

LCD TV / DVD Combo OWNER'S MANUAL

26LG40 32LG40

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

Write the model number and serial number from the label on the back cabinet on the front or back of this manual.

CAUTION - CLASS 1M VISIBLE AND INVISIBLE LASER RADIATION WHEN OPEN DO NOT VIEW DIRECTLY WITH OPTICAL INSTRUMENTS

ENERGY STAR is a set of power-saving guidelines issued by the U.S. Environmental Protection Agency (EPA).



As an ENERGY STAR Partner LG Electronics USA, Inc. has determined that this product meets the ENERGY STAR guidelines for energy efficiency.

P/NO: SAC31712401 (0805-REV03)

WARNING / CAUTION



WARNING / CAUTION

RISK OF ELECTRIC SHOCK
DO NOT OPEN



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

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

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

WARNING/CAUTION

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

NOTE TO CABLE/TV INSTALLER

This reminder is provided to call the CATV system installer's attention to Article 820-40 of the National Electric Code (U.S.A.). The code provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of the cable entry as practical.

WARNING / CAUTION

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

FCC NOTICE

Class B digital device

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

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

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

CAUTION

Do not attempt to modify this product in any way without written authorization from LG Electronics. Unauthorized modification could void the user's authority to operate this product

SAFETY INSTRUCTIONS

IMPORTANT SAFETY INSTRUCTIONS

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



Do not use this apparatus near water.



Clean only with dry cloth.



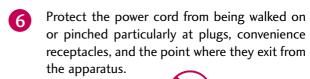
Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.



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.





Only use attachments/accessories specified by the manufacturer.



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





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



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



SAFETY INSTRUCTIONS

- Never touch this apparatus or antenna during a thunder or lighting storm.
- When mounting a TV on the wall, make sure not to install the TV by the hanging power and signal cables on the back of the TV.
- Do not allow an impact shock or any objects to fall into the product, and do not drop onto the screen with something.
- CAUTION concerning the Power Cord:

 It is recommend that appliances be placed upon a dedicated circuit; that is, a single outlet circuit which powers only that appliance and has no additional outlets or branch

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.

circuits. Check the specification page of this

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

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



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



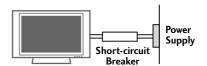
Do not expose to dripping or splashing and do not place objects filled with liquids, such as vases, cups, etc. on or over the apparatus (e.g. on shelves above the unit).



GROUNDING

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

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



- DISCONNECTING DEVICE FROM MAINS

 Mains plug is the disconnecting device. The plug must remain readily operable.
- Keep the product away from direct sunlight.

20

ANTENNAS

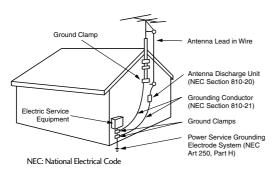
Outdoor antenna grounding

If an outdoor antenna is installed, follow the precautions below. An outdoor antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits, or where it can come in contact with such power lines or circuits as death or serious injury can occur.

Be sure the antenna system is grounded so as to provide some protection against voltage surges and built-up static charges.

Section 810 of the National Electrical Code (NEC) in the U.S.A. provides information with respect to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna discharge unit, connection to grounding electrodes and requirements for the grounding electrode.

Antenna grounding according to the National Electrical Code, ANSI/NFPA 70





Cleaning

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



Moving

Make sure the product is turned off, unplugged and all cables have been removed. It may take 2 or more people to carry larger TVs. Do not press against or put stress on the front panel of the TV.



Ventilation

Install your TV where there is proper ventilation. Do not install in a confined space such as a bookcase. Do not cover the product with cloth or other materials (e.g.) plastic while plugged in. Do not install in excessively dusty places.



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

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is a trademark of DVD format/Logo Licensing Corporation.

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

On Disposal

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.

PREPARATION

ACCESSORIES

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

The accessories included may differ from the images below.



Owner's Manual



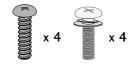
CD Manual



Remote Control, Batteries



Power Cord



Bolts for stand assembly (Refer to P.10)



Screw for stand fixing (Refer to P.12)



Protection Cover



Cable Management Clip



Polishing Cloth (This feature is not available for all models.)

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

Option Extras



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

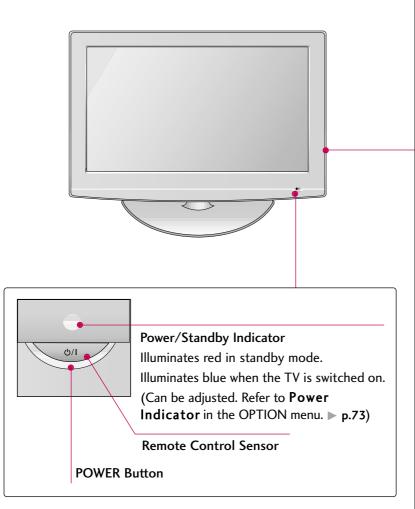
D-sub 15 pin Cable

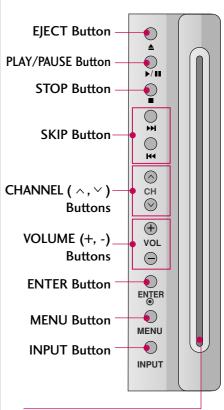
PREPARATION

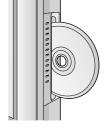
FRONT PANEL INFORMATION

- Image shown may differ from your TV.
- NOTE: If your TV has a protection tape attached, remove the tape.

