to scroll to **Auto Tuning** and press **ENTER**.

5 Select **Start** to start automatic tuning.
The TV scans and saves available channels automatically.

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

To store channels manually,

1 Press **Home** to access the Home menu.

2 Press the Navigation buttons to scroll to **SETUP** and press **ENTER**.

3 Press the Navigation buttons to scroll to **SETUP** and press **ENTER**.

4 Press the Navigation buttons to scroll to **Manual Tuning** and press **ENTER**.

5 Scroll through the channel types, and then update, add or delete channels.

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

NOTE

- If the TV scans a blocked channel, you will be prompted to enter your password to keep the channel scanned.
- You can store up to 1200 channels. The number of channels that you can store differs depending on the broadcasting signal environment.
- The channels are stored in the order of DTV, TV, and Cable TV.

Editing your channel list

1 Press **Home** to access the Home menu.

2 Press the Navigation buttons to scroll to **SETUP** and press **ENTER**.

3 Press the Navigation buttons to scroll to **SETUP** and press **ENTER**.

4 Press the Navigation buttons to scroll to **Channel Edit** and press **ENTER**.

5 Edit channels using the following buttons.

Button	Description	
^	Highlight the channel type (DTV, Radio, TV, Cable TV).	
^, v, <, >	Scrolls through channel types or channels.	
ENTER	Edits channels.	
	Watch	Selects the highlighted channel to view.
	Set as Favorite	Registers or cancels the current channel in favorite channel list.
	Add/Delete	Adds or deletes a channel. The deleted channel displays in blue.
	Channel Number Edit (For DTV or Radio)	Selects your desired channel number.
	Block	Blocks or unblocks a channel.
CH (^, v)	Moves to the previous or next page.	
TV/RAD	Changes channel mode.	
Red button	Selects your desired favorite channel group.	

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

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Selecting a channel on the channel list

1 Press **LIST** to access the channel list.

Button	Description
<, >	Selects Channel list or Recent channel list.
^, v	Scrolls through channel.
ENTER	Selects the highlighted channel to view.
CH (^, v)	Moves to the previous or next page.
Red button	Edits Channel.
TV/RAD	Changes channel mode.
FAV	Moves to the favorite channel list.

2 When you are finished, press **EXIT**.
When you return to the previous menu, press **BACK**.

NOTE

- If you select the blocked channel, you will be prompted to enter your password.

Using favorite channels

Add the channels that you watch frequently to the favorite list.

1 Select a channel to add to the favorite list.

2 Press **FAV**.

Button	Description
<, >	Selects a desired favorite channel group.
CH (^, v)	Moves to the previous or next page
Red button	Moves to the **Channel Edit**.
Green button	Registers or cancels the current channel.
TV/RAD	Changes channel mode.
FAV	Moves to the **Channel List**.

3 When you are finished, press **EXIT**.

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Checking current program info

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

Icon		Description
Dolby Digital	D	The program contains a Dolby Digital audio signal in TV and HDMI input sources.
Dolby Digital Plus	D+	The program contains a Dolby Digital Plus audio signal in TV and HDMI input sources.
Caption	CC	The program contains one or more language caption services. You can select a closed caption you want by using the quick menu.
Aspect ratio	4:3 16:9	The original aspect ratio of the video is 4:3. The original aspect ratio of the video is 16:9 (wide).
Resolution	480i 480p 576i 720p 1080i 1080p	The video resolution is 720 x 480i. The video resolution is 720 x 480p. The video resolution is 720 x 576i. The video resolution is 1280 x 720p. The video resolution is 1920 x 1080i. The video resolution is 1920 x 1080p.

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Using additional options

Adjusting aspect ratio

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

NOTE

- You can also change the image size by pressing **Q. MENU** or accessing **Aspect Ratio** in the **PICTURE** menu.
- The available ratio varies depending on the input source.
  - The input sources: HDMI-PC and RGB-PC support 4:3 and 16:9.

- **16:9**: Resizes images to fit the screen width.

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

NOTE

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

- **Original**: When your TV receives a wide screen signal it will automatically change to the picture format broadcast.

- **Full Wide**: When TV receives the wide screen signal,it will lead you to adjust the picture horizontally or vertically, in a linear proportion,to fill the entire screen fully.

  4:3 and 14:9 video is supported in full screen with-out any video distortion through DTV input.

- **4:3**: Resizes imagesto the previous standard 4:3.

- **14:9**: You can view a picture format of 14:9 or a general TV programme in the 14:9 mode. The 14:9 screen is viewed in the same way as in 4:3, but is moved to the up and down.

- **Cinema Zoom**: Formats an image to the cinemascope ratio, 2.35:1.
  - To change the ratio of the cinema zoom, press **<** or **>** and its range is from 1 to 16.
  - To move the zoom focus up or down, press **∧** or **∨**.

NOTE

- If you enlarge or reduce an image, the image may be distorted.

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Changing AV modes

Each **AV mode** has optimized image and sound settings.
Press **AV MODE** repeatedly to select an appropriate mode.

Mode	Description
Off	Changes to the previously customized settings
Cinema or THX Cinema	Use the optimized image and sound settings for the cinematic look
Sport (Plasma)	Use the optimized image and sound settings for dynamic action sports.
Game	Use the optimized image and sound settings for fast gaming. When playing a video game using PlayStation or Xbox, it is recommended to use the Game mode. When in Game mode, functions related to picture quality will be optimized for playing games.

Using the input list

Selecting an input source

1 Press **INPUT** to access the input sources.
- The connected device displays on each input source.

NOTE
- You can also access the input source list by selecting **INPUT** in the **Home** menu.

2 Press the Navigation buttons to scroll to one of the input sources and press **ENTER**.

Input source	Description
Antenna, Cable	Watch TV over the air, cable, and digital broadcast.
USB	Play media files from a thumb drive.
NETWORK	Play media files from your home network.
AV	Watch video from a VCR or other external devices.
Component	Watch video from a DVD or other external devices, or through a digital set-top box.
RGB	Use the TV as a computer monitor.
HDMI	Watch video from a HTS or other high definition devices.

The disconnected input sources will be gray.
- To add an input label, press the Green button. You can easily identify a device connected to each input source.
- If you connect a new external device to the TV, a pop-up window appears. Select **Yes** on the pop-up window to select an input source.
- To access the SIMPLINK, press the Red button. If you select "SIMPLINK and On", the pop-up window for the HDMI input will not display.

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Adding an Input label

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

1 Press **INPUT** to access the input sources.

2 Press the Green button.

3 Press the Navigation buttons to scroll to one of the input sources.

4 Press the Navigation buttons to scroll to one of the input labels.

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

Using the quick menu

Customize frequently used menus.

1 Press **Q. MENU** to access the quick menus.

2 Press the Navigation buttons to scroll through the following menus and press **ENTER**.

Menu (Depending on model)	Description
Aspect Ratio	Changes the image size.
Picture Mode	Changes the image mode.
Sound Mode	Changes the sound mode.
Sleep Timer	Sets the length of time until the TV to turns off.
Subtitle Language	Recalls your preferred subtitle in digital mode.
Caption	Activates or deactivate the subtitles (Analog signal).
Audio Language	Changes the audio language (Digital signal)
Audio	Changes the MTS sound (Analog signal)
Energy Saving	Reduces the power consumption by adjusting the screen brightness.
AV Mode	Sets the optimized image and sound settings.
Del/Add	Edits the channels to add or delete the channel.
USB Device	Eject a USB device. The menu is displayed only when the USB device is connected.

NOTE

- The available menus and options may differ from the input source or product model that you are using.

3 Press the Navigation buttons to scroll to the option you want.

4 When you are finished, press **Q. MENU**.

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ENTERTAINMENT

Network Connection

Connecting to a wired network

Connect the TV to a local area network (LAN) via the LAN port as shown in the following illustration and set up the network settings.
If wired and wireless networks are both available, wired is the preferred method.
After making a physical connection, a small number of home networks may require the TV network settings to be adjusted. For most home networks, the TV will connect to automatically without any adjustments.
For detail information, contact your internet provider or router manual.

i.e)

CAUTION

- Do not connect a modular phone cable to the LAN port.
- Since there are various connection methods, please follow the specifications of your telecommunication carrier or internet service provider.
- After connecting the LAN port, use the Premium or LG Apps menu.

To set up the network settings: (Even if your TV has already connected automatically, running setup again will not harm anything)

1 Press **Home** to access the Home menu.

2 Press the Navigation buttons to scroll to **SETUP** and press **ENTER**.

3 Press the Navigation buttons to scroll to **NETWORK** and press **ENTER**.

4 Press the Navigation buttons to select **Network Setting** and press **ENTER**.

5 If wired and wireless are simultaneously connected, press the Navigation buttons to select **Wired** and press **ENTER**.

6 If you have already set the Network Setting, select **Resetting**. The new connection settings will reset the current network settings.

7 Select **IP Auto Setting** or **IP Manual Setting**.
- If selecting **IP Manual Setting**, press the Navigation and Number buttons. IP addresses will need to be input manually.
- **IP Auto Setting**: Select this if there is a DHCP server (Router) on the local area network (LAN) via wired connection, the TV will automatically be allocated an IP address. If you're using a broadband router or broadband modem that has a DHCP (Dynamic Host Configuration Protocol) server function. The IP address will automatically be determined.
- **IP Manual Setting**: Select if there is no DHCP server on the network or you want to set the IP address manually.

8 When you are finished, press **EXIT**.

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NOTE

- If you want to access the Internet directly on your TV, the broadband internet connection should always be on.
- If you cannot access the Internet, check the network conditions from a PC on your network.
- When you use **Network Setting**, check the LAN cable or check if DHCP in the router is turned on.
- If you do not complete the network settings, the network may not work properly.

Connecting to a wireless network

The LG Wireless LAN for Broadband/DLNA Adaptor allows the TV to connect to a wireless LAN network.
The network configuration and connection method may vary depending on the equipment in use and the network environment. Refer to the setup instructions supplied with your access point or wireless router for detailed connection steps and network settings.
Setting up the AP (Access Point) or the wireless router is required before connecting the TV to the network. The easiest method is the WPS button method (Third method in this section).

(LW9800 series: Built-in the Wi-Fi Module, Unnecessary **Wireless LAN for Broadband/DLNA adaptor** setup)

NOTE

- For enjoying pictures, music, or video stored on a PC using the router, a wired connection is recommended.
- When the wireless port of the router is used, there may be restrictions on some functions.
- It is recommended that an Access Point (AP) be located more than 1 m away from the TV. If the AP is installed closer than 1 m, the magic motion remote control may not perform as expected due to frequency interference.

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To set up the network settings,

1 Press **Home** to access the Home menu.

2 Press the Navigation buttons to scroll to **SETUP** and press **ENTER**.

3 Press the Navigation buttons to scroll to **NETWORK** and press **ENTER**.

4 Press the Navigation buttons to select **Network Setting** and press **ENTER**.

5 Press the Navigation buttons to select **Wireless** and press **ENTER**.

6 If you already set Network Setting, select **Resetting** and press **ENTER**.
The new connection settings resets the current network settings.

7 Press the Navigation buttons to select **Setting from the AP list** and press **ENTER**.
- Scan the all available AP (Access Point) or wireless routers within range and display them as a list.

8 Press the Navigation buttons to select an AP (Access Point) or wireless router on the list. (If your AP is secured, you will prompted for the key.) And press **ENTER**.

9 Press the Number buttons to Input the security key of AP and press **ENTER**.

When a security code is already set

PIN (Personal Identification Number)

If your router is set to use a PIN, use the following instructions.

1 Repeat step 1-7 on "Connecting to a wireless network"

2 Press the Red button to connect the access point with **PIN** mode.

3 You can see the Network ID and Security Key on your TV screen.
Enter the PIN number to your device.
PIN number is the unique 8 digit number of the dongle.

4 Press **ENTER** to select **Connect**.

5 Repeat step 6-7 on "Connecting to a wired network".

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WPS (Wi-Fi Protected Setup)

If your router or AP has a WPS button, it is the easiest connection method. You simply press the button on the router and then select the WPS on the TV within 120 seconds.

1 Repeat step 1-7 on "Connecting to a wireless network"

2 Press the Navigation buttons to select the **Simple setting (WPS-button mode)**.

3 Press the WPS button on your router.

4 Go back to the TV and select **Connect**.

5 Repeat step 6-7 on "Connecting to a wired network".

Ad-hoc Mode

Ad-hoc mode allows the TV to use a wireless to connect to a computer without using a router or access point.

1 Repeat step 1-5 on "Connecting to a wireless network"

2 Press the Navigation buttons to select **Setting Ad-hoc network** and press **ENTER**.

3 Press the Navigation buttons to select **Enter** and press **ENTER**.

4 Press **ENTER** to select **Connect** to connect Ad-hoc network.
- You can see the Network ID and Security Key on your TV screen.
- Enter this Network ID and Security Key to your device.
- When needed, you can change the setting information using the Red button.

NOTE

When searching for wireless networks on your PC using ad-hoc, the TV is named LGTV10.
- LGTV10 that appears in the list. (Select the same name as the network ID that appears on your TV screen.)

5 Press the Navigation buttons to type in an IP address and press **ENTER**.

Option	Description
PC Setting	• Internet Protocol(TCP/IP) of PC needs to be set manually. IP address, Subnet Mask, and default Gateway can be set with your own discretion. » e.g.) IP address: 192.168.0.1 / Subnet Mask: 255.255.255.0 / default Gateway: 192.168.0.10
TV Setting	• Verify IP address and gateway of PC. Input Gateway address of PC to IP Address, and IP Address of PC to Gateway, and select Enter. » e.g.) IP address: 192.168.0.10 / Subnet Mask: 255.255.255.0 / default Gateway: 192.168.0.1

6 Press the Navigation buttons to select **Close** after Network setting is completed.

7 Press the **ENTER**.

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Tips for Network setting

- Use a standard LAN cable with this TV. Cat5 or better with a RJ45 connector.
- Many network connection problems during set up can often be fixed by re-setting the router or modem. After connecting the player to the home network, quickly power off and/or disconnect the power cable of the home network router or cable modem. Then power on and/or connect the power cable again.
- Depending on the internet service provider (ISP), the number of devices that can receive internet service may be limited by the applicable terms of service. For details, contact your ISP.
- LG is not responsible for any malfunction of the TV and/or the internet connection feature due to communication errors/malfunctions associated with your broadband internet connection, or other connected equipment.
- LG is not responsible for problems within your internet connection.
- Some content available through the network connection may not be compatible with the TV. If you have questions about such content, please contact the producer of the content.
- You may experience undesired results if the network connection speed does not meet the requirements of the content being accessed.
- Some internet connection operations may not be possible due to certain restrictions set by the Internet service provider (ISP) supplying your broadband Internet connection.
- Any fees charged by an ISP including, without limitation, connection charges are your responsibility.
- A 10 Base-T or 100 Base-TX LAN port is required when using a wired connection to this TV. If your internet service does not allow for such a connection, you will not be able to connect the TV.
- A DSL modem is required to use DSL service and a cable modem is required to use cable modem service. Depending on the access method of and subscriber agreement with your ISP, you may not be able to use the internet connection feature contained in this TV or you may be limited to the number of devices you can connect at the same time. (If your ISP limits sub-scription to one device, this TV may not be allowed to connect when a PC is already connected.)
- The use of a "Router" may not be allowed or its usage may be limited depending on the policies and restrictions of your ISP. For details, contact your ISP directly.
- The wireless network operates at 2.4 GHz radio frequencies that are also used by other household devices such as cordless telephone, Bluetooth® devices, microwave oven, and can be affected by interference from them.It can be interrupted by the device using 5 Ghz radio frequencies. It is same device with LG wireless media box, cordless telephone, other Wi-Fi device.
- It may decrease the service speed using Wireless network by surrounding wireless condition.
- Turn off all unused network equipment in your local home network. Some devices may generate network traffic.
- In some instances, placing the access point or wireless router higher up away from the floor may improve the reception.
- The reception quality over wireless depends on many factors such as type of the access point, distance between the TV and access point, and the location of the TV.
- To connect wireless AP, an AP that supports the wireless connection is necessary, and the wireless connection function of the AP needs to be activated. Please enquire to the AP supplier for the possibility of AP wireless connections.
- Please verify the security settings of AP SSID for wireless AP connection, and enquire to the AP supplier for the AP SSID security settings.
- The TV can become slower or malfunction with wrong settings of network equipments (wired/wireless router, hub, etc). Please install correctly by referring to the manual of the equipment, and set the network.
- When AP is set to include 802.11 n, and if Encryption is designated as WEP(64/128bit) or WPA(TKIP/AES), the connection may not be possible. There may be different connection methods according to the AP manufacturers.