 And then wipe the TV with a cloth (If a polishing cloth is included with your TV, use it).





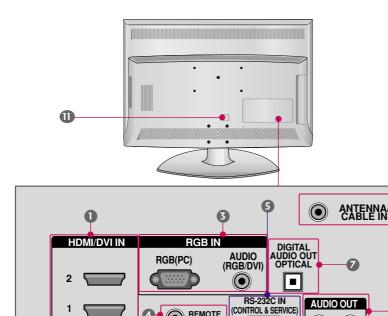


Disc Slot:

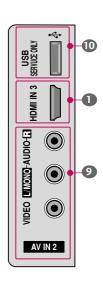
Insert discs with the label facing towards the front of the TV. Press the disc partially into the slot and the loader will pull the disc from your hand. Do not force the disc into the slot.

BACK PANEL INFORMATION

■ Image shown may differ from your TV.



) (O



HDMI/DVI IN, HDMI IN

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

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

COMPONENT IN

Analog Connection. Supports HD.

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

RGB (PC)

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

AUDIO (RGB/DVI)

1/8" headphone jack for analog PC audio input.

4 REMOTE CONTROL IN PORT

For a wired remote control.

S RS-232C IN (CONTROL & SERVICE)

Used by third party devices.

6 ANTENNA/CABLE IN

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

DIGITAL AUDIO OUT OPTICAL

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

Includes an optical connection.

Note: In standby mode, these ports do not work.

AUDIO OUT

S-VIDEO VIDEO L(MONO)-AUDIO-R

Analog audio output for use with amps and home theater systems.

AV (Audio/Video) IN

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

S-VIDEO

Better quality than standard composition. Supports standard definition video only (480i).

(II) USB SERVICE ONLY

Used for software updates.

Power Cord Socket

For operation with AC power.

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

PREPARATION

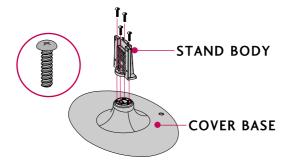
STAND INSTRUCTION

■ Image shown may differ from your TV.

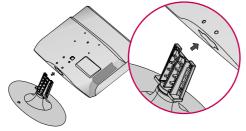
INSTALLATION

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

Assemble the parts of the STAND BODY with COVER BASE of the TV.



3 Assemble the TV as shown.



Fix the 4 bolts securely using the holes in the back of the TV.



NOTE

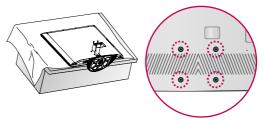
➤ When assembling the desk type stand, make sure the bolt is fully tightened (If not tightened fully, the TV can tilt forward after the product installation). Do not over tighten.

DETACHMENT

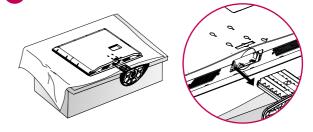
Carefully place the TV screen side down on a cushioned surface to protect the screen from damage.



2 Loose the bolts from TV.

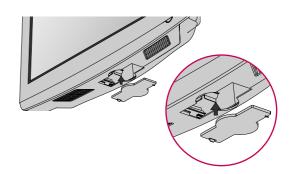


Detach the stand from TV.



PROTECTION COVER

After removing the stand, install the included **protection cover** over the hole for the stand. Press the **PROTECTION COVER** into the TV until you hear it click. And push the tab aside.



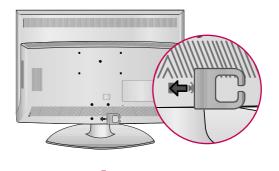
CABLE MANAGEMENT

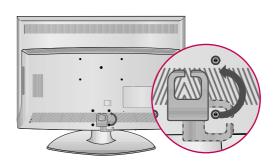
■ Image shown may differ from your TV.

Align the hole with the tab on the CABLE MANAGEMENT CLIP.

Turn the **CABLE MANAGEMENT CLIP** as shown.

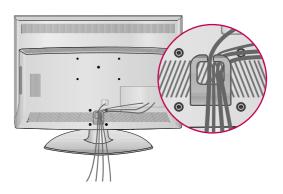
Note: This cable management clip can be broken by excessive pressure.





Connect the cables as necessary.

To connect additional equipment, see the EXTERNAL EQUIPMENT SETUP section.

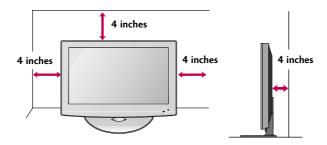


PREPARATION

DESKTOP PEDESTAL INSTALLATION

■ Image shown may differ from your TV.

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

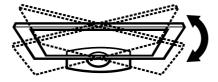


A CAUTION

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

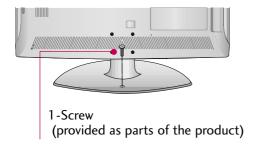
SWIVEL STAND

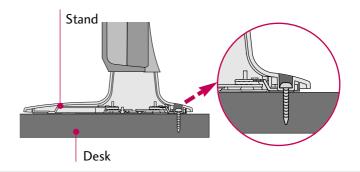
After installing the TV, you can adjust the TV set manually to the left or right direction by 20 degrees to suit your viewing position.



ATTACHING THE TV TO A DESK

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





A WARNING

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

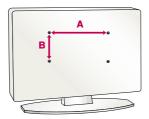
VESA WALL MOUNTING

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

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

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

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



Product	Model	VESA (A * B)	Standard Screw	Quantity
LCD TV	26LG40, 32LG40	200 * 100	M4	4

NOTE

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

- standard screw specifications, the length of the screws may differ depending on their specifications
- ▶ Do not use screws that do not comply with the VESA standard screw specifications.
 - Do not use fasten the screws too strongly, this may damage the TV or cause the TV to a fall, leading to personal injury. LG is not liable for these kinds of accidents.
- ▶ LG is not liable for TV damage or personal injury when a non-VESA or non specified wall mount is used or the consumer fails to follow the TV installation instructions.

A CAUTION

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

PREPARATION

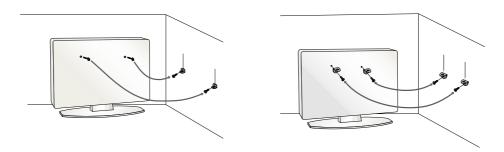
SECURING THE TV TO THE WALL TO PREVENT FALLING WHEN THE TV IS USED ON A STAND

- You should purchase necessary components to prevent TV from falling off of the stand.
- Image shown may differ from your TV.

We recommend that you set up the TV close to a wall so it cannot fall over if pushed backwards.

Additionally, we recommend that the TV be attached to a wall so it cannot be pulled in a forward direction, potentially causing injury or damaging the product.

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



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

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

Ensure the eye-bolts or brackets are tightened securely.



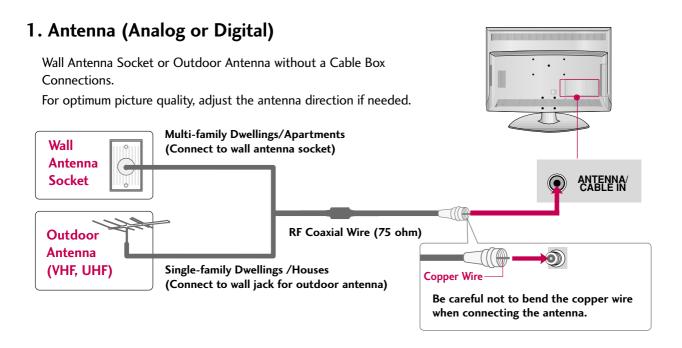
■ Use a sturdy rope (sold separately) to tie the product. It is safer to tie the rope so it becomes horizontal between the wall and the product.

NOTE

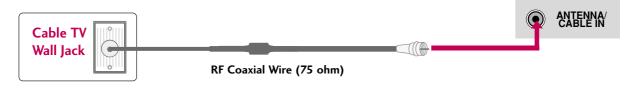
- ▶ Use a platform or cabinet strong enough and large enough to support the size and weight of the TV.
- ▶ To use the TV safely make sure that the height of the bracket on the wall and the one on the TV are the same.

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

ANTENNA OR CABLE CONNECTION



2. Cable



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

■ To prevent the equipment damage, never plug in any power cords until you have finished connecting all equipment.

HD RECEIVER SETUP

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

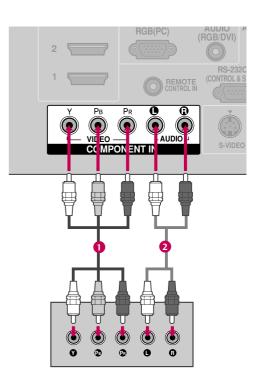
Component Connection

1. How to connect

- Connect the video outputs (Y, PB, PR) of the digital settop box to the **COMPONENT IN VIDEO** jacks on the TV. Match the jack colors (Y = green, PB = blue, and PR = red).
- Connect the audio output of the digital set-top box to the COMPONENT IN AUDIO jacks on the TV.

2. How to use

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



Supported Resolutions

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

Y, CB/PB, CR/PR

Resolution	Horizontal Frequency(KHz)	Vertical Frequency(Hz)
720x480i	15.73 15.73	59.94 60.00
720x480p	31.47 31.50	59.94 60.00
1280x720p	44.96 45.00	59.94 60.00
1920x1080i	33.72 33.75	59.94 60.00
1920x1080p	26.97 27.00 33.71 33.75 67.43 67.50	23.94 24.00 29.97 30.00 59.94 60.00

HDMI Connection

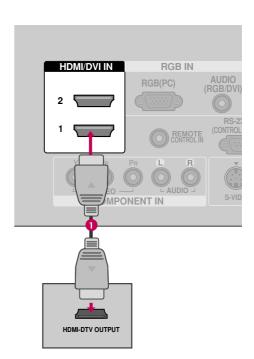
1. How to connect

- Connect the digital set-top box to HDMI/DVI IN1, 2, or 3 jack on the TV.
- No separate audio connection is necessary.