Network Status

1 Press **Home** to access the Home menu.

2 Press the Navigation buttons to scroll to **SETUP** and press **ENTER**.

3 Press the Navigation buttons to scroll to **NETWORK** and press **ENTER**.

4 Press the Navigation buttons to select **Network Status**.

5 Press **ENTER** to check the network status.

Option	Description
Setting	Return to the network setting menu or wireless network setting type menu.
Test	Test the current network status after setting the network.
Close	Return to the previous menu.

Premium Account Function

LG's Premium technology allows you to access a variety of online services or content directly on your TV. Your TV offers instant streaming of movies, weather, videos, and photo album services with a Premium account and an Internet connection.
Enjoy entertainment including not only entertainment content, but also up-to-the minute news, weather updates, photo management, and more by simply using the TV's remote control without a separate PC.

1 Press **Premium** to access the Premium option.

2 Press the Navigation buttons to scroll to the content you want and press **ENTER**.

Option	Description
❶	Moves to the weather setting screen.
❷	Sign into the premium service.
❸	Moves to the previous menu screen.
❹	Returns to TV viewing.
❺	Selects your desired online service. • If a service requires you to log in, you must first sign up for the service on your computer and then log into the service on the TV.
❻	Launcher bar

3 Enjoy the premium features.

Notice

- These services are provided by separate content providers.
- Please visit the content providers web site for specific information on their service.
- Premium menu can differ by country.
- Note that content may be updated automatically depending on the service provider, so the content layout or operation method may change without notice. Please refer to the help menu on the screen.
- All information, data, documents, communications, downloads, files, text, images, photographs, graphics, videos, webcasts, publications, tools, resources, software, code, programs, applets, applications, products and other content ("Content") and all services and offerings ("Services") provided or made available by or through any third party (each a "Service Provider") is the sole responsibility of the Service Provider from whom it originated.
- The availability of and access to Content and Services furnished by the Service Provider through the LGE Device are subject to change at any time, without prior notice, including, but not limited to the suspension, removal or cessation of all or any part of the Content or Services.
- Should you have any inquiry or problem related to the Content or Services, you may refer to the Service Provider's website for the most up-to-date information. LGE is neither responsible nor liable for customer service related to the Content and Services. Any question or request for service relating to the Content or Services should be made directly to the respective Content and Service Providers.
- Please note that LGE is not responsible for any Content or Services provided by the Service Provider or any changes to, removal of, or cessation of such Content or Services and does not warrant or guaranty the availability of or access to such Content or Services.

- Some content may be harmful to minors depending on the service provider. Parental guidance is necessary.
- The service may be interrupted if the Internet connection is unstable. Please check the connection status if you experience this problem.
- The videos list searched from the TV may different with the list searched from a web browser on PC.
- The playback of videos may pause, stop, or buffer depending on your broadband speed.
- For service that requires log in, join the applicable service on the website using a PC and log in through the TV to enjoy various additional functions.
- For Plasma TV: If there is no user action 2 minutes following freezing image or video on screen, the screensaver will activate itself preventing a fixed image remaining on screen.

LG Apps. function

This feature is not available for all country.
Additional applications can be downloaded from the LG App Store.
These functions may be not available for a certain period of time depending on country or product model. In such cases, the buttons may be disabled.
They are enabled when the services are available.

	Option	Description
❶	Sign In, Sign out	Sign in or sign out to the premium service.
❷	Exit	Returns to TV viewing.
❸	LG Apps	Moves to the LG Apps.
❹		Moves to the LG Apps you want directly.
❺	Search	These functions may be not available for a certain period of time depending on country or product model. In such cases, the buttons may be disabled. They are enabled when the services are available.
❻	Web Browser	
❼	Media Link	
❽	Quick Apps.	Stores the most frequently used apps among all downloads. To change the list of Quick Apps, see "Using My Apps".
❾	My Apps.	Moves to My Apps. You can browse all apps installed, change the list of Quick Apps, and select and play the app you want.

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Registration LG Apps.

1 Press **Home** to access the Home menu.

2 Press **Red** button to register.
- You can only register as a free member from your TV.

3 Create your ID and password.
Press the Navigation buttons to select alphabet and number and select **OK**.

4 The registration is completed.

NOTE
- If you wish to become a paid member or change your information, please use your PC and visit *http://www.lgappstv.com*.

Sign in with LG Apps. account

To enjoy the LG Apps with your account, you need sign in with the LG Apps account.

1 Press **Home** to access the Home menu.

2 Press **Red** button to sign in.
It displays the keyboard menu for entering ID and password.
- If you are not a member, press **Red** button again. You can only register as a free member from your TV.

3 Press the Navigation buttons to scroll to the alphabet or number and press **ENTER**.
- If you check "Auto Sign In", you are automatically logged in whenever you turn on TV.

4 Enjoy the LG Apps.
You can enjoy Premium service, LG Apps, My Apps and much more.

NOTE
- You can download a paid app on up to five TVs.

ID Management

1 After sign in, press **Red** button again.
A pop-up window will appear.

2 Press the Navigation buttons to scroll to the desired menu option and press **ENTER**.

3 Manage the ID by using following menu.

Option	Description
Account Setting	Checks basic information, apps you purchased and apps installed on your TV.
Change User	Changes your account.
Sign Out	Sign out the premium service.

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Using LG Apps

1 Press **Home** to access the Home menu.

2 Sign in on your TV.

3 Press the Navigation buttons to scroll to the LG Apps and press **ENTER**.

4 Edit the Apps by using following menu.

Option		Description
❶	**Sign in/out**	Sign in or out to use the LG Apps.
❷	**Search**	Search the LG Apps.
❸	**My Apps.**	Move to My Apps.
❹	**Back**	Move to the previous screen.
❺	**Exit**	Exit the LG Apps.
❻	**Apps Sorting**	• Hot: Most downloaded apps in the past 7 days • New: Most recently released apps • Top Paid: Most downloaded paid apps • Top Free: Most downloaded free apps • All: Alphabetical order • Moves to the previous or next page using CH (^, v) button.
❼	**Apps Category**	Shows the LG Apps category (All, Game, Entertainment, Life, Education, News)
❽	**Live TV**	Watches the current channel.

Purchasing and Installing Apps.

Log in first to purchase apps.

1 Press the Navigation buttons to select Apps you want and press **ENTER**.
You can see the information of the App.

2 Press **Purchase** to buy a App.

Option		Description
❶	**Sign in/out**	Sign in or out to use the LG Apps.
❷	**My Apps.**	Move to My Apps.
❸	**Back**	Move to the previous screen.
❹	**App description**	Shows the description of the current Apps.
❺	**Fee**	Shows the fee of the current app.
❻	**Install**	Install or purchase the App. You can purchase an app on either your PC or TV, but it can be installed and played only on the TV. • If you want to purchase a paid app, you need to sign up as a paid member on www.lgappstv.com. • If the available space of your TV is not enough, you can download apps in the USB storage device by connecting it to the USB IN 2 port. • You can play, delete or move the apps stored in the USB storage device on the My Apps screen.
❼	**Rate this App**	Rate the app you purchased with stars.
❽	**App info.**	Shows the creator/program version/update date/volume/ rating of the current Apps.

NOTE

- To store apps in the USB storage device, make sure that it is connected to the USB IN 2/USB Apps port.
- Up to 1000 apps can be stored as USB apps.
- The USB storage device containing apps cannot be used for storing other types of data.

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Using My Apps

1 Enter the LG Apps after sign in.

2 Press the Navigation buttons to scroll to **My Apps.** and press **ENTER**.

Option	Description
❶	Shows the amount of used and available memories.
❷	Current page number/total number of pages of My Apps.
❸	Shows the downloaded apps. Moves to the previous or next page using CH (^, v) button.
❹	Moves the LG Apps.
❺	Quick Apps.
❻	Sign In the LG Apps. After sign in, manage the ID option (Account Setting, Change User, Sign Out).
❼	Edit the My Apps.
❽	Exit the My Apps.
❾	Move to the Home menu.
❿	Delete the Apps.

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Legal Notice

IMPORTANT NOTICE RELATING TO NETWORK SERVICE

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Web Browser Function

(This feature is not available for all country.)
The Web Browser allows you to view Web pages on your TV.

More information about the Web Browser

- The web browser on this device supports Flash 8 and earlier.
- The web browser on this device does not support platform-dependent technologies such as ActiveX.
- The web browser on this device only supports preinstalled plug-ins.
- The web browser on this device may not support media formats other than the following: JPEG / PNG / GIF / WMV (ASF) / WMA / MP3 / MP4
- Some Web pages may exceed the memory allotment of the Web Browser. The Web Browser will close when this happens.
- The web browser on this device uses a single built-in font. Some text may not be displayed as intended.
- The web browser on this device does not support downloading of files or fonts.
- The web browser on this device is a TV browser. It may work differently to PC browsers.

Using Web Browser

1 Connect to the network.

2 Press **Home** to access the Home menu.

3 Press the Navigation buttons to scroll to the **Web Browser** and press **ENTER**.

4 Press the Navigation buttons to scroll to the **URL** and press **ENTER**.

5 Press the Navigation buttons to scroll to the desired the URL and press **ENTER**.

6 You can browse websites on your TV.

Select the browser input window to display the keyboard at the bottom of the screen.

Option	Description
❶	Move to the previous page.
❷	Move to the Favorites screen.
❸	Zoom the screen in or out.
❹	Add the current web page to Favorites.
❺	Move to the search screen.
❻	Move to the previous/next page in the list of recently viewed web pages. You can change the URL address to move to other websites. You can delete the list and cookies of recently viewed web pages.
❼	Exit the web browser.

Browsing Favorite Websites

1 Connect to the network.

2 Press **Home** to access the Home menu.

3 Press the Navigation buttons to scroll to the **Web Browser** and press **ENTER**.

4 Press the Navigation buttons to scroll to the **Favorites** and press **ENTER**.

- By adding frequently visited websites to Favorites, you can browse them easily.

Option	Description
❶	Browse a website by directly entering the URL address.
❷	Select a website in Favorites.
❸	View the list of recently viewed web pages.
❹	Select a site to browse.
❺	Edit Favorites. • Move: Change the order in Favorites. • Rename: Rename the sites added to Favorites. • Delete: Remove the sites from Favorites.
❻	Move to the previous screen.
❼	Exit the web browser.

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Browsing Websites by Directly Entering Address

1 Connect to the network.

2 Press **Home** to access the Home menu.

3 Press the Navigation buttons to scroll to the **Web Browser** and press **ENTER**.

4 Press the Navigation buttons to scroll to the **URL** and press **ENTER**.

- You can browse a website by directly entering the URL address.

Option	Description
❶	Browse a website by directly entering the URL address.
❷	Select a website in Favorites.
❸	View the list of recently viewed web pages.
❹	Enter the URL address. If the address entered is similar to any of the sites previously visited, a drop-down list will be displayed.
❺	Use the keyboard to enter the address. Select characters to enter.
❻	Select the keyboard language.
❼	Change the keyboard.
❽	Clear the similar addresses appearing below the address input field.
❾	Move to the previous page.
❿	Exit the web browser.
⓫	Hide the keyboard. Select the address input field to display the keyboard again.
⓬	Move the cursor left or right.
⓭	Delete the text before the cursor, one character at a time.
⓮	Press this after entering the address to go to the website.

Viewing Visited Website List

1 Connect to the network.

2 Press **Home** to access the Home menu.

3 Press the Navigation buttons to scroll to the **Web Browser** and press **ENTER**.

4 Press the Navigation buttons to scroll to the history and press **ENTER**.

- You can view the addresses of the websites you visited previously. Select an item to move to the page.

Option	Description
❶	Browse a website by directly entering the URL address.
❷	Select a website in Favorites.
❸	View the list of recently viewed web pages.
❹	Display a list of recently visited pages. Select an item to move to the page.
❺	Clear the visited website list.
❻	Move to the previous screen.
❼	Exit the web browser.

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Smart Share Function

Connecting USB storage devices

Connect USB storage devices such as a USB flash drive or external hard to the TV and use multimedia features (See "Browsing files"). Connect a USB flash drive or USB memory card reader to the TV as shown in the following illustration.

i.e)

To disconnect a USB storage device, make sure to end the connection properly to prevent damages to the TV or files.

1 Press **Q.MENU** to access the quick menus.

2 Press the Navigation buttons to scroll to **USB Device** and press **ENTER**.

3 Disconnect the USB storage device only when the message says that it is safe to remove.

CAUTION

- Do not turn the TV off or remove a USB storage device while the USB storage device is connected to the TV, as this could result in loss of files or damage to the USB storage device.
- Back up your files saved on a USB storage device frequently, as you may lose or damage the files and this may be not covered by the warranty.

Tips for using USB storage devices

- The TV recognizes only a USB storage device.
- If you connect a USB storage device to the TV through a USB hub, your TV may not recognize the USB storage device.
- The TV may not recognize a USB storage device that requires a special driver.
- The recognition speed of a USB storage device may differ depending on the device.
- Only use a USB storage device which has normal music or image files.
- Use only USB storage devices that are formatted as a FAT 32 or NTFS file system.
- You may need to connect a USB storage device to an external power supply with a power adapter.
- If the TV does not recognize a connected USB storage device, replace the cable and try again. Do not use an excessively long cable.
- The TV does not support some USB storage devices properly.
- You can use a multi-partition (up to 4) USB storage device.
- You can use up to 4 USB storage devices at a time by using a USB multi-card reader.
- The file alignment method of a USB storage device is similar to the one of Window XP.
- You cannot create or delete a folder saved in a USB storage device directly on the TV.
- The number of characters for a file name is up to 100 English characters.
- Up to 1000 including folders and files can be recognized.
- If there are too many folders and files in one folder, it may not operate properly.
- The recommended capacity for a USB external hard disk is 1 TB or less and for a USB storage device is 32 GB or less.
- If a USB external hard disk with the Energy Saving feature does not work, turn the USB external hard disk off and on again to make it work properly. For more information, refer to the user manual of the USB external hard disk.
- USB storage devices below USB 2.0 are supported as well. But they may not work properly in the movie list.
- The electrostatic can cause USB device's malfunction. In this case, USB Device has to be plugged again.

Connecting DLNA DMP (Digital Living Network Alliance, Digital Media Player)

This TV can display and play many types of movie, photo and music files from your DLNA server and has been certified by DLNA.
The Digital Living Network Alliance (DLNA) is a cross-industry organization of consumer electronics, computing industry and mobile device companies. Digital Living provides consumers with easy sharing of digital media through a wired or wireless network in the home.
The DLNA certification logo makes it easy to find products that comply with the DLNA Interoperability Guidelines. This unit complies with DLNA Interoperability Guidelines v1.5. When a PC running DLNA server software or other DLNA compatible device is connected to this TV, some setting changes of software or other devices may be required. Please refer to the operating instructions for the software or device for more information.
Please refer to "Smart Share Function" for additional information on supported file types and other instructions.