 HDMI supports both audio and video.

2. How to use

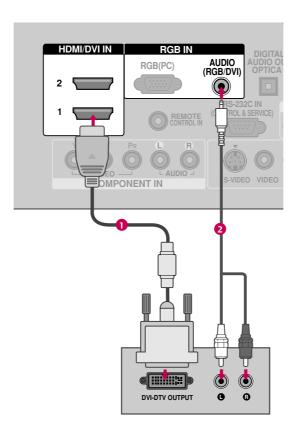
- Turn on the digital set-top box.(Refer to the owner's manual for the digital set-top box.)
- Select the HDMI1, HDMI2, or HDMI3 input source on the TV using the INPUT button on the remote control.



HDMI-DTV

Resolution	Horizontal Frequency(KHz)	Vertical Frequency(Hz)
720x480p	31.47 31.50	59.94 60.00
1280x720p	44.96 45.00	59.94 60.00
1920x1080i	33.72 33.75	59.94 60.00
1920x1080p	26.97 27.00 33.71 33.75 67.432 67.50	23.976 24.00 29.97 30.00 59.939 60.00

DVI to HDMI Connection



1. How to connect

- Connect the DVI output of the digital set-top box to the HDMI/DVI IN1, 2, or 3 jack on the TV.
- Connect the PC audio output to the AUDIO (RGB/DVI) jack on the TV.

2. How to use

- Turn on the digital set-top box.(Refer to the owner's manual for the digital set-top box.)
- Select the HDMI 1, HDMI 2 or HDMI 3 input source on the TV using the INPUT button on the remote control.

NOTE

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

DVD SETUP

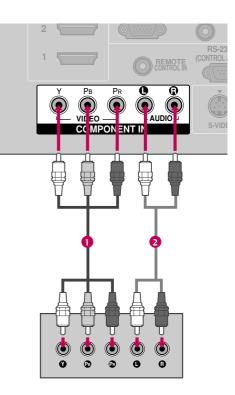
Component Connection

1. How to connect

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

2. How to use

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



Component Input ports

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

Component ports on the TV	Y	Рв	PR
Video output ports	Y Y	P _B	P _R
on DVD player	Y Y	СЬ Pb	Cr Pr

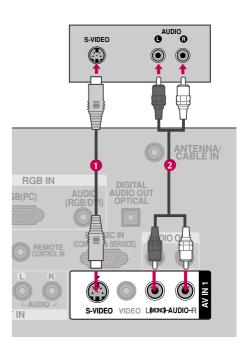
S-Video Connection

1. How to connect

- Connect the S-VIDEO output of the DVD to the **S-VIDEO** input on the TV.
- Connect the audio outputs of the DVD to the **AUDIO** input jacks on the TV.

2. How to use

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



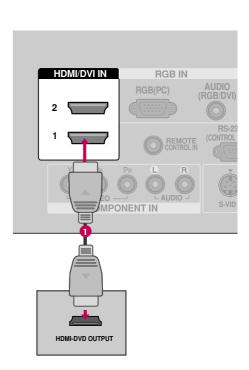
HDMI Connection

1. How to connect

- Connect the HDMI output of the DVD to the HDMI/DVI IN 1, 2, or 3 jack on the TV.
- No separated audio connection is necessary. HDMI supports both audio and video.

2. How to use

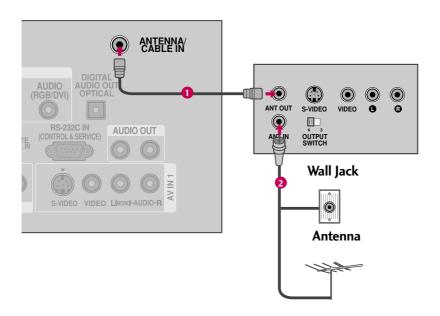
- Select the HDMI 1, 2, or 3 input source on the TV using the INPUT button on the remote control.
- Refer to the DVD player's manual for operating instructions.



VCR SETUP

- To avoid picture noise (interference), leave an adequate distance between the VCR and TV.
- If the 4:3 picture format is used; the fixed images on the sides of the screen may remain visible on the screen. This phenomenon is common to all TVs and is not covered by warranty.

Antenna Connection



1. How to connect

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

2. How to use

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

Composite (RCA) Connection

1. How to connect



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

2. How to use

- Insert a video tape into the VCR and press PLAY on the VCR. (Refer to the VCR owner's manual.)
- Select the **AV1** input source on the TV using the **INPUT** button on the remote control.
- If connected to AV IN2, select AV2 input source on the TV.

NOTE

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

S-Video Connection

1. How to connect

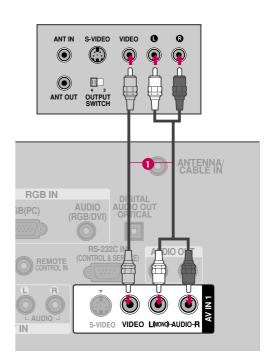
- Connect the S-VIDEO output of the VCR to the S-VIDEO input on the TV.
- Connect the audio outputs of the VCR to the AUDIO input jacks on the TV.

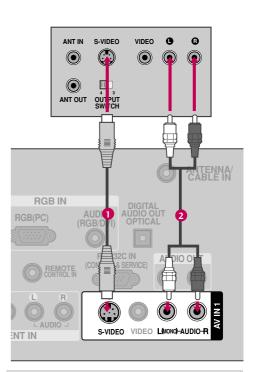
2. How to use

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

A CAUTION

▶ Do not connect to both Video and S-Video at the same time. In the event that you connect both Video and the S-Video cables, only the S-Video will work.





NOTE

➤ The picture quality is improved: compared to normal composite (RCA cable) input.

OTHER A/V SOURCE SETUP

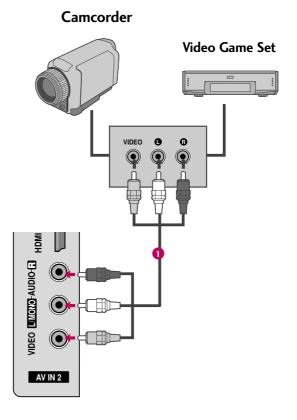
1. How to connect

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

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

2. How to use

- Select the AV2 input source on the TV using the INPUT button on the remote control.
- If connected to AV IN1 input, select the AV1 input source on the TV.
- Operate the corresponding external equipment.



AUDIO OUT CONNECTION

Send the TV's audio to external audio equipment via the Audio Output port.

Analog

1. How to connect

- Connect audio outputs to the TV's AUDIO OUT jacks.
- Set the "TV Speaker option Off" in the AUDIO menu. (▶ p.79). See the external audio equipment instruction manual for operation.

RS-232C IN AUDIO OUT CONTROL & SERVICE) L R SERVICE S-VIDEO VIDEO VIDEO AUDIO AUDIO AUDIO AUDIO AUDIO

Digital

1. How to connect

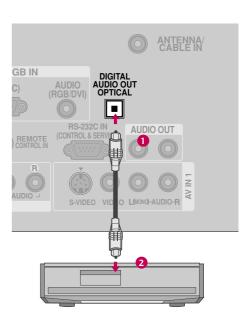
- Connect one end of the optical cable to the TV's OPTI-CAL port of DIGITAL AUDIO OUT.
- Connect the other end of the optical cable to the digital audio input on the audio equipment.
- Set the "TV Speaker option Off" in the AUDIO menu. (p.79). See the external audio equipment instruction manual for operation.

NOTE

When connecting with external audio equipments, such as amplifiers or speakers, you can turn the TV speakers off in the menu. (▶ p.79)

A CAUTION

- ▶ Do not look into the optical output port. Looking at the laser beam may damage your vision.
- Composite audio out (the red and white jacks) only works with composite inputs. Use optical audio output for any type of DTV signal.



PC SETUP

This TV provides Plug and Play capability, no display driver is needed.

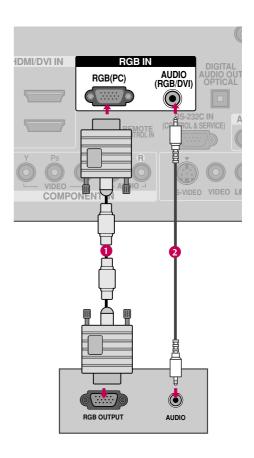
VGA (D-Sub 15 pin) Connection

1. How to connect

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

2. How to use

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



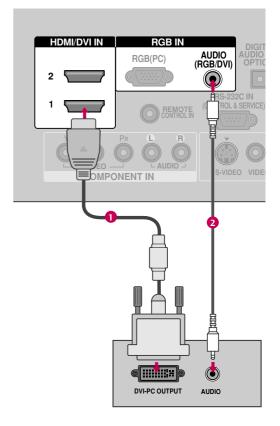
DVI to HDMI Connection

1. How to connect

- Connect the DVI output of the PC to the HDMI/DVI IN1, 2, or 3 jack on the TV.
- Connect the PC audio output to the AUDIO (RGB/DVI) jack on the TV.

2. How to use

- Turn on the PC and the TV.
- Select the HDMI 1, HDMI 2 or HDMI 3 input source on the TV using the INPUT button on the remote control.



NOTES

- ➤ To get the the best picture quality, adjust the PC graphics card to 1360x768.
- ▶ 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, run Auto Config. in the Screen (RGB-PC) menu. You may also try changing the PC output to another resolution, change the refresh rate to another rate or adjust the bright-
- ness and contrast on the PICTURE menu until the picture is clear.
- ➤ Avoid keeping a fixed image on the screen for a long period of time. The fixed image may become permanently imprinted on the screen.
- ► The synchronization input form for Horizontal and Vertical frequencies is separate.