NOTE

- The supplied Nero MediaHome 4 Essentials CD-ROM is a customized software edition only for sharing files and folders to this TV.
- The supplied Nero MediaHome 4 Essentials software does not support following functions: Transcoding, Remote UI, TV control, Internet services and Apple iTunes
- This manual explains operations with the English version of Nero MediaHome 4 Essentials as examples. Follow the explanation referring to the actual operations of your language version.
- If there are too many folders and files in one folder, it may not operate properly.
- For the DLNA option, use the Nero MediaHome program that is provided with the TV. However, we cannot guarantee that third party program will work perfectly.
- You can select a channel while viewing the small preview channel list on your TV screen.
- Check your network settings when the DLNA option does not work properly.
- If there is an abnormal operation or an error occurs in Nero Media Home, the DLNA option may not work properly. In this case, exit Nero Media Home and restart the program. You can download the latest version of Nero Media Home by clicking the question mark at the bottom-left of the program.
- When the network is unstable, the device may be slower or may need to load during playback.
- When playing a video in DLNA mode, the Multi Audio and Closed Caption features are not supported.
- When selecting Full Screen in DLNA mode, the ratio of the outputted screen may differ from the original.
- When more than one TV is connected to a single server in DLNA mode, a file may not play properly, depending on the server performance.
- If the play time information is not provided by the server, it is displayed as “- -.”

Installing Nero MediaHome 4 Essentials

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

Computer requirements for Nero MediaHome 4 Essentials

- Windows® XP (Service Pack 2 or higher), Windows Vista® (no Service Pack required), Windows® XP Media Center Edition 2005 (Service Pack 2 or higher), Windows Server® 2003 (Service Pack 1 or higher)
- Windows® 7 Home Premium, Professional, Enterprise or Ultimate (32 and 64-bit)
- Windows Vista® 64-bit edition (application runs in 32-bit mode)
- Windows® 7 64-bit edition (application runs in 32-bit mode)
- Hard drive space: 200 MB hard drive space for a typical installation of Nero MediaHome stand-alone
- 1.2 GHz Intel® Pentium® III or AMD Sempron™ 2200+ processors
- Memory: 256 MB RAM
- Graphics card with at least 32 MB video memory, minimum resolution of 800 x 600 pixels, and 16-bit color settings
- Windows® Internet Explorer® 6.0 or higher
- DirectX® 9.0c revision 30 (August 2006) or higher
- Network environment: 100 Mb Ethernet, WLAN (IEEE 802.11g), or faster

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

Sharing files and folders

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

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

NOTE

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

Playing Shared Media

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

1 Press **Home** to access the Home menu.

2 Press the Navigation buttons to scroll to **Smart Share** and press **ENTER**.

3 Press the Navigation buttons to scroll to the device you want and press **ENTER**.

4 Press the Navigation buttons to select **DLNA**. Depending on the media server, this TV may need to get the permission from the server.

Tips for using DLNA DMP

- To play the file on the media server, the TV and the media server must be connected to the same access point.
- File requirements and playback functions on the Smart Share may differ depending on the media server used.
- There may be some restrictions by file features and the media server that restrict playback.
- Movie thumbnail is only supported when DLNA server supports a Movie thumbnail.
- If there is an unplayable music file in the Smart Share menu, the TV will skip the file and play next file.
- Files in a folder can be played only when they are of the same type.
- The file information indicated on the screen may not always correct for music and movie files in Smart Share menu
- This TV only supports movie subtitle files supplied by Nero MediaHome 4.
- The subtitle file name and movie file name have to be the same and located in the same folder.
- If subtitle files have been added after a directory has been indexed already, the user has to remove and re-add the folder to the list of shares.
- The DRM/*.tp/*.trp file in DLNA server is not played while Movie List is in operation.
- MPO files are not played when Photo List is in operation.
- The playback and operating quality of the Smart Share function may be affected by your home network condition.
- The files from removable media such as USB drive, DVD-drive etc. on your media server may not share properly.
- When playing the Media through DLNA connection, it does not support files protected by DRM.
- Up to 1000 including folders and files can be recognized.
- If there are too many folders and files in one folder, it may not operate properly.
- The DLNA function is not available in some routers which do not support multicasting. For more information, refer to your router manual or contact the manufacturer.

Connecting DLNA DMR (Digital Living Network Alliance, Digital Media Render)

This supports remote playing of media files. Media from a compatible device (Windows 7, Mobile Phone with PlayTo, or other compatible DLNA-DMC device) can be "pushed" to the TV.

The DMR function only works properly when the TV and PC are on the same local network.

1 To play a file, select the file by using the "Remote Play" feature in Windows 7.
To do this, right-click on the file you want to play.

2 You can play a file only on a single TV set or device even though multiple devices are connected. The playback speed depends on the network status.

NOTE

- Subtitle is supported only on some DMC devices.
- The DMR function may not work properly in a wireless network.
- The seek function of the DMC only works on video files.
- The DMR is not available when another function is operating (recording, playback or Smart Share work etc.).
- Refer to the owner's manual of the mobile phone or other device to find out how to use it to play a file.
- You can change the name of a connected TV by double-clicking the item you want to change in Control Panel > Network and Internet > View network computers and devices (For Windows 7).
- You cannot change the name of a TV while DMR media is playing. Change it when playback is stopped.

ENGLISH

Browsing files

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

1 Connect a USB storage device.

2 Press **Home** to access the Home menu.

3 Press the Navigation buttons to scroll to **Smart Share** and press **ENTER**.

4 Press the Navigation buttons to scroll to the device you want and press **ENTER**.

5 Press Navigation buttons to scroll to **All Media**, **Movie List**, **Photo List**, or **Music List** and press **ENTER**.
- **All Media**: Shows all files in the file list.
- **Movie List**, **Photo List**, or **Music List:** Shows only one type of file in the file list.

6 Press Navigation buttons to select a folder or file you want.

No.	Description
1	Shows all media folders.
2	Current page number/total number of pages.
3	Moves to the previous or next page.
4	Current page number/total number of pages.
5	Files info or thumbnail.
6	Available buttons on the remote control.

Thumbnail information

Type	Abnormal files	Non-supported files
Video		
Photo		
Music		

Tips for using USB storage devices

Type	Supported File Formats			
Video	• MPG, MPEG, DAT, TS, TRP, TP, VOB, MP4, MOV, MKV, DivX, AVI, ASF, WMV, M4V • Max bitrate of playable movie 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, SubViewer 1.0/2.0), *.ass, *.ssa, *.txt (TMPlayer), *.psb (PowerDivX) • Supported Internal subtitle format: only XSUB (It is the subtitle format made in DivX files), Text UTF- 8, SRT, ASS, SSA (It is the subtitle format used in DivX-Plus HD files)			
Photo	• Do not use the progressive option when saving JPG files on your PC. • It may take some time to open high-resolution images in full screen.			
		File Extensions	Item	Profile
	2D	jpeg jpg jpe	Supported file format	• SOF0: baseline • SOF1: Extend Sequential • SOF2: Progressive
			Photo size	• Min: 64 x 64 • Max - Normal Type: 15360 (W) x 8640 (H) • Progressive Type: 1920 (W) x 1440 (H)
	3D (For 3D TV)	mpo	Supported file format	• mpo
			Photo size	• 4:3 size: 3,648 x 2,736 2,592 x 1,944 2,048 x 1,536 • 3:2 size: 3,648 x 2,432
Music	• MP3 • Bit rate range: 32 Kbps - 320 Kbps • Sampling rate (Sampling Frequency) MPEG1 layer 3: 32 kHz, 44.1 kHz, 48 kHz MPEG2 layer 3: 16 kHz, 22.05 kHz, 24 kHz * A copy-protected file will not play.			

ENGLISH

Viewing Videos

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

1 Press **Home** to access the Home menu.

2 Press the Navigation buttons to scroll to **Smart Share** and press **ENTER**.

3 Press the Navigation buttons to scroll to the device you want and press **ENTER**.

4 Press the Navigation buttons to scroll to **Movie List** and press **ENTER**.

5 Press Navigation buttons to select a folder or file you want and press **ENTER**.

6 Play a movie by using the following menus/ buttons.

Button	Description
Navigation button	Scrolls through the files.
ENTER	Plays the highlighted file.
CH (∧, ∨)	Moves to the previous or next page.
Red button	Change device: Changes to a different input.
Green button	Go to root folder.
Yellow button	Go to upper folder.

7 Control playback by using the following buttons.

Button	Description
■	Stops the playback.
▶	Plays a video.
❚❚	Pauses or resumes the playback
◀◀	Scans backward in a file
▶▶	Scans forward in a file
❚❚ and ▶▶	Plays videos in slow motion
Red button and < or >	Selects the frame directly. The entire file is divided into 10 frames. Frames may not be displayed depending on the file.
ENERGY SAVING	Increases or decreases the brightness of your screen.
Q.MENU	Shows the Option menu (See p.64)
3D (For 3D TV)	Views the 3D imaging.
BACK	Hides the menu on screen. To see the menu again, press ENTER button to display.
EXIT	Moves to the previous menu screen.

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Tips for playing video files

- The TV does not support the files encoded in Motion JPEG.
- Some user-created subtitles may not work properly.
- Subtitles may not display some special characters or HTML tags.
- Changing font and color in subtitles is not supported.
- Subtitles in non-supported languages are unavailable.
- Video files with subtitle files of 1 MB or larger may not be played properly.
- The screen may suffer from temporary interruptions such as image stoppage or faster playback when you change the audio language.
- If you play a damaged video file, the video file may not be played correctly or some player functions may not be unavailable.
- The TV may not properly play the video files produced with certain encoders.
- If the recorded file does not have video or audio, either video or audio is not outputted.
- If the TV plays the recorded file without video or audio, either video or audio is not outputted.
- The TV may not smoothly play the video files with a resolution higher than the supported resolution for each frame.
- The TV may not properly play the video files not included on the specified type and format.
- The TV may not play the files encoded with GMC (Global Motion Compensation) or quarter-pel motion estimation.
- The TV supports the only 10,000 sync blocks within the subtitle file.
- The TV supports the H.264/AVC codec up to the profile level 4.1.
- The TV does not support DTS audio codec.
- The TV cannot play a video file whose size is larger than 30 GB. The file size limit is dependent on the encoding environment.
- If you play a video file through the USB connection that does not support the high speed, the video player may not work properly.
- The video file and its subtitle should be in the same folder and the name of the video file and subtitle should be identical.
- The TV may not play the video files in the supported file format depending on the encoded condition.
- Trick Mode does not support other functions than ⏩ if video files do not have index information.
- Video file names that contain special characters may not be playable.
- For 3D WMV files encoded in dualstream, 3D mode is not supported. (For 3D TV)

Q.MENU options for movie list

1 Press **Q. MENU**.
A pop-up window will appear.

2 Press the Navigation buttons to scroll to the option and press **ENTER**.

3 Press the Navigation buttons to scroll to one of the following options and press **ENTER**.

Set Video Play.

Option	Description
Picture Size	Selects your desired picture format for videos. • **Full Mode**: Files are played in full screen mode according to the aspect ratio of video. • **Original Mode**: Files are played in their native size.
Audio Language	Changes the Language Group of the audio for video files. Files with a single audio track cannot be selected.
Subtitle Language	The subtitles can be turned on or off.
Language	Activated for SMI subtitles and can select the language within the subtitle.
Code Page	Subtitle font selection. When set to default, contents are displayed in the language set in "Option - Language - Menu Language."

Option	Description
Subtitle Language Group	Latin1 (English, Spanish)
Sync	If the video is not synchronized with the captions, it can be adjusted by 0.5 second.
Position	Move the location of the subtitles.
Size	Changes the subtitle font size.

Repeat	Turn on/off repeat function of movie playback. When turned on, the file within the folder will be played back repeatedly. When turned off, if the next file name is similar to the previous file, it can be played sequentially.

NOTE

- Option values changed in Movie List does not affect Photo 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.
- When replaying a video file after stopping, select “Yes” to restart where it previously stopped.
- If continuous series files exist within the folder, the next file will automatically be played. But, this excludes cases when the Repeat function of Movie List Option is turned “On”.

Set Video.

Allows you to change Video presets (Refer to "PICTURE Settings" on page 92).

Set Audio.

Allows you to change Audio presets (Refer to "AUDIO Settings" on page 97).

Set DivX PLUS HD

These options are enabled only when the movie file being played has the title, edition and authored chapter information.

Option	Description
Title	For files with more than one title, select the title you want to play.
Edition	For files with more than one edition, select the edition you want to play. • An edition refers to the playback order set based on the chapters.
Authored Chapter	Select and play the chapter you want.

ENGLISH

DivX® VOD Guide

DivX® VOD Registration

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

1 Press **Home** to access the Home menu.

2 Press the Navigation buttons to scroll to **SETUP** and press **ENTER**.

3 Press the Navigation buttons to scroll to **OPTION** and press **ENTER**.

4 Press the Navigation buttons to scroll to **Smart Share Setting** and press **ENTER**.

5 Press the Navigation buttons to scroll to **DivX VOD Registration** and press **ENTER**.

6 View the registration code of your TV.

7 When you are finished, press **EXIT**.

NOTE

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

DivX® VOD Deregistration

You should deregister your device with 8 digit DivX deregistration code from your device at www.divx.com/vod.
Note: Once the deregistration is executed, you must register your device again to see DivX® VOD contents.

1 Press **Home** to access the Home menu.

2 Press the Navigation buttons to scroll to **SETUP** and press **ENTER**.

3 Press the Navigation buttons to scroll to **OPTION** and press **ENTER**.

4 Press the Navigation buttons to scroll to **Smart Share Setting** and press **ENTER**.

5 Press the Navigation buttons to scroll to **DivX Deregistration** and press **ENTER**.

6 Select **Yes** to confirm.

7 When you are finished, press **EXIT**.

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Viewing Photos

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

1 Press **Home** to access the Home menu.

2 Press the Navigation buttons to scroll to **Smart Share** and press **ENTER**.

3 Press the Navigation buttons to scroll to the device you want and press **ENTER**.

4 Press the Navigation buttons to scroll to **Photo List** and press **ENTER**.

5 Press Navigation buttons to select a folder or file you want and press **ENTER**.

6 View a photo by using the following menus/ buttons.

Button	Description
Navigation button	Scrolls the file.
ENTER	Views the highlighted file.
CH (∧, ∨)	Moves to the previous or next page.
Red button	Change device: Changes to a different input.
Green button	Go to root folder.
Yellow button	Go to upper folder.

7 The following options are available while viewing photos.

Option	Description
Slideshow	• Starts or stops a slideshow. • All photos saved in the current folder display during a slideshow. • To set a slideshow speed, select Option.
BGM (Background Music)	• Turns the background music on or off. To set the background music folder, select Option.
( )	Displays the current photo in Original, Monotone, Sepia, Oil Painting and Vignetting.
↻ (Rotate)	Rotates photos clockwise (90°, 180°, 270°, 360°). **NOTE** • The supported photo size is limited. You cannot rotate a photo if the resolution of the rotated width is larger than the supported resolution size.
	Views the photo in full mode or original mode.
(ENERGY SAVING)	Increases or decreases the brightness of your screen.
3D (For 3D TV)	Views the 3D images.
Option	Shows the Option menu (See p.67).
Hide	Hides the option window. To display the options, press **ENTER**.
Exit	Moves to the previous menu screen.

Q.MENU options for photo list

1 Press **Q. MENU**.
A pop-up window will appear.

2 Press the Navigation buttons to scroll to the option and press **ENTER**.

3 Press the Navigation buttons to scroll to one of the following options and press **ENTER**.

Set Photo View.

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

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

Set Video.

Allows you to change Video settings. (Refer to "PICTURE Settings" on page 92).

Set Audio.

Allows you to change Audio settings. (Refer to "AUDIO Settings" on page 97).