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

Resolution	Horizontal Frequency(KHz)	Vertical Frequency(Hz)
640x350	31.469	70.08 •
720x400	31.469	70.08 •
640x480	31.469	59.94
800×600	37.879	60.31
1024x768	48.363	60.00
1280x768	47.776	59.87
1360x768	47.720	59.799
1366x768	47.130	59.65

^{*} Only RGB-PC mode

Screen Setup for PC mode

Selecting Resolution

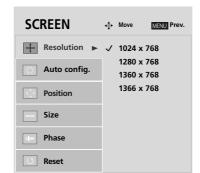
You can choose the resolution in RGB-PC mode. The Position, Phase, and Size can also be adjusted.

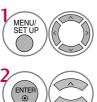


Color

Screen (RGB-PC)

Advanced Control

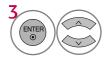




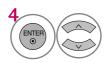
Select PICTURE.



Select Screen (RGB-PC).



Select Resolution.

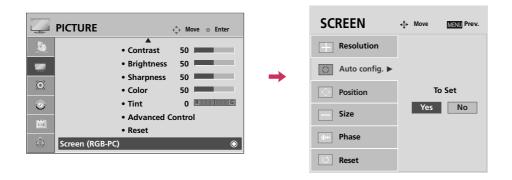


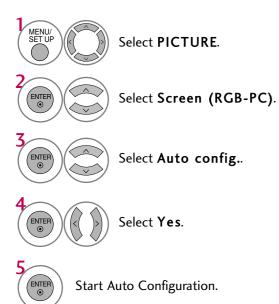
Select the desired resolution.



Auto Configure

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



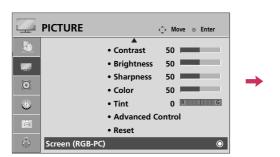


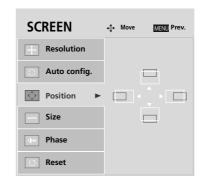
- If the position of the image is still not correct, try Auto adjustment again.
- If picture needs to be adjusted again after Auto adjustment in RGB-PC, you can adjust the **Position**, **Size** or **Phase**.

Adjustment for screen Position, Size, and Phase

If the picture is not clear after auto adjustment and especially if characters are still trembling, adjust the picture phase manually.

This feature operates only in RGB-PC mode.







Select PICTURE.



Select Screen (RGB-PC).



Select Position, Size, or Phase.



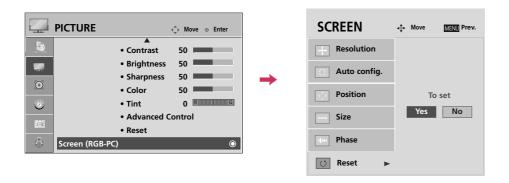
Make appropriate adjustments.

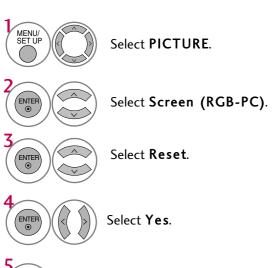


- Position: This function is to adjust picture to left/right and up/down as you prefer.
- Size: This function is to minimize any vertical bars or stripes visible on the screen background. And the horizontal screen size will also change.
- Phase: This function allows you to remove any horizontal noise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

Screen Reset (Reset to original factory values)

Returns **Position**, **Size**, and **Phase** to the default factory settings. This feature operates only in RGB-PC mode.

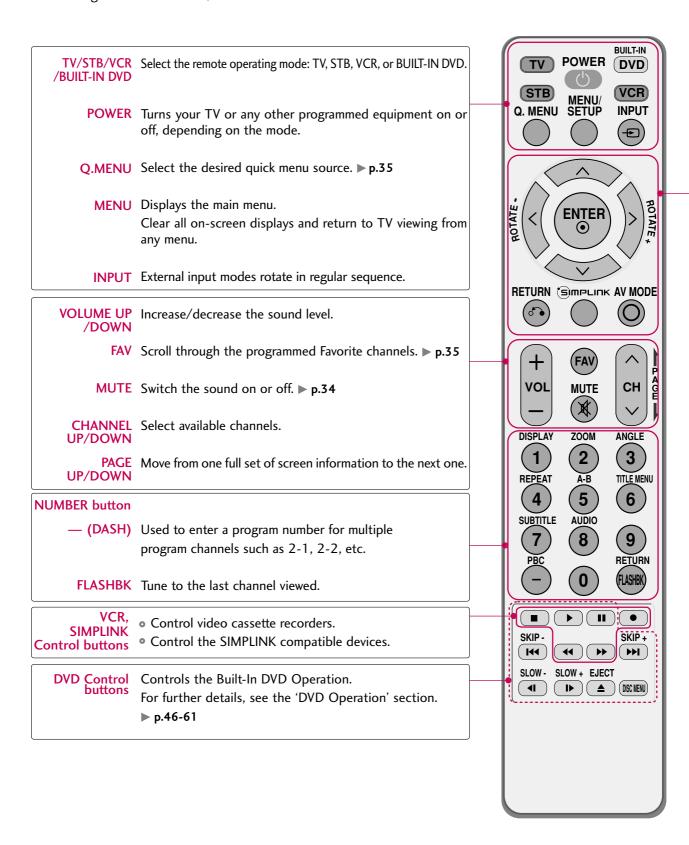




WATCHING TV / CHANNEL CONTROL

REMOTE CONTROL FUNCTIONS

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



THUMBSTICK (Up/Down/Left Right/ENTER)

Navigate the on-screen menus and adjust the system settings to your preference.

RETURN Allows the user to move return one step in an interactive application or other user interaction function. Also closes menus.

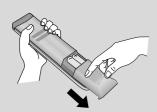
SIMPLINK See a list of SIMPLINK compatible devices connected to the TV. When you press this button, the SIMPLINK menu appears at the screen. ▶ p.44-45

AV MODE Toggles through preset picture and audio settings. ▶ p.43

Blue Color The recommands printed on the remote in blue are active when in Built-In DVD mode.

Button For further details, see the 'DVD Operation' section. ▶ p.46-61

Installing Batteries



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

WATCHING TV / CHANNEL CONTROL

TURNING ON TV

- First, connect power cord correctly.
 - At this moment, the TV switches to standby mode.
 - In standby mode to turn TV on, press the ϕ/I , INPUT, CH (\wedge or \vee) button on the TV or press the POWER, INPUT, CH(\wedge or \vee), Number (0~9) button on the remote control.
- Select the viewing source by using the **INPUT** button on the remote control
 - This TV is programmed to remember which power state it was last set to, even if the power cord is out.
- When finished using the TV, press the **POWER** button on the remote control. The TV reverts to standby mode.
 - NOTE
 - If you intend to be away on vacation, disconnect the power plug from the wall power outlet.

CHANNEL SELECTION

Press the CH(\land or \lor) or NUMBER buttons to select a channel number.

VOLUME ADJUSTMENT

Adjust the volume to suit your personal preference.

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

QUICK MENU

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

- **Aspect Ratio**: Selects your desired picture format.
- **Backlight**: Adjust the brightness of LCD panel to control the brightness of the screen.
- Clear Voice: By differentiating the human sound range from others, it helps make human voices sound better.
- **Picture Mode**: Selects the factory preset picture depend on the viewing environment.
- Sound Mode: Selects the factory preset sound for type of program.

- **Caption**: Select on or off.
- Multi Audio: Changes the audio language (Digital signal).
 - SAP: Selects MTS sound (Analog signal).
- Sleep Timer: Select the amount of time before your TV turns off automatically.
- **Del/Add/Fav**: Select channel you want to add/delete or add the channel to the Favorite List.





Display each menu.



Make appropriate adjustments.



Return to TV viewing.

INITIAL SETTING

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

- Default selection is "Home". We recommend setting the TV to "Home" mode for the best picture in your home environment.
- "In-store" Mode is only intended for use in retail environments. Customers can adjust the "Picture menu
 Picture mode" manually while inspecting the TV, but the TV will automatically return to preset in-store mode after 5 minutes.

Step1. Mode Setting





Select Home Mode.



Step2. Time Setting





Select **Auto** or **Manual**.





Select desired time option.



Step3. Option Setting





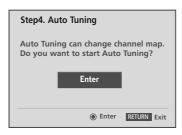
Select OSD Language Setting or Audio Language Setting.



Select your desired language.



Step4. Auto Tuning





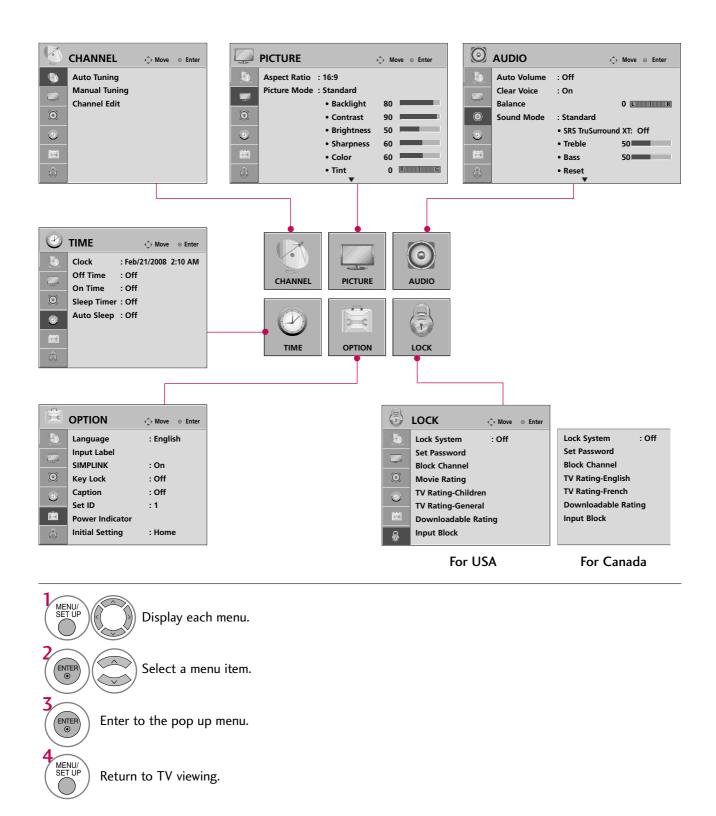
Start Auto Tuning.