Listening to music

1 Press **Home** to access the Home menu.

2 Press the Navigation buttons to scroll to **Smart Share** and press **ENTER**.

3 Press the Navigation buttons to scroll to the device you want and press **ENTER**.

4 Press the Navigation buttons to scroll to **Music List** and press **ENTER**.

5 Press Navigation buttons to select a folder or file you want and press **ENTER**.

6 Play music by using the following menus/ buttons.

Button	Description
Navigation button	Scrolls through the files.
ENTER	Plays the highlighted file.
CH (∧, ∨)	Moves to the previous or next page.
Red button	Change device: Changes to a different input.
Green button	Go to root folder.
Yellow button	Go to upper folder.
Blue button	Open music player. It is enabled during palying music.

7 Control playback by using the following buttons.

Button	Description
■	Stops playback.
▶	Plays a music file.
❚❚	Pauses or resumes playback.
◀◀	Skips to the previous file.
▶▶	Skips to the next file.
< or >	Indicates a cursor.
(ENERGY SAVING)	Increases or decreases the brightness of your screen.
Q.MENU	Shows the Option menu (See p.68).
BACK	Hides the option window. To display the options, press **ENTER**.
EXIT	Moves to the previous menu screen.

Tips for playing music files

- The TV cannot support the ID3 Tag embedded MP3 files.

Q.MENU options for music list

1 Press **Q. MENU**.
A pop-up window will appear.

2 Press the Navigation buttons to scroll to the option and press **ENTER**.

3 Press the Navigation buttons to scroll to one of the following options and press **ENTER**.

NOTE

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

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Set Audio Play.

Select Repeat or Random option.

Set Audio.

Allows you to change Audio settings. (Refer to "AUDIO Settings" on page 97).

NOTE

- The TV will not play copy protected files.
- If the TV is not in use for some time during playback, the information box as a screensaver will appear to prevent image burn.
  To return to the Music list screen, press **ENTER**.

File name

Time elapsed /Duration

Media Link Function

(This feature is not available for all country.)
The Media Link program allows you to connect to a Plex Media Server. The Plex Media Server is free download from *www.plexapp.com*. It will allow to play media files and download Plex apps. The Plex apps download to your computer and do not use any space on the TV.

NOTE

- We recommend that you install version 0.9.1.14 or later of PLEX Media Server on your Mac or PC. (Download the installation file at http://www.plexapp.com/medialink)
- GUI is displayed in English and the data transmitted will not be displayed when using the following languages: Thai, Arabic, Persian, Hebrew, Kurdish.
- When using the video plug-in, initial buffering may take a while if the TV does not support a file to be played and conversion needs to be performed on the computer. The conversion performance may vary depending on the computer's performance and the network speed.
- When playing the files stored on the computer (movies, TV shows, music), the formats supported are the same as those for the DLNA function. The skip to content function is not supported when playing music. (Same for DLNA)
- You may experience problems when playing HD movies over Wi-Fi due to the network slowing down.
- When using a router, the TV may not detect the computer due to the router settings. (For example, when using the multicast forward function in some routers, TVs cannot detect computers via Wi-Fi.)
- Some plug-ins may not work, depending on the media format.
- Plug-ins are subject to change and may stop working without prior notice, at the providers' discretion.

Media Link Connection

1 Your TV must be connected to your home network. Either using a wired or wireless connection.

2 Download the Plex Media Server and install it.
- You can download it at http://www.plexapp.com/medialink.
- For more information on how to install it, please visit the website above.

3 When running PLEX for the first time, the wizard guides you through the steps to set up the program.
- For information on how to use the wizard, please visit the website above.

Using Media Link

1 Press **Home** to access the Home menu.

2 Press the Navigation buttons to scroll to the **Media Link** and press **ENTER**.

3 The Media Link sections of the connected computer are displayed. Select an icon to view the shared media in that category.

Option	Description
❶	This is a list of categories you set on the connected computer.
❷	This is a list of plug-ins for online content.
❸	Change the section sorting. • By server name: Sort the list by server name. • By item name: Sort the list by item name.
❹	Select another device.
❺	Using PLEX Online, you can install, remove or update applications on the computer.
❻	Move to the previous screen.
❼	Exit Media Link.

Viewing Movies

Media Link will retrieve information on shared movies as described below.

1 Press **Home** to access the Home menu.

2 Press the Navigation buttons to scroll to the **Media Link** and press **ENTER**.

3 Press the Navigation buttons to scroll to the Video and press **ENTER**.

Option	Description
❶	Show information for the selected movie.
❷	Show images captured from the movie file.
❸	Search movies within the section.
❹	Display the list according to the selected filter.
❺	Select to play the movie in full screen mode. If the movie has already been played, you can continue from the last scene.
❻	Move to the previous screen.
❼	Exit Media Link.

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Using Music Section

You can view information for the music files set for the Music section and enjoy them.

1 Press **Home** to access the Home menu.

2 Press the Navigation buttons to scroll to the **Media Link** and press **ENTER**.

3 Press the Navigation buttons to scroll to the Music section and press **ENTER**.

Option	Description
❶	Sort the music files in the selected section in the order of artist > album > song title.
❷	Select a folder or a song.
❸	Show the artist, album and information for the selected music.
❹	Search music files within the section.
❺	Display the list according to the selected filter.
❻	Move to the previous screen.
❼	Exit Media Link.

Using TV Program Section

You can view information for the programs contained in the TV Show section and enjoy them.

1 Press **Home** to access the Home menu.

2 Press the Navigation buttons to scroll to the **Media Link** and press **ENTER**.

3 Press the Navigation buttons to scroll to the TV Show section and press **ENTER**.

Option	Description
❶	Sort the TV program files in the selected section in the order of Program name > season > episode.
❷	Select a folder or a program.
❸	Show information for the selected program.
❹	Search TV Programs within the section.
❺	Display the list according to the selected filter.
❻	Move to the previous screen.
❼	Exit Media Link.

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Installing Plug-Ins

Media Link allows you to install plug-ins to enjoy media content on the web.

1 Press **Home** to access the Home menu.

2 Press the Navigation buttons to scroll to the **Media Link** and press **ENTER**.

3 Press the yellow button to select **PLEX online**.

Option	Description
❶	Move the cursor to a plug-in to view the plug-in information on the right pane. Plug-ins already installed: You can run, update, reinstall or remove them. Plug-ins not yet installed: You can install them. Once installed, you can run the plug-in by selecting Video, Music or Picture Plug-in from the Media Link main screen.
❷	A list of plug-ins available for installation.
❸	Move to the previous screen.
❹	Exit Media Link.

ENGLISH

Time Machine Function

(Except LV3700 series)

Precautions when using the USB Device

Tips for Time Machine

- Only a USB storage device is recognizable.
- If the USB storage device is connected through a USB hub, the device is not recognizable.
- A USB storage device using an automatic recognition program may not be recognized.
- A USB storage device which uses its own driver may not be recognized.
- In case of several partitions or a card reader, up to four memory cards are concurrently recognizable.
- The recognition speed of a USB storage device may depend on each device.
- Please do not turn off the TV or unplug the USB device when the connected USB storage device is working. When such device is suddenly separated or unplugged, the stored files or the USB storage device may be damaged.
- Please connect power to a USB storage device which requires an external power supply. If not, the device may not be recognized.
- Please connect a USB storage device with cable is offered by USB maker. If connected with cable is not offered by USB maker or an excessively long cable, the device may not be recognized.
- Some USB storage devices may not be supported or operate properly.
- The TV will display up to 128 characters of a files name.
- Please backup important files because data on USB device may be damaged. Data management is consumer's responsibility and as a result, the manufacturer does not cover data damage.
- The recommended capacity is 40 GB or over and 1TB or less for a USB HDD.
- Any device with more than the recommended capacity may not work properly.
- Playing a movie via a USB connection that doesn't support high speed may not work properly.
- USB storage devices below USB 2.0 are supported as well. But they may not work properly in the movie list.
- Please maintain the stability of external HDD by using the HDD benchmarking tool in order to guarantee smooth action of HDD.
- The HDD benchmarking tools is checking the performance of HDD that is read/write rate, access time, stability. It will be able to search at website and use easily it after download the HDD benchmarking tool.
- Time machine USB hard disk supports only SSD or HDD disk types. (USB memory is not supported.)
- A SSD (Solid State Drive) has a limited number of write/delete cycles. A HDD (Hard Disk Drive) is recommended for this product.

Time Machine (Pause & Replay of Live TV)

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

Connecting USB storage devices

i.e)

1 Connect the USB device to the **USB IN 1/Time Machine Ready** jacks on the side of TV.

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

NOTE

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

USB device Initialization

1 Connect an unformatted USB for Time Machine and press **REC** to initialize the USB device.

2 Press the Navigation buttons to scroll to **OK** and press **ENTER**.

3 Press Navigation buttons to scroll to **On** or **Off** and press **ENTER**.

NOTE

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

Time Machine Mode change during using Time Machine

1 After connecting USB device, press the **ENTER** button.

2 Press Yellow button to show the Time Machine option menu and press **Q.MENU**.

3 Press the Navigation buttons to scroll to **Time Machine Mode** and press **ENTER**.

4 Press Navigation buttons to scroll to **On or Off** and press **ENTER**.

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

Menu	Description
Recorded TV	Moves to the **Recorded TV**.
Schedule List	Moves to the **Schedule List**.
Select schedule by date	Moves to the **Manual Timer**.
Select schedule by program	Set up timer recording by going to the Program Guide.

USB Device Reinitialization during using Time Machine

1 After connecting USB device, press the **ENTER** button.

2 Press Yellow button to show the Time Machine option menu and press **Q.MENU**.

2 Press the Navigation buttons to scroll to **USB storage device Initialization** and press **ENTER**.

3 When you are finished, press **EXIT**.
When you return to the previous menu, press **BACK**.

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Time Machine Progress

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

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

❶Preview
❷Current location and Progress time in playback
❸Total progress time of the Time Machine

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

NOTE

- In order to save hard-disk space, nothing is saved when there is no signal.
- Time Machine can be used for maximum of 2 hours.
- You can't do the program change or input conversion on recording.
- When turning power on, it may take up to a maximum of 3 minutes to initialize the HDD.
- Recording or playing the recorded program may not initiate for a copy-protected program.
- Instant recording time is set to 3 hours and supported maximum time is up to 5 hours.
- A thumbnail is created every 3 minutes for recordings longer than 18 minutes and every 1 to 3 minutes for recordings shorter than 18 minutes.
- Up to 6 thumbnails are created on one screen.
- Time Machine is available in DTV channel.
- Audio channel cannot be recorded.
- You can record and enjoy DTV programmes in 3D.

Playback during the Time Machine

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

Use of remote control

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

Button	Description
◀◀ ▶▶	During playback, repeatedly, press the REW (◀◀) or FF (▶▶) button to speed up. - Every time you press the button, the search speed will increase by stage (up to 4 stages).
❚❚ ▶▶	During playback, press the Pause(❚❚) button. - Pause screen is displayed. - Every time you press the Pause(❚❚) button from the pause screen, it will move screen by screen (❚❚▶). - Press the Pause(❚❚) button and then use the FF (▶▶) button for slow motion (❚▶).
< >, ENTER	When you move the cursor using the Navigation (< >) button during playback, and then press the **ENTER** button, the screen will directly play at the applicable screen where the cursor is located. (,)
LIVE TV	To view the current live broadcast, press the **LIVE TV** button during playback.

Recording

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

Start/Stop record

You can record the program you are watching.

Start record

1 Press **REC** to start the recording.

Stop record

1 Press **REC** to stop the recording.

2 Press Navigation buttons to scroll to **Recording stop** and press **ENTER**.

NOTE

- You can also stop the recording by pressing **STOP**.

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Modify recording end time

1 Press **REC** to stop the recording.

2 Press Navigation buttons to scroll to **Recording end time modify** and press **ENTER**.

3 Press Navigation buttons to scroll to set the recording end time and press **ENTER**.

NOTE

- When recording, if the available storage space is not sufficient, the recording will automatically Stop.
- Recordings of less than 10 seconds will not be saved.
- Recording available time is maximum 5 hours.
- To save disk space while recording broadcasts, no data will be saved if there is no signal.
- The recording function will not initiate for a copy-protected program.
- The displayed time may differ slightly from the actual time.
- When there is no signal or a film source is being viewed, the displayed time may differ slightly from the actual time.

WARNING

- Broadcast materials are protected by copyright and that recording and playback of certain material would only be permissible by permission of the copyright owner.
- Audio and video recordings you make using this recorder are for your personal use only. You may not sell, lend or rent them to other people.

Schedule

Manual Timer

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

1 After connecting USB device, press the **ENTER** button.

2 Press Yellow button.

3 Press Navigation buttons to scroll to **Select schedule by date** and press **ENTER**.

4 Press Navigation buttons to scroll to select a date and press **ENTER**.

5 Press Navigation buttons to scroll to select repeat option and press **ENTER**.

6 Press Navigation buttons to scroll to set the schedule type, time and program and press **ENTER**.

7 When you are finished, press **EXIT**.
When you return to the previous menu, press **BACK**.

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Schedule List

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

1 After connecting USB device, press the **ENTER** button.

2 Press Yellow button.

3 Press Navigation buttons to scroll to **Schedule List** and press **ENTER**.

4 Press Navigation buttons to select a desired program and press **ENTER**.

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

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

Schedule List Initialzation

This function is to reset the schedule list.

1 After connecting USB device, press the **ENTER** button.

2 Press Yellow button to show the Time Machine option menu and press **Q.MENU**.

3 Press the Navigation buttons to scroll to **Schedule list Initialization** and press **ENTER**.

4 Press Navigation buttons to scroll to **OK** and press **ENTER**.
Start the Schedule List Initialization.

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

ENGLISH

Program Guide

This function is easy to register to reserved recording (Refer to "EPG (Electronic Program Guide) Function (In digital mode)" on page 85).

1 After connecting USB device, press the **ENTER** button.

2 Press Yellow button.

3 Press Navigation buttons to scroll to **Select schedule by program** and press **ENTER**.

4 Press Navigation buttons to scroll to select a program and press **ENTER**.

5 When you are finished, press **EXIT**.

When you return to the previous menu, press BACK.

NOTE

- Recording is not possible with copy-protected programs.

  i Program with copy protection : failed to record.

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

Recorded TV

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

Recorded TV List

1 After connecting USB device, press the **ENTER** button.

2 Press Green button to select **Recorded TV**.

3 Press Navigation buttons to select recorded program and press **ENTER**.

4 When you are finished, press **EXIT**.
When you return to the previous menu, press **BACK**.

NOTE

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

ENGLISH

Mark Mode

1 After connecting USB device, press the **ENTER** button.

2 Press Green button to select **Recorded TV**.

3 Press **FAV** to mark your desired recorded program.

4 Press Navigation buttons to select a desired recorded program.

5 Press Yellow button to play the marked recorded program.

Button	Description
Red button	**Unmark All**: Change marked recorded programs to unmarked recorded programs.
Green button	**Mark All**: Mark all recorded programs in the list.
Yellow button	**Play Marked**: Play the first selected file. Once recorded programs finishes playing, the next selected one will be played automatically.
Blue button	**Delete Marked**: Delete the marked recorded program.
FAV	Exit Mark Mode.

Playing Recorded programs

You can play a selected program from the recorded list.

1 After connecting USB device, press the **ENTER** button.

2 Press Green button to select **Recorded TV**.

3 Press Navigation buttons to select recorded program and press **ENTER**.

4 Press Green button to select **Option** and press **ENTER**.

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

Menu	Description
Play on previous playtime.	Resumes playing at the previously stopped point.
Play from the start	Playback of selected recorded programs.
Rename	Rename the program.
Delete	Delete the program.

ENGLISH

The 'Progress Bar'?
This function indicates what recorded program reviewing is possible, a current on-screen and live broadcasting position.

❶ Preview
❷ Current location and progress time in playback
❸ Total progress time of the recorded program

- Playback
- Fast forward
- Rewind
- Pause
- Direct view +
- Direct view -
- By one screen
- Slow playback
- (Blue) Start repeat interval
- (Yellow) Start clip-edit interval
- (Blue) End repeat interval
- (Yellow) End clip-edit interval
- Repeating interval

Use of remote control

You can adjust various method during the recorded program play.

Button	Description
◀◀ ▶▶	During playback, repeatedly, press the REW (◀◀) or FF (▶▶) button to speed up. - Every time you press the button, the search speed will increase by stage (up to 4 stages).
Green button	Option: Press Green button to input video and audio settings for recorded files.
Yellow button	**Clip-Edit**: Press the Yellow button at the starting point where you want to set the Interval clip-edit and press it again at the ending point. To save, select Yes. - The start of the Interval clip-edit is displayed as A and end of the Interval clip-edit as B in the recording progress bar at the bottom of the screen. Start and end of the Interval clip-edit can be set both in forward and reverse direction. - Interval shorter than 10 seconds cannot be saved.
Blue button	**Repeat**: Press the blue button at the starting point where you want to set the Interval repeat and press it again at the ending point. To cancel the playback for the interval repeat, press the BLUE button one more time. - The start of the Interval repeat is displayed as A and end of the Interval repeat as B in the recording progress bar at the bottom of the screen. Start and end of the Interval repeat can be set both in forward and reverse direction. - Interval shorter than 10 seconds cannot be set. - When the Interval repeat is cancelled, it will return to normal playback from the end point of the interval.
❚❚ ▶▶	During playback, press the Pause(❚❚) button. -Pause screen is displayed. -Every time you press the Pause(❚❚) button from the pause screen, it will move screen by screen (❚❚ ▶). -Press the Pause (❚❚) button and then use the FF (▶▶) button for slow motion (❚▶). -If you don't press any button 10 minutes after the pause, it will return to the playback.
< >, ENTER	When you move the cursor using the Navigation (**< >**) button during playback, and then press the **ENTER** button, the screen will directly play at the applicable screen where the cursor is located. (,)
3D (For 3D TV)	Uses for viewing 3D video.

ENGLISH

EPG (Electronic Program Guide) Function (In digital mode)

This system has an Electronic Program Guide (EPG) to help your navigation through all the possible viewing options.
The EPG supplies information such as program listings, start and end times for all available services. In addition, detailed information about the program is often available in the EPG (the availability and amount of these program details will vary, depending on the particular broadcaster).
This function can be used only when the EPG information is broadcast by broadcasting companies.
The EPG displays the program details for next 8 days.

Switch on/off EPG

1 Press **GUIDE** to switch on or off EPG.

Select a program

1 Press Navigation buttons or CH (^ v) to select desired program.

NOW/NEXT Guide Mode

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

Button	Description
Red button	Change EPG mode.
Yellow button	Enter Manual Timer mode (See p.79).
Blue button	Enter Schedule List mode (See p.80).
ENTER	When 'Now' is selected, it is moved to selected program and EPG disappears. When 'Next' is selected, a reservation pop-up window appears.
< or >	Select NOW or NEXT Program.
^ or v	Select the Broadcast Program.
CH (^, v)	Page Up/Down.
GUIDE	Switch off EPG.
BACK	
EXIT	

8 Day Guide Mode

Button	Description
Red button	Change EPG mode.
Green button	Enter Date setting mode.
Yellow button	Enter Manual Timer mode (See p.79).
Blue button	Enter Schedule List mode (See p.80).
ENTER	When 'Currently broadcasting program is selected, it is moved to selected program and EPG disappears. When 'Future broadcasting program' is selected, a reservation pop-up window appears.
< or >	Select Program.
^ or v	Select the Broadcast Program.
CH (^, v)	Page Up/Down.
GUIDE	Switch off EPG.
BACK	
EXIT	

ENGLISH

Date Setting Mode

Button	Description
Green button	Switch off Date setting mode.
v	
BACK	
ENTER	Change to the selected date.
< or >	Select a date.
GUIDE	Switch off EPG.
EXIT	

Detailed Information Box

Button	Description
INFO	The detail information on or off.
^ or v	Text Up/Down.
< or >	Select Timer Record/Remind setting mode.
GUIDE	Switch off EPG.
EXIT	

3D IMAGING (FOR 3D TV)

3D Technology

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

When watching 3D imaging

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

(LCD)

- We recommend that you maintain a distance of at least twice the screen diagonal length when watching 3D videos.

(Plasma)

- After powering on the TV, a few seconds may be needed for your TV to calibrate.
- The TV may flicker slightly if the 3D imaging is displayed under 3 wavelength fluorescent light (50 Hz - 60 Hz) or magnetic fluorescent lamp (50Hz - 60 Hz). In such instances, it is recommended to turn the lights off.
- If there is an obstacle between the TV and the 3D glasses, the 3D imaging may not display properly.
- Do not use the TV in close proximity to other electronic equipments and RF equipments.
- The 3D imaging may not display if it is viewed while you are lying down.
- It may take a moment for you to see the 3D imaging if you look away from the TV and then revert your eyes back to the 3D program.

When using 3D Glasses

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

NOTE

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

3D Imaging Viewing Range (Plasma)

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

Viewing Distance	Maximum Viewing Distance
2 m - 7 m	10 m

ENGLISH

Viewing 3D Imaging

1 Play the video produced in 3D.

2 Press **3D** to watch 3D imaging.

3 Wear the 3D glasses.

4 Press the Navigation buttons to scroll the **OK** and press **ENTER**.

5 Press the Navigation buttons to select the shape and press **ENTER**.

Mode	Description
2D » 3D	Changed from 2D imaging to 3D imaging. 2D-to-3D converted videos may appear less realistic than titles originally produced as 3D videos.
Side by Side	
Top & Bottom	
Checker Board	
Frame Sequential	

6 Press **3D** button to **2D Off** or **3D Off**.

Option	Description
3D -> 2D	Displays images in 2D without any 3D effects.
3D Off	Displays images in original format.
2D -> 3D	Displays images in 3D.
Cancel	Close the pop-up window.

Setting 3D Imaging

1 Press the **3D OPTION** while viewing 3D imaging.
A pop-up window will appear.

2 Press the Navigation buttons to scroll to one of the following options and press **ENTER**.

3D Mode Setting

Option (Depending on model)	Description
3D Picture Size	Cuts off the outer edges of the picture and stretch it to fit the full screen in 3D mode.
3D Picture Correction	Select **Left/Right** or **Right/Left**. Select the screen with 3D video with better visibility.
3D Depth	Adjusts the stereoscopic effect of the 3D image converted from 2D image.
3D Viewpoint	Moves the 3D image to front and back to adjust the 3D perspective view.
3D Picture Balance	Adjusts the color and brightness difference between the right and left sides of the picture in 3D mode.
3D Optimization	Optimizes the 3D image screen for the viewing environment.

ENGLISH

Set Video.

Allows you to change Video settings (Refer to "PICTURE Settings" on page 92).

Set Audio.

Allows you to change Audio settings (Refer to "AUDIO Settings" on page 97).

CAUTION

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

NOTE

(LCD)

- If viewing 3D imaging, “Power indicator” is turned off automatically.
- You can only choose "**Off** or **Cinema**" with the **AV MODE** button on the remote control.
- Energy Saving is disabled while playing in 3D.
- Home menu is not available while playing in 3D.
- You cannot enter the Home menu while watching 3D imaging.

CUSTOMIZING TV SETTINGS

The SETUP Menu

1 Press **Home** to access the Home menu.

2 Press the Navigation buttons to select the **SETUP** menu and press **ENTER**.

3 Press the Navigation buttons to scroll to one of the following menus and press **ENTER**.

4 Press the Navigation buttons to scroll to the setting or option you want and press **ENTER**.

5 When you are finished, press **EXIT**.

Menu		Description
	SETUP	Sets up and edit channels.
	PICTURE	Adjusts the image size, quality, or effect.
	AUDIO	Adjusts the sound quality, effect, or volume level.
	TIME	Sets the time, date, or Timer feature.
	LOCK	Locks or unlocks channels and programs.
	OPTION	Customizes the general settings.
	NETWORK	Sets up the network setting.
	SUPPORT	Checks the customer information.

Customizing Settings

SETUP Settings

1 Press **Home** to access the Home menu.

2 Press the Navigation buttons to scroll to **SETUP** and press **ENTER**.

3 Press the Navigation buttons to scroll to **SETUP** and press **ENTER**.

4 Press the Navigation buttons to scroll to the setting or option you want and press **ENTER**.
- To return to the previous level, press **BACK**.

5 When you are finished, press **EXIT**.

The available channel settings are described in the following.

Setting	Description
Auto Tuning	Tunes and stores all available channels through antennas or cable inputs (See p.36).
Manual Tuning	Tunes and stores the channels you want manually (See p.36).
Channel Edit	Adds or deletes channels (See p.36).

PICTURE Settings

1 Press **Home** to access the Home menu.

2 Press the Navigation buttons to scroll to **SETUP** and press **ENTER**.

3 Press the Navigation buttons to scroll to **PICTURE** and press **ENTER**.

4 Press the Navigation buttons to scroll to the setting or option you want and press **ENTER**.
- To return to the previous level, press **BACK**.

5 When you are finished, press **EXIT**.

The available picture settings are described in the following.

Setting	Description
Aspect Ratio	Changes the image size to view images at its optimal size (See p.39).
Set 3D Video (For 3D TV)	Sets the 3D imaging option (See p.88).
Picture Wizard	Adjusts the image quality and calibrates the screen. The customized options will be saved as **Expert1** in the **Picture Mode**. NOTE • If you use **Picture Wizard**, the **Energy Saving** feature will turn off automatically. • To reset changes made by **Picture Wizard**, operate **Picture Reset** when **Picture Mode** is on **Expert1**.
Energy Saving	Reduces the power consumption by adjusting the screen brightness. NOTE • When selecting **Auto** or **Maximum**, **Backlight** will not work (LCD).

Option	
Auto (LCD)	The backlight is adjusted automatically corresponding to the surroundings when selecting **Auto** using the **Intelligent sensor** feature.
Intelligent sensor (Plasma)	The most suitable picture is automatically adjusted corresponding to the surroundings.
Off	Select if this feature is not necessary.
Minimum/ Medium/Maximum	Selects the brightness level.
Screen off	The screen turns off in 3 seconds. Pressing any button of the remote control will turn on the screen again.

ENGLISH

Setting	Description	
Picture Mode	Selects one of the preset image or customizes options in each mode for the best TV screen performance. You are also able to customize advanced options of each mode. The available preset picture modes vary depending on the TV. NOTE • (LCD) If you select **Intelligent Sensor**, the Energy saving feature will switch to **Auto** automatically . • If you select **THX Cinema** or **THX Bright Room**, the Aspect ratio feature will switch to Just scan automatically.	
	Mode (Depending on model)	
	Intelligent Sensor	Sets the TV to adjust the image settings, such as contrast, brightness, sharpness, color, or tint, automatically corresponding to the surrounding environments.
	Vivid	Adjusts the video image for the retail environment by enhancing the contrast, brightness, color, and sharpness.
	Standard	Adjusts the image for the normal environment.
	APS	Maximizes video images reducing power consumption without hurting picture quality.
	Cinema	Optimizes video image for a cinematic look to enjoy movies as if you are in a movie theater.
	THX Cinema, THX Bright Room	Provides a cinema experience while watching a movie at home. The user will be able enjoy the best level of screen quality without any separate adjustments. » THX Cinema express the optimal screen quality when the room is dark. » THX Bright Room express the optimal screen quality when the room is bright. NOTE • THX : THX (Thomlinson Holman's Experiment) is an audio and video certification standard established by George Lucas and Thomlinson. A THX certified display guarantees screen quality that exceeds the display standard specification in both hardware and software.
	Sport	Optimizes the video image for high and dynamic actions by emphasizing primary colors such as white, grass, or sky blue.
	Game	Optimizes the video image for a fast gaming screen for PCs or games.
	Photo	Optimizes the still image like a photo file in HDMI, USB mode (ie, when connecting the external device like a DSLR)
	Expert 1, 2 or ISFccc Expert 1, 2	Adjusts the detailed video image settings for video experts as well as general viewers. NOTE • ISFccc (ISFccc: Imaging Science Foundation Certified Calibration Control) : This TV contains the detailed calibrations necessary for professional certification by the Imaging Science Foundation. The resulting ISF "day" and "night" modes will then be accessible by the user to experience the best their LG HDTV has to offer. Sophisticated and detailed calibrations can be made through the ISFccc mode. Detailed calibration requires a licensed technician. Please contact your local dealer to inquire about an ISF certified technician.

ENGLISH

Setting	Description	
TruMotion (Depending on model)	Advance video technology that provides clearer, smoother images, even during fast action scenes creating a more stable structure for a crisper picture. 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".	
	Mode	
	High	Provides smoother picture movement.
	Low	Provides smooth picture movement. Use this setting for standard use.
	Off	Turn off TruMotion operation.
	User	De-Judder: Adjusts noise of the screen. De-Blur: Adjusts after-image of the screen.
SCREEN	Customizes the PC display options.	
	Option	
	Resolution	Selects a proper resolution.
	Auto Configure	Sets the TV to optimize the options automatically for the TV display.
	Position	Locates the image at the proper position.
	Size	Adjusts the image size.
	Phase	Eliminates horizontal streaking.
	Reset	Restores the options to the default setting.
LED Local Dimming (Depending on model)	After analysing the signal of the input video by areas of the screen, it adjusts the backlight to improve the contrast ratio.	
	Mode	
	Off	Turn off LED Local Dimming operation.
	Low	Brightens the picture and deepens black levels using the soft local dimming.
	Medium	Deepens black levels using the strong local dimming.
	High	Clears the picture and deepens black levels using the strong local dimming.

ENGLISH

Basic Image Options

Setting	Description
Backlight (LCD)	Adjusts the brightness of the screen by controlling the LCD backlight. If you decrease the brightness level, the screen becomes darker and the power consumption will be reduced without any video signal loss. NOTE • If you use the "**Energy saving** - **Off**, **Minimum**, **Medium**", Backlight will be available.
Contrast	Increases or decreases 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.
Sharpness	Adjusts the level of sharpness 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.

Setting	Description
Advanced Control or Expert Control	Customizes the advanced options.
Picture Reset	Restores the options of each mode to the factory default.

Advanced Image Options (Depending on model)

Setting	Description
Dynamic Contrast	Adjusts the contrast to keep it at the best level according to the brightness of the screen. The picture is improved by making bright parts brighter and dark parts darker.
Dynamic Color	Adjusts screen colors so that they look livelier, richer and clearer. This feature enhances hue, saturation and luminance so that red, blue and green white look more vivid.
Skin Color	It detects the skin area of video and adjusts it to express a natural skin color.
Noise Reduction	Reduces screen noise without compromising video quality.
MPEG Noise Reduction	Removes noise caused by compressing video.
Super Resolution	Provides a crystal-clear picture by improving the details in an area that has a blurry or unclear picture.
Gamma	You can adjust brightness of dark area and middle gray level area of the picture. » Low: Make the dark and middle gray level areas brighter. » Medium: Express the original picture level. » High: Make the dark and middle gray level area darker.
Black Level	Sets black level of the screen to proper level. This function is available in the following modes: TV(NTSC-M/J, PAL-M, PAL-N), AV (NTSC-M/J, PAL-M, PAL-N), HDMI or Component. » Auto: Realizing the black level of the screen and set it to High or Low automatically. » Low: The reflection of the screen gets darker. » High: The reflection of the screen gets brighter.
Clear White	Make the white area of screen brighter and more white.
Eye Care	Adjusts 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, Game".
Real Cinema or Film Mode	Makes video clips recorded in film look more natural by eliminating judder effect. DVD and Blu-ray movies are filmed at 24 frames per second (fps). With LG Real Cinema, every frame is consistently processed 5 times in 1/24 of a second producing 120 fps with TruMotion or 2 times in 1/24 of a second producing 48 fps without TruMotion, thus totally eliminating the judder effect. This function can also work when TruMotion is off.
Color Gamut	Plasma: **Advanced Control, Expert Control** » Maximizes the utilization of color to increase color quality. » **Standard**: Displays standard set of colors. » **Wide**: Increases number of colors used. **Photo mode** » **Wide**: Increases number of colors used. » **sRGB**: Mode to display sRGB standard color gamut"
	LCD: **Advanced Control** » Maximizes the utilization of color to increase color quality. » **Standard**: Displays standard set of colors. » **Wide**: Increase number of colors used. **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.

ENGLISH

Setting	Description
Edge Enhancer	Shows clearer and distinctive yet natural edges of the video. This function works well over Sharpness UI 60 value.
xvYCC	This is produces richer colors. This feature represents rich colors as much as a conventional video signal. This function is enabled in "**Picture mode** - **Cinema**, **Expert**" when **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.
Expert Pattern	This is the pattern used for expert adjustment This function is enabled in "**Picture Mode** - **Expert**" when you watch DTV.
Color Temperature	Adjusts the overall color of the screen by changing the white baseline.
	Plasma a. Method : 2 Points • Pattern: Inner, Outer • Red/Green/Blue Contrast, Red/Green/Blue BrightnessThe adjustment range is -50 to +50. b. Method : 20 Point IRE • IRE (Institute of Radio Engineers) is the unit to display the size of the video signal and can be set among 0, 5, 10, 15 - 100 Plasma TV. You can adjust Red, Green or Blue according to each setting. • Red/Green/Blue: The adjustment range is -50 - +50. c. Apply to all inputs
	LCD a. Gamma : Select 1.9, 2.2, 2.4 b. Method : 2 Points • Pattern: Inner, Outer • Red/Green/Blue Contrast, Red/Green/Blue Brightness c. 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. d. Apply to all inputs
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/Magenta/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.

ENGLISH

AUDIO Settings

1 Press **Home** to access the Home menu.

2 Press the Navigation buttons to scroll to **SETUP** and press **ENTER**.

3 Press the Navigation buttons to scroll to **AUDIO** and press **ENTER**.

4 Press the Navigation buttons to scroll to the setting or option you want and press **ENTER**.
- To return to the previous level, press **BACK**.

5 When you are finished, press **EXIT**.

The available audio settings are described in the following.

Setting	Description	
Auto Volume	Activates the Auto Volume feature to keep the volume level consistent whenever you change channels. The volume level may not be consistent due to different signal conditions of broadcasting stations.	
Clear Voice II	Sets whether to enhance human voice clarity. You can adjust the level of clarity when you set this feature on.	
Balance	Adjust balance between the left and right speakers according to your room environment.	
Sound Mode	Selects one of the preset sound modes or customizes options in each mode.	
	Mode	
	Standard	Select when you want standard-quality sound.
	Music	Select when you listen to music.
	Cinema	Select when you watch movies.
	Sport	Select when you watch sports events.
	Game	Select when you play games.
	NOTE • If sound quality or volume is not at the level you want, it is recommended to use a separate home theater system or amplifier to cope with different user environments. • If the Clear Voice II feature is on, **Infinite 3D Surround** will not be activated.	
	Option	
	Infinite 3D Surround	Patents LG proprietary sound processing technology that strives immersive 5.1 surround sound with just two front speakers.
	Treble	Controls the dominant sounds in the output. When you turn up the treble, it will increase the output to the higher frequency range.
	Bass	Controls the softer sounds in the output. When you turn up the bass, it will increase the output to the lower frequency range.
	Sound Reset	Resets the sound mode to the default setting.

ENGLISH

Setting	Description		
Sound Optimizer	Optimizes the sound depending on the environment in which the TV is installed.		
	Option		
	Normal	Normal sound mode.	
	Wall Mount Type	Optimized sound mode for a wall-mounted TV.	
	Stand Type	Optimized sound mode for a stand-type TV.	
Digital Audio Out	This function is setting the Dolby digital/PCM to connect the audio outputs. If you select "Digital Audio Out - Auto" when Dolby digital is available, SPDIF (Sony Philips Digital InterFace) output will be Dolby Digital. If you select "Digital Audio Out - PCM" when Dolby digital is not available, SPDIF output will be PCM (Pulsecode modulation). Even if both Dolby Digital and Audio language have been set in a channel which broadcast Dolby Digital Audio, only Dolby Digital will be played.		
	Item	Audio Input	Digital Audio output
	Auto	MPEG Dolby Digital Dolby Digital Plus HE-AAC	PCM Dolby Digital Dolby Digital Dolby Digital
	PCM	All	PCM
TV Speaker	Turns on the internal speaker of the TV when using an external Hi-Fi system. You can use the TV speaker as an audio output device even if there is no video input.		
ARC Mode (Audio Return Channel)	When using an external audio device with the ARC (Audio Return Channel) feature, SPDIF can be output using only a High Speed HDMI cable without an additional optical cable. **NOTE** • Some HDMI cables may not support this mode. (A High Speed HDMI cable is recommended.) • The ARC mode only works on the HDMI 1 input on the TV. • Activates the SIMPLINK feature to use this feature.		
	Option		
	On	If the device with the ARC feature is turned on, the device speaker is automatically used when SIMPLINK is enabled.	
	Off	Even if the device with the ARC feature is turned on and SIMPLINK is enabled, the device speaker is not automatically used.	
DTV Audio Setting (In digital mode)	When different audio types exist in an input signal, this function allows you to select the audio type you want.		
	Mode		
	Auto	Automatically outputs in the order HE-AAC > Dolby Digital+ > Dolby Digital > MPEG.	
	HE-AAC, Dolby Digital+, Dolby Digital, MPEG	Allows users to select the audio type they want. ex) If MPEG is selected, MPEG is always outputted. If MPEG is not supported, another audio type is set in that order.	
AV Sync.	If the video and sound are not synced, you can adjust it manually. » (-) setting : Make audio output faster than the default. » (+) setting : Make audio output slower than the default.		
	Option		
	AV Sync.	Adjusts the sync of the TV speaker and SPDIF.	
	TV Speaker	Adjusts the sync of the sound from the TV's internal speaker.	
	SPDIF (Sony Philips Digital InterFace)	Adjusts the sync of the sound from an external speaker connected to the digital audio output port.	

ENGLISH

TIME Settings

1 Press **Home** to access the Home menu.

2 Press the Navigation buttons to scroll to **SETUP** and press **ENTER**.

3 Press the Navigation buttons to scroll to **TIME** and press **ENTER**.

4 Press the Navigation buttons to scroll to the setting or option you want and press **ENTER**.
- To return to the previous level, press **BACK**.

5 When you are finished, press **EXIT**.

The available time settings are described in the following.

Setting	Description
Clock	Sets the time, date, time zone, and daylight-saving time feature. The time will be set automatically according to a digital channel signal which includes time information provided by the broadcasting station. If not, set the time and date manually.
Off Time/On Time	Sets the time to turn on or off the TV automatically. To use this function, you should set the current time and date in advance. NOTE • If you do not press any button within 2 hours after the TV turns on by the On Time feature, the TV enters the Standby mode automatically. • If you set both Off time and On time features to the same time, the Off time feature overrides the On time feature.
Sleep Timer	Sets the length of time until the TV to turns off. When you turn the TV off and turn it on again, the Sleep timer feature will be set to off.

ENGLISH

LOCK Settings

1 Press **Home** to access the Home menu.

2 Press the Navigation buttons to scroll to **SETUP** and press **ENTER**.

3 Press the Navigation buttons to scroll to **LOCK** and press **ENTER**.

4 Press the Navigation buttons to scroll to the setting or option you want and press **ENTER**.
- To return to the previous level, press **BACK**.

5 When you are finished, press **EXIT**.

The available lock settings are described in the following.

Setting	Description
Set Password	Changes the 4-digit password. The default PIN is “0-0-0-0”. If you forget your password, press “0-3-2-5” on the remote control.
Lock System	Activates or deactivates the lock system.
Block Channel	Blocks the channels that contain inappropriate contents for children. The channels can be selected but the screen is blank and the audio is muted. To watch a locked channel, enter the password.
Input Block	Block the input sources.

OPTION Settings

1 Press **Home** to access the Home menu.

2 Press the Navigation buttons to scroll to **SETUP** and press **ENTER**.

3 Press the Navigation buttons to scroll to **OPTION** and press **ENTER**.

4 Press the Navigation buttons to scroll to the setting or option you want and press **ENTER**.
- To return to the previous level, press **BACK**.

5 When you are finished, press **EXIT**.

The available general settings are described in the following.

Setting	Description	
Language	Selects a desired language.	
	Option	
	Menu Language	Selects a language for the display text.
	Audio Language	Selects an audio language for your program. This feature operates only in the DTV mode. If audio data in a selected language is not broadcast, the default language audio will be played. • Audio Language OSD Information » NA: Not Available » MPEG: MPEG Audio » DD: Dolby Digital Audio » : Audio for "Visual Impaired" » ABC: Audio for "Hearing Impaired" » DD+: Dolby Digital Plus Audio » AAC: HE-AAC Audio
	Subtitle Language	Use the Subtitle function when two or more subtitle languages are broadcast. If subtitle data in a selected language is not broadcast, the default language subtitle will be displayed. • Subtitle Language OSD Information » NA: Not Available » ABC: Subtitle for "Hard of Hearing" NOTE • When the languages you selected as the primary for Audio Language and Subtitle Language and Text Language are not supported, you can select language in secondary category. • The audio/subtitles can be displayed in a simpler form with 1 to 3 characters broadcast by the service provider. • When you select supplementary Audio (Audio for "Visual/Hearing Impaired") the TV may output a part of the Main audio.
Caption (Depending on model)	Sets whether to display captions and customize your option in each mode.	
	Mode	
	CC 1-2 (Closed Captioning)	Displays the audio portion of a TV program as text on the TV screen. CC1 is the most common mode in use.
	Text 1-2	
Hard of Hearing	This function if for the hearing impaired. If it is set to on, the subtitle is displayed by default.	

ENGLISH

Setting	Description	
Power Indicator (Depending on model)	Sets to turn on or off the indicator light on the TV.	
	Option	
	Standby Light	Set to turn on or off the indicator light in Standby mode.
	Power Light	Set to turn on or off the indicator light when you turn on the power.
ISM Method (Plasma)	Prevents image sticking or removes a ghost image. A frozen still picture displayed on the screen for prolonged periods can result in a ghost image.	
	Mode	
	Normal	Sets it if image sticking is never a problem.
	Orbiter	Avoids a ghost image on the screen. The image will move every 2 minutes to help prevent ghost images. However, it is best not to allow any fixed image to remain on the screen.
	Color Wash	Removes a ghost image on the screen. The color block with the screen moved a little and the white pattern are alternately displayed. It is difficult to see the after image on all colors. Once it has been corrected it will not be visible in any color.
	White Wash	Removes a ghost image on the screen. Use sparingly. Watch the TV normally for a while before using this feature to see if the ghost image disappears on its own. NOTE • An excessive ghosted image may be impossible to clear entirely with **White Wash**. To return to normal viewing, press the any button.
Pointer (Depending on model)	Sets the pointer option of the magic motion remote control.	
	Option	
	Speed	Changes the pointer speed.
	Shape	Selects the pointer shape.
	Size	Changes the pointer size.
	Alignment	Align the remote control's direction with the pointer on your TV screen by shaking the remote control left and right. Then, the pointer automatically moves to the center of the screen.
Smart Share Setting	Sets the DivX and DLNA option.	
	Option	
	DivX® VOD Registration	Registers your TV to play DivX protected videos (See p.65).
	DivX® VOD Deregistration	Deregisters your TV (See p.65).
	DMR	Activates or deactivates the DMR (Digital Media Render) connection.

ENGLISH

Setting	Description	
Factory Reset	Resets the TV to factory default and erases all stored channels. Customizes the TV settings to suit your preference. The initial setup screen will appear when you turn on the TV for the first time. NOTE • 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.	
	Setting	
	Language	Selects a desired language.
	Mode Setting	Selects **Home Use** for the home environment. Selects **Store Demo** for the retail environment. Selects **Demo Mode** to set to show special features of the TV. You can cancel the demo mode by pressing any buttons except the Volume and Mute buttons. NOTE • When selecting **Store Demo**, **Demo Mode** will be activated.
	Power Indicator (LED LCD TV)	Turns the power indicator light on or off.
	Network Setting (LW9800 series)	Sets your network to enable network-related feature on the TV.
	Auto Tuning	Scans and saves available channels automatically.
Set ID	Adds an ID to the connected devices.	
Mode Setting	Default selection is “Home Use”. We recommend setting the TV to “Home Use” mode for the best picture in your home environment.	
	Option	
	Home Use	Selects it for the home environment.
	Store Demo	Selects it for the retail environment.
	Demo Mode	Sets to show special features of the TV. You can cancel the demo mode by pressing any buttons except the Volume and Mute buttons.
IR Blaster (Depending on model)	Adjusts when connecting Wireless media box (sold seperate). For futher information, refer to the optional "Wireless media box" manual for operating insturctions.	

NETWORK Settings

1 Press **Home** to access the Home menu.

2 Press the Navigation buttons to scroll to **SETUP** and press **ENTER**.

3 Press the Navigation buttons to scroll to **NETWORK** and press **ENTER**.

4 Press the Navigation buttons to scroll to the setting or option you want and press **ENTER**.
- To return to the previous level, press **BACK**.

5 When you are finished, press **EXIT**.

The available network settings are described in the following.

Setting	Description	
Network Setting	Configure the network settings (See p.42).	
Network Status	Display the network status (See p.47).	
Smart TV Setting	Set the region for which weather forecast is provided and manage the IDs added to the TV.	
	Setting	
	Country Setting	Set the country for premium services. Different premium services are provided depending on the country you set.
	Weather Effect	Sets the region for the weather to be displayed on the background of the premium service. Select your region.
	Premium Version	Display the version of the premium service.
	ID Management	Manage the login history of the IDs added to the TV.
	Reset	Delete all IDs added on the TV.
Legal Notice	Display the Legal notice.	

ENGLISH

SUPPORT Settings

1 Press **Home** to access the Home menu.

2 Press the Navigation buttons to scroll to **SETUP** and press **ENTER**.

3 Press the Navigation buttons to scroll to **SUPPORT** and press **ENTER**.

4 Press the Navigation buttons to scroll to the setting or option you want and press **ENTER**.
- To return to the previous level, press **BACK**.

5 When you are finished, press **EXIT**.

The available support settings are described in the following.

Setting	Description
Software Update	Update the TV with the latest firmware.
Picture Test	Executes picture or built-in melody sound tests. » If this test has an error, select Yes. You will see product or service information. » If this test has no errors, check the connection status of external devices and refer to the manual of external devices.
Sound Test	
Signal Test	Shows the MUX and Service information etc.
Product/Service Info.	Shows the product or service information. Customer Service Center can differ by country.
Initialization of Premium	Initialize the premium menu if an error occurs while updating the premium menu. Then, the TV automatically switches off and then back on.

MAKING CONNECTIONS

Connect various external devices to the TV and switch input modes to select an external device. For more information on external device's connection, refer to the manual provided with each device.
Available external devices are: HD receivers, DVD players, VCRs, audio systems, USB storage devices, PC, gaming devices, and other external devices.

NOTE

- If you record a TV program on a DVD recorder or VCR, make sure to connect the TV signal input cable to the TV through a DVD recorder or VCR. For more information on recording, refer to the manual provided with the connected device.
- The external device connection may differ from the model.
- Connect external devices to the TV regardless of the order of the TV port.

Connection Overview

Connect various external devices to the ports on the TV back panel.

1 Find an external device you want to connect to your TV as shown on the following illustration.

2 Check the connection type of the external device.

3 Go to the appropriate illustration and check the connection details.

ENGLISH

NOTE

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

Connecting to a HD receiver, DVD, or VCR player

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

HDMI Connection

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

NOTE

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

LV3700 series

Other models

ENGLISH

DVI to HDMI Connection

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

Plasma

Other models

LV3700 series

ENGLISH

Component Connection

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

NOTE

- If cables are installed incorrectly, it could case the image to display in black and white or with distorted color. Check to ensure the cable are matched with the corresponding color connection.

Plasma

Other models

LV3700 series

ENGLISH

Composite Connection

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

NOTE

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

Plasma

LV3700 series

Other models

ENGLISH

Connecting to a PC

NOTE

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

HDMI Connection

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

Plasma

LV3700 series

Other models

ENGLISH

DVI to HDMI Connection

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

Plasma

Other models

LV3700 series

ENGLISH

RGB Connection

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

Plasma

LV3700 series

Other models

NOTE

- 1920X1080 is the recommended PC resolution. If you use the TV in other video modes, afterimages or distorted images may appear on the screen.
- 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.
- The synchronization input form for Horizontal and Vertical frequencies is separate.
- Depending on the graphics card, some resolution settings may not allow the image to be positioned on the screen properly.
- If you experience overscan issues when using HDMI-PC 1920x1080, change aspect ratio to Just scan.
- When selecting HDMI-PC, set the “Input Label - PC” in the INPUT menu.

ENGLISH

Connecting to an Audio System

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

NOTE

- If you use an optional external audio device instead of the built-in speaker, set the TV speaker feature to off (See p.98).

Digital Optical Audio Connection

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

NOTE

- 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.

Plasma

LV3700 series

Other models

ENGLISH

Connecting to a USB

Connect a USB storage device such as a USB flash memory, external hard drive, or a USB memory card reader to the TV and access the Smart Share menu to use various multimedia files. See "Connecting USB storage devices" on page 56 and see "Browsing files" on page 61.

i.e)

Connecting to a Headphone

Listen to the sound through a headphone.

i.e)

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.
- Headphone impedance: 16 Ω
- Max audio output: 10 mW to 15 mW
- Headphone jack size: 0.35 cm

ENGLISH

Connecting the Wireless Media Box

(Not support for LV3700 series)

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

NOTE

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

Plasma

Other models

ENGLISH

SIMPLINK Connection

Use the TV remote control to play and control the AV device connected with the HDMI cable through HDMI-CEC. This TV may work with the devices that support HDMI-CEC, but only devices with the SIMPLINK logo are fully supported.

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

NOTE

- If the connected device does not support HDMI-CEC, the SIMPLINK feature is unavailable.
- To operate SIMPLINK, you should use an High Speed HDMI cable with the CEC (Consumer Electronics Control) function.
- SIMPLINK may not work properly if you a third-party device that has an HDMI-CEC function.

Activating and Using the SIMPLINK menus

1 Press **SIMPINK** to access the SIMPLINK menus.

2 Press the Navigation buttons to select to **On**.

3 Press the Navigation buttons to scroll to one of the devices and press **ENTER**.

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

- A check mark appears in front of the selected device.
- Available devices display in a bright color.
- Unavailable devices display in grey.

3 Control the selected AV device.

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

NOTE

- If you change the input source by pressing **INPUT**, the progressing function of the SIMPLINK device will stop.
- If you select a device that has the home theater feature, the sound output automatically switches to the home theater speaker and the TV speaker turns off.
- If a connected SIMPLINK home theater system does not play the audio from the TV, connect the DIGITAL AUDIO OUT terminal on the rear of the TV to the DIGITAL AUDIO IN terminal on the back of the SIMPLINK device with an optical cable.

ENGLISH

MAINTENANCE

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

Updating the TV Firmware

Download and install the latest firmware by connecting to the firmware update server or broadcasting OTA service to enhance or change the product function, or add new features.
The firmware update may not work properly depending on the Internet environment or DTV signal strength. If so, you may obtain the latest firmware update from the authorized LG Electronics service center.

To check the current firmware version or update the firmware,

1 Press **Home** to access the Home menu.

2 Press the Navigation buttons to scroll to **SETUP** and press **ENTER**.

3 Press the Navigation buttons to scroll to **SUPPORT** and press **ENTER**.

4 Press the Navigation buttons to scroll to **Software Update** and press **ENTER**.
The current firmware version displays.

5 Select **Check Update Version** to check a new firmware version manually.

When software update is on, the TV will automatically check for software updates through the NSU/OTA*.
A pop-up window will appear on the screen when an update is available.

* NSU (Network Software Update): If the TV is connected to the internet, the TV finds a new firmware uploaded on the LG server.
* OTA (Over-The-Air): If watching the digital broadcasting system, the TV is transmitted new firmware thorugh DTV signal.

NOTE

- While updating the firmware, do not disconnect the LAN cable, turn the TV off, or unplug the power cord.
- If you change the channel during the firmware update through OTA, the update is stoped.
- The process resumes when you go back to the original channel. The update continues even when the power is switched off using the remote control. In this case, it is normal that the color of the power indicator may change and a dim light may be displayed on the screen. The system operates normally once the update is complete.
- Premium service is disabled while the software is being updated through NSU.
- You can check the software update status in the Software Update menu or from the update information displayed under the channel banner.

6 When the update is complete, the TV will automatically restart in 5 seconds.
You may need to reset some **SETUP**, **PICTURE**, or **AUDIO** menus.

NOTE

- You cannot downgrade back to an older firmware version.
- The period of time for the firmware update may be different depending on the firmware size or network condition.
- If the firmware update download fails when using wireless, temporarily connect a cable directly to your router. If it still does not download, contact customer service.

ENGLISH

Cleaning Your TV

CAUTION

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

Screen and frame

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

CAUTION

- Do not push, rub, or hit the surface with your fingernail or a sharp object, as this may result in scratches on the screen and image distortions.
- Do not use any chemicals, such as waxes, benzene, alcohol, thinners, insecticides, air fresheners, lubricants, as these may damage the screen's finish and cause discoloration.

Cabinet and stand

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

CAUTION

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

Power cord

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

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

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

TROUBLESHOOTING

General

Problem	Resolution
Cannot control the TV with the remote control.	• Check the remote control sensor on the product and try again. • Check if there is any obstacle between the product and the remote control. • Check if the batteries are still working and properly installed (⊕ to ⊕, ⊖ to ⊖). • Check if the appropriate input mode such as TV or VCR is set for using the remote control.
No image display and no sound is produced.	• Check if the product is turned on. • Check if the power cord is connected to a wall outlet. • Check if there is a problem in the wall outlet by connecting other products.
Image appears slowly when the TV turns on.	• The image is muted during the product startup process. This is normal. If the image does not appear in a few minutes, unplug the TV for 30 seconds and try again. If the image still does not appear, contact the authorized service center in your local area.
Cannot connect external devices.	• Refer to the "Connection overview" and connect an external device.
The TV turns off suddenly.	• Check the power control settings. The power supply may be interrupted. • Check if the Auto sleep feature is activated in the Time settings. Refer to the "Sleep Timer". • If there is no signal while the TV is on, the TV will turn off automatically after 15 minutes of inactivity.

ENGLISH

Audio

Problem	Resolution
No sound is produced while images are displaying.	• Press **VOL +** or **-** button. • Check if the sound is muted by pressing **MUTE**. • Scroll to other channels. There may a problem with the broadcast. • Check if the audio cables are connected properly. • Check if the TV Speaker feature is activated in the menu option.
No output from one of the speakers	• Adjust Balance in the menu option.
Unusual sound from inside the TV is produced.	• A change in ambient humidity or temperature may result in an unusual noise when the product turns on or off. There is no problem with your product.

Video

Problem	Resolution
An image displays in black and white or the color quality is poor.	• Adjust the color setting in the menu option. • Keep a sufficient distance between this product and other electronic products. • Scroll to other channels. There may a problem with the broadcast.
Horizontal or vertical bars appears or images blur	• Check if there are local interferences such as an electrical appliance or power tool.
Lines or streaks appear on images	• Check the antenna or aim the antenna to the proper direction.
Afterimages (ghosts) appear when the product turns off	• Pixels may have been damaged from a fixed image displayed for a long time (image burn). Use a screen saver to prevent the pixel damage on the screen.
The power is on but the screen appears extremely dark.	• Adjust the brightness and contrast in the menu option.
"No Signal" appears on the screen.	• Check if the signal cable is connected between the TV and products properly. • Check the selected input source by pressing **INPUT**.
Black spots appear on the screen.	• Several pixels in red, green, white, or black may appear on the screen that can attribute to the characteristics of the panel. This is normal.
The display offset is wrong.	• Adjust the position setting in the menu option. • Check if the video card resolution and frequency are supported by the product. If the frequency is out of range, set to the recommended resolution using the display settings on the external device.
Thin lines appear in the background of the screen.	• Check the video cable connections.
Horizontal noises appear or characters blur.	• Adjust the Phase setting in the menu option. Refer to the "SCREEN" or "SCREEN (RGB-PC)".
The reception on some channels is poor	• Scroll to other channels. There may a problem with the broadcast. • The station signal may be weak. Aim the antenna to the proper direction. • Check if there is local interference such as an electrical appliance or power tool.

Movie

Problem	Resolution
The file does not appear on the Movie List.	• Check whether the extension is supported.
Message is displayed saying "This file is invalid" or the audio is working normally but the video is not working normally.	• 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.)

SPECIFICATIONS

Product specifications may be changed without prior notice due to upgrade of product functions.

Television System		NTSC-M, DVB-T
Program Coverage		VHF 2-13, UHF 14-69, CATV 1, 14-125, DTV 14-69
Power requirement		AC 100 - 240V ~ 50 / 60 Hz
External Antenna Impedance		75 Ω
Environment condition	Operating Temperature	0 - 40°C
	Operating Humidity	Less than 80%
	Storage Temperature	-20 - 60°C
	Storage Humidity	Less than 85%

MODELS		50PZ950E (50PZ950E-DA)	60PZ950E (60PZ950E-DA)
Dimensions (W x H x D)	With stand	1175.2 mm x 787.6 mm x 317.2 mm	1393.4 mm x 916.4 mm x 364.4 mm
	Without stand	1175.2 mm x 720.6 mm x 49.6 mm	1393.4 mm x 843.8 mm x 49.6 mm
Weight	With stand	32.5 kg	46.3 kg
	Without stand	28.9 kg	40.3 kg
Current Value / Power consumption		3.7 A / 370 W	5.3 A / 530 W

MODELS		32LV3700 (32LV3700-DA)	42LV3700 (42LV3700-DA)	47LV3700 (47LV3700-DA)
Dimensions (W x H x D)	With stand	764.0 mm x 545.0 mm x 240.0 mm	998.0 mm x 684.0 mm x 256.0 mm	1108.0 mm x 746.0 mm x 256.0 mm
	Without stand	764.0 mm x 484.0 mm x 35.4 mm	998.0 mm x 615.0 mm x 30.4 mm	1108.0 mm x 677.0 mm x 30.4 mm
Weight	With stand	11.4 kg	15.5 kg	20.9 kg
	Without stand	9.6 kg	13.3 kg	18.7 kg
Current Value / Power consumption		0.8 A / 80 W	1.1 A / 110 W	1.4 A / 140 W

MODELS		32LV5500 (32LV5500-DD)	42LV5500 (42LV5500-DD)
Dimensions (W x H x D)	With stand	776.0 mm x 549.0 mm x 240.0 mm	1012.0 mm x 683.0 mm x 256.0 mm
	Without stand	776.0 mm x 485.0 mm x 34.9 mm	1012.0 mm x 617.0 mm x 29.9 mm
Weight	With stand	10.8 kg	15.5 kg
	Without stand	8.8 kg	13.2 kg
Current Value / Power consumption		1.2A / 120W	1.4 A / 140 W

MODELS		47LV5500 (47LV5500-DD)	55LV5500 (55LV5500-DD)
Dimensions (W x H x D)	With stand	1121.0 mm x 746.0 mm x 256.0 mm	1298.0 mm x 849.0 mm x 338.0 mm
	Without stand	1121.0 mm x 678.0 mm x 29.9 mm	1298.0 mm x 778.0 mm x 29.9 mm
Weight	With stand	20.7 kg	25.8 kg
	Without stand	18.4 kg	21.7 kg
Current Value / Power consumption		1.5 A / 150 W	1.7 A / 170 W

MODELS		32LW5700 (32LW5700-DA)	42LW5700 (42LW5700-DA)
Dimensions (W x H x D)	With stand	766.0 mm x 545.0 mm x 240.0 mm	999.0 mm x 681.0 mm x 255.0 mm
	Without stand	766.0 mm x 491.0 mm x 41.0 mm	999.0 mm x 623.0 mm x 30.9 mm
Weight	With stand	10.7 kg	15.7 kg
	Without stand	8.9 kg	13.4 kg
Current Value / Power consumption		1.2A / 120 W	1.4 A / 140 W

MODELS		47LW5700 (47LW5700-DA)	55LW5700 (55LW5700-DA)
Dimensions (W x H x D)	With stand	1109.0 mm x 744.0 mm x 255.0 mm	1286.0 mm x 848.0 mm x 338.0 mm
	Without stand	1109.0 mm x 684.0 mm x 30.9 mm	1286.0 mm x 784.0 mm x 30.9 mm
Weight	With stand	20.2 kg	26.2 kg
	Without stand	17.9 kg	22.1 kg
Current Value / Power consumption		1.5 A / 150 W	1.7 A / 170 W

MODELS		47LW6500 (47LW6500-DA)	55LW6500 (55LW6500-DA)
Dimensions (W x H x D)	With stand	1119.0 mm x 749.0 mm x 255.0 mm	1297.0 mm x 851.0 mm x 341.0 mm
	Without stand	1119.0 mm x 684.0 mm x 29.9 mm	1297.0 mm x 785.0 mm x 29.9 mm
Weight	With stand	21.0 kg	27.0 kg
	Without stand	18.2 kg	22.0 kg
Current Value / Power consumption		1.5 A / 150 W	1.7 A / 170W

MODELS		47LW9800 (47LW9800-DA)	55LW9800 (55LW9800-DA)
Dimensions (W x H x D)	With stand	1095.0 mm x 735.0 mm x 235.0 mm	1265.0 mm x 831.0 mm x 285.0 mm
	Without stand	1095.0 mm x 665.0 mm x 27.9 mm	1265.0 mm x 760.0 mm x 27.9 mm
Weight	With stand	22.5 kg	29.0 kg
	Without stand	18.2 kg	23.8 kg
Current Value / Power consumption		2.1 A / 210 W	2.7 A / 270 W

RGB (PC), HDMI (PC) supported mode

Resolution	Horizontal Frequency (kHz)	Vertical Frequency (Hz)
720x400	31.469	70.08
640x480	31.469	59.94
800x600	37.879	60.31
1024x768	48.363	60.00
1360x768	47.712	60.015
1280x1024 (HDMI-PC)	63.981	60.02
1920x1080 (RGB-PC)	66.587	59.934
1920x1080 (HDMI-PC)	67.50	60.00

HDMI (DTV) supported mode

Resolution	Horizontal Frequency (kHz)	Vertical Frequency (Hz)
720x480p	31.47	59.94
	31.50	60.00
720x576p	31.25	50.00
1280x720p	37.50	50.00
	44.96	59.94
	45.00	60.00
1920x1080i	28.125	50.00
	33.72	59.94
	33.75	60.00
1920x1080p	26.97	23.976
	27.00	24.00
	33.71	29.97
	33.75	30.00
	56.25	50.00
	67.432	59.94
	67.50	60.00

Component supported mode

Resolution	Horizontal Frequency (kHz)	Vertical Frequency (Hz)
720x480i	15.73	59.94
	15.73	60.00
720x480p	31.47	59.94
	31.50	60.00
720x576i	15.625	50.00
720x576p	31.25	50.00
1280x720p	37.50	50.00
	44.96	59.94
	45.00	60.00
1920x1080i	28.125	50.00
	33.72	59.94
	33.75	60.00
1920x1080p	26.97	23.976
	27.000	24.000
	33.71	29.97
	33.75	30.000
	56.25	50.00
	67.432	59.94
	67.500	60.00

Component port connecting information

Component ports on the TV	Y	P_B	P_R

Video output ports on DVD player	Y	P_B	P_R
	Y	B-Y	R-Y
	Y	Cb	Cr
	Y	Pb	Pr

DivX supported mode

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

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3D supported formats

Input	Signal	Resolution	Horizontal Frequency (kHz)	Vertical Frequency (Hz)	Playable 3D video format
HDMI	720p	1280x720	90	60	» HDMI 3D Frame Packing
			89.9	59.94	
			75	50	
			45.00	60	» Side by Side » Top & Bottom » HDMI 3D Side by Side (Half) » HDMI 3D Top & Bottom
			37.5	50	
	1080i	1920x1080	33.75	60	» Side by Side » Top & Bottom » HDMI 3D Side by Side (Half) » HDMI 3D Top & Bottom
			28.125	50	
	1080p		67.50	60	» Side by Side » Top & Bottom » Checker Board » Single Frame Sequential » HDMI 3D Side by Side (Half) » HDMI 3D Top & Bottom
			56.250	50	
			53.95	23.98	» HDMI 3D Frame Packing
			54	24	
			27.00	24	» Side by Side » Top & Bottom » Checker Board » HDMI 3D Side by Side (Half) » HDMI 3D Top & Bottom
			33.75	30	
Component (Plasma)	720p	1280x720	37.50	50.00	» Side by Side » Top & Bottom
			44.96	59.94	
			45.00	60.00	
	1080i	1920x1080	28.125	50.00	» Side by Side » Top & Bottom
			33.72	59.94	
			33.75	60.00	
RGB-PC	1080	1920x1080	66.587	59.934	» Side by Side » Top & Bottom
USB	1080p	1920x1080	33.75	30	» Side by Side » Top & Bottom » Checker Board
DLNA	1080p	1920x1080	33.75	30	» Side by Side » Top & Bottom » Checker Board
	Signal				Playable 3D video format
DTV	720p, 1080i				» Side by Side » Top & Bottom

- Media contents and a player need to support HDMI 3D Frame Packing, HDMI 3D Side by Side, HDMI 3D Top & Bottom to play in 3D.
- Video, which is input as HDMI 3D Frame Packing, HDMI 3D Side by Side, HDMI 3D Top & Bottom format, is switched into the 3D screen automatically.

Wireless LAN for Broadband/DLNA Adaptor SPEC (For LW9800 series)

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

Standard	IEEE802.11a/b/g/n
Frequency Range	2402 to 2483 MHz 5150 to 5250 MHz 5725 to 5850 MHz
Modulation	CCK / OFDM / MIMO
Output Power (Typical)	802.11a: 14 dBm 802.11b: 17 dBm 802.11g: 14 dBm 802.11n: 13 dBm
Data rate	802.11a/g: 54 Mbps 802.11b: 11 Mbps 802.11n: 300 Mbps
Antenna Gain (Typical)	2402 to 2483 MHz: 1.17 dBi 5150 to 5250 MHz: 4.67 dBi 5725 to 5850 MHz: 3.30 dBi
Occupied bandwidth	802.11a/b/g: HT20 802.11n: HT20/40

Because band channel used by the country could be different, the user can not change or adjust the operating frequency and this product is set for the regional frequency table.

- FCC ID of Wi-Fi module inside TV
  FCC ID: BEJWN8522D1

RF module (BM-LDS201) specification

For TV By using a 2.4 GHz bandwidth radio frequency (RF).

- Output: 1 dBm or lower
- Maximum Communication Distance: 10 m (30 ft) in an open space
- Bandwidth: 2.4 GHz (2.4035 GHz - 2.4783 GHz)
- Transfer Rate: 250 kbps
- FCC ID of RF module inside TV
  FCC ID: BEJLDS201

IR CODES

Code (Hexa)	Function	Note	Code (Hexa)	Function	Note
08	POWER	Remote control Button (Power On/Off)	F0	TV/RAD	Remote control Button
			DC	3D	Remote control Button
45	Q.MENU	Remote control Button	5B	EXIT	Remote control Button
43	Home	Remote control Button	D6	TV	Discrete IR Code (TV Input Selection)
0B	INPUT	Remote control Button			
10 - 19	Number Key 0-9	Remote control Button	C4	POWER ON	Discrete IR Code (Only Power Off)
53	LIST	Remote control Button			
1A	Q.VIEW	Remote control Button	C5	POWER OFF	Discrete IR Code (Only Power Off)
09	MUTE/DELETE	Remote control Button			
02	VOL +	Remote control Button	5A	AV1	Discrete IR Code (AV1 Input Selection)
03	VOL -	Remote control Button			
00	CH ^	Remote control Button	D0	AV2	Discrete IR Code (AV2 Input Selection)
01	CH v	Remote control Button			
1E	FAV/MARK	Remote control Button	BF	COMPONENT1	Discrete IR Code (Component1 Input Selection)
40	^	Remote control Button			
41	v	Remote control Button	D4	COMPONENT2	Discrete IR Code (Component2 Input Selection)
07	<	Remote control Button			
06	>	Remote control Button	D5	RGB-PC	Discrete IR Code (RGB-PC Input Selection)
44	ENTER	Remote control Button			
28	BACK	Remote control Button	CE	HDMI1	Discrete IR Code (HDMI1 Input Selection)
79	RATIO	Remote control Button			
BA Plasma	FREEZE	Remote control Button	CC	HDMI2	Discrete IR Code (HDMI2 Input Selection)
95	ENERGY SAVING	Remote control Button			
7E	SIMPLINK	Remote control Button	E9	HDMI3	Discrete IR Code (HDMI3 Input Selection)
AA	INFO	Remote control Button			
30	AV MODE	Remote control Button	DA	HDMI4	Discrete IR Code (HDMI4 Input Selection)
72	RED	Remote control Button			
71	GREEN	Remote control Button	76	Ratio 4:3	Discrete IR Code (Only 4:3 Mode)
63	YELLOW	Remote control Button			
61	BLUE	Remote control Button	77	Ratio 16:9	Discrete IR Code (Only 16:9 Mode)
B1	■	Remote control Button			
B0	▶	Remote control Button	AF	Ratio Cinema Zoom	Discrete IR Code (Only Cinema Zoom Mode)
BA	❚❚	Remote control Button	AB	GUIDE	Remote control Button
8E	▶▶	Remote control Button	59	Premium	Remote control Button
8F	◀◀	Remote control Button	9E	LIVE TV	Remote control Button
BD	REC	Remote control Button	39	SUBTITLE	Remote control Button

- Use the feature depending on your model.

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EXTERNAL CONTROL DEVICE SETUP

RS-232C Setup

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

NOTE

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

Type of connector; D-Sub 9-Pin Male

RS-232C IN
(CONTROL & SERVICE)

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

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RS-232C configurations

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

3-Wire Configurations(Not standard)

Set ID

Set ID number.

1 Press **Home** to access the Home menu.

2 Press the Navigation buttons to scroll to **SETUP** and press **ENTER**.

3 Press the Navigation buttons to scroll to **OPTION** and press **ENTER**.

4 Press the Navigation buttons to scroll to **Set ID** and press **ENTER**.

5 Scroll left or right to select a set ID number and select **CLOSE**. The adjustment range is 1-99.

6 When you are finished, press **EXIT**.

*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

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Communication Parameters

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

Command reference list

	COMMAND1	COMMAND2	DATA (Hexadecimal)		COMMAND1	COMMAND2	DATA (Hexadecimal)
01. Power	k	a	00 - 01	14. Treble	k	r	00 - 64
02. Input Select	x	b	(See p.135)	15. Bass	k	s	00 - 64
03. Aspect Ratio	k	c	(See p.135)	16. Balance	k	t	00 - 64
04. Screen Mute	k	d	00 - 01	17. 3D (For 3D TV)	x	t	(See p.136)
05. Volume Mute	k	e	00 - 01	18. Color Temperature	x	u	00 - 64
06. Volume Control	k	f	00 - 64	19.Extended 3D (For 3D TV)	x	v	(See p.136)
07. Contrast	k	g	00 - 64	20. ISM Method (Plasma)	j	p	(See p.137)
08. Brightness	k	h	00 - 64	21. Energy Saving	j	q	(See p.137)
09. Color	k	i	00 - 64	22. Auto Configuration	j	u	(See p.137)
10. Tint	k	j	00 - 64	24. Channel Add/Del	m	b	00 - 01
11. Sharpness	k	k	00 - 64	25. Key	m	c	(See p.137)
12. OSD Select	k	l	00 - 01	26. Backlight (LCD)	m	g	00 - 64
13. Remote Control Lock Mode	k	m	00 - 01				

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

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Transmission / Receiving protocol

Transmission

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

[Command 1] : First command to control the set.(j, k, m or x)
[Command 2] : Second command to control the set.
[Set ID] : You can adjust the set ID to choose desired set ID number in Option menu. Adjustment range is 1~ 99. When selecting Set ID '0', every connected the set is controlled. Set ID is indicated as decimal (1~ 99) on menu and as Hexa decimal (0x0~ 0x63) on transmission /receiving protocol.
[DATA] : To transmit the command data.
Transmit the 'FF' data to read status of command.
[Cr] : Carriage Return
ASCII code '0x0D'
[ ] : ASCII code 'space (0x20)'
* In this model, set will not send the status during the standby mode.

OK Acknowledgement

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

The set transmits ACK (acknowledgement) based on this format when receiving normal data. At this time, if the data is data read mode, it indicates present status data. If the data is data write mode, it returns the data of the PC computer.
* In this model, set will not send the status during the standby mode.
* Data Format
[Command 2] : Use as command.
[Set ID] : Use the small character, if set ID is 10, it will send the '0', 'a'.
[DATA] : Use the small character, if data is 0 x ab, it will send the 'a', 'b'.
[OK] : Use the large character.

Error Acknowledgement

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

The set transmits ACK (acknowledgement) based on this format when receiving abnormal data from non-viable functions or communication errors.
Data1: Illegal Code
Data2: Not supported function
Data3: Wait more time
* In this model, set will not send the status during the standby mode.
* Data Format
[Command 2] : Use as command.
[Set ID] : Use the small character, if set ID is 10, it will send the '0', 'a'.
[DATA] : Use the small character, if data is 0 x ab, it will send the 'a', 'b'.
[NG] : Use the large character

01. Power (Command: k a)

To control Power On/Off of the set.

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

Data 00: Power Off Data 01: Power On

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

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

There might be a time delay between command and acknowledge.

02. Input Select (Command: x b)

To select input source for set.

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

Data 00: DTV (Antenna)
Data 10: Analog (Antenna) Data 11: Analog (Cable)
Data 20: AV or AV1 Data 21: AV2
Data 40: Component1 Data 41: Component2
Data 42: Component3 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 0B: Full Wide
Data 02: 16:9 Data 10: Cinema Zoom 1
Data 06: Original ⋮
Data 07: 14:9 Data 1F: Cinema Zoom16
Data 09: Just scan

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 Monitor set, use this mode. When main power is on/off, remote control lock is released. If Key Lock is on in the standby mode, TV will not turn on by POWER button of remote control and on the TV.

14. Treble (Command: k r)

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

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

Data Min: 00 ~ 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. 3D (Command: x t) (For 3D TV)

To change 3D mode for TV.

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

Data1
00: 3D On 01: 3D Off
02: 3D → 2D 03: 2D → 3D

Data2
00: Top and Bottom 01: Side by Side
02: Check Board 03: Frame Sequential

Data3
00: Right to Left 01: Left to Right

Data4
3D Depth: Min : 00 ~ Max : 14
(*transmit by Hexadecimal code)

*If data1 is 00(3D On), data4 has no meaning.
*If data1 is 01(3D off) or 02(3D to 2D), data2, data3 and data4 have no meaning.
*If data1 is 03(2D to 3D), data2 and data3 have no meaning.

Data 1	Data 2	Data 3	Data 4
00	o	o	x
01	x	x	x
02	x	x	x
03	x	x	o

x : Don't care

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

18. Color Temperature (Command: x u)

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

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

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

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

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

To change 3D option for TV.

Transmission [x][v][ ][Set ID][ ][Data01][ ][Data02][Cr]

Data1: 3D option
00: 3D Picture Correction
01: 3D Depth (2D to 3D Only)
02: 3D Viewpoint
03: 3D Picture Size
04: 3D Picture Balance
05: 3D Optimization

Data2: It has own range for each 3D option determined by Data1.
1) When Data1 is 00
00: Right to Left 01: Left to Right
2) When Data1 is 01
Data Min: 00 ~ Max: 14 (*transmit by Hexadecimal code)
3) When Data1 is 02
Data Min: 00 ~ Max: 14 (*transmit by Hexadecimal code)
4) When Data1 is 03
00: Just Scan 01: 16:9
5) When Data1 is 04
00: Off 01: On
6) When Data1 is 05
Data Min: 00 ~ Max: 02 (*transmit by Hexadecimal code)

Acknowledgement [v][ ][OK][Data1][Data2][x]
[v][ ][NG][Data1][x]

* Use the feature depending on your model.

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20. ISM Method (Command: j p) (Plasma)

To avoid having a fixed image remain on screen.

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

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

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

21. Energy Saving (Command: j q)

To control the energy saving function.

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

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

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

22. Auto Configuration (Command: j u)

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

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

Data 01: To set

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

23. Channel Tuning (Command: m a)

To tune channel to following physical number.

Transmission [m][a][ ][Set ID][ ][Data00][ ][Data01][ ][Data02][Cr]

Data 00: High channel data
Data 01: Low channel data
ex.
No.47 ➞ 00 2F (2FH)
No.394 ➞ 01 8A (18AH)
DTV No.0 ➞ Don't care
Data 02:
0x00: Analog Main
0x10: DTV Main
0x20: Radio
0x80: CATV Main
Channel data range
Analog air: Min 02 - Max 45 (2 - 69)
Analog cable: Min 01 - Max 7D (1 - 125)
Digital: Min 01 - Max 3E7 (1 - 999)

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

Digital: Min 00 - Max 7DH

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

To add and delete the channels.

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

Data 00: Channel Delete Data 01: Channel Add

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

25. Key (Command: m c)

To send IR remote key code.

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

See p.130

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

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

26. Backlight (Command: m g) (LCD)

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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- libxslt

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- lua interpreter

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NOTE

ENG

Some video codecs listed in the manual may not be supported, depending on the region (country).

POR

Alguns codecs de vídeo listados no manual podem não ser suportados, dependendo da região (país).

POL

Niektóre kodeki wideo wymienione w instrukcji mogą nie być obsługiwane, w zależności od regionu (kraju).

SPA

Algunos códecs de vídeo que figuran en el manual pueden no ser compatibles, dependiendo de la región (país).

THA

ชนิดของไฟล์วิดีโอบางชนิดที่อยู่ในคู่มือเล่มนี้ อาจไม่รองรับการใช้งานในบางพื้นที่(ประเทศ)

The model and serial numbers of the TV is located on the back of the TV
Record it below should you ever need service.

MODEL _____

SERIAL _____