NOTE

■ You can also adjust Initial Setting in the OPTION menu.

ON-SCREEN MENUS SELECTION

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



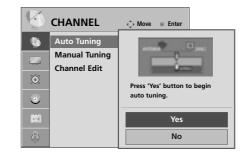
CHANNEL SETUP

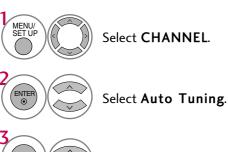
Auto Scan (Auto Tuning)

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

Run Auto Tuning again after any Antenna/Cable connection changes.

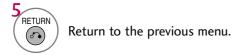


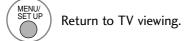








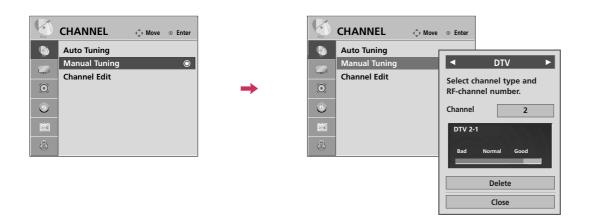


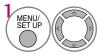


A password is required to gain access to Auto Tuning menu if the Lock System is turned on.

Add/Delete Channel (Manual Tuning)

If selecting DTV or CADTV input signal, you can view the on-screen signal strength monitor to see the quality of the signal being received.





Select CHANNEL.



Select Manual Tuning.



Select DTV, TV, CADTV, or CATV.



Select channel you want to add or delete.



Select Add or Delete.



Return to the previous menu.

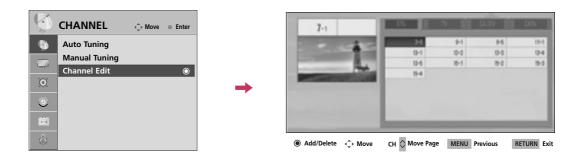


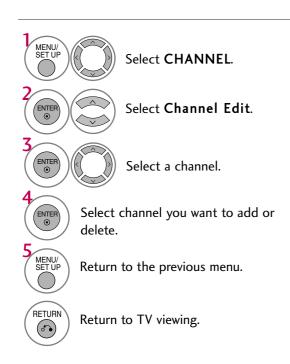
Return to TV viewing.

A password is required to gain access to Manual Tuning menu if the Lock System is turned on.

Channel Editing

A custom list can be created by toggling each channel on or off with the ENTER button. The channels in the Custom List are displayed in black and the channels deleted from the Custom List are displayed in gray. Once a channel is highlighted you can add or delete the channel by referring to the small window at the topright corner of the screen.





INPUT LIST

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

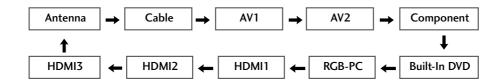


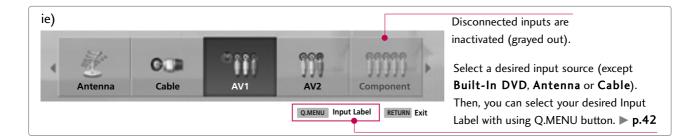






Select the desired input source.

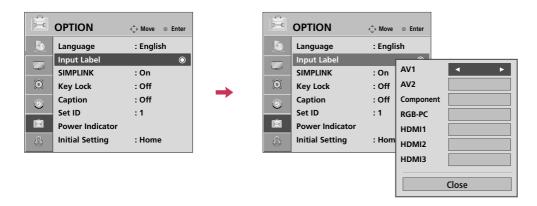




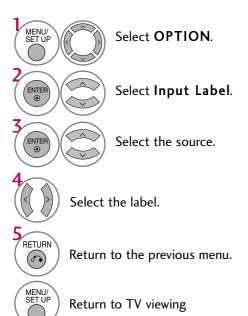
- **Antenna**: Select it to watch over-the-air broadcasts.
- **Cable**: Select it to watch cable and digital cable.
- **AV**: Select them to watch a VCR or other external equipment.
- Component: Select them to watch DVD or a Digital set-top box.
- Built-In DVD: Select it to play DVD.
- **RGB-PC**: Select it to view PC input.
- **HDMI**: Select them to watch high definition devices.

INPUT LABEL

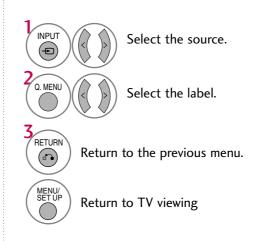
You can set a label for each input source when it's not in use.



With using OPTION menu

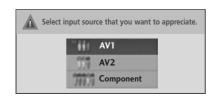


With using INPUT button



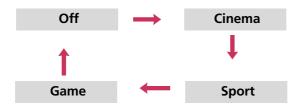
- When new external device is connected, this popup menu is displayed automatically. If selecting **Yes**, you can select input source that you want to appreciate.
- But, when selecting "SIMPLINK On", popup menu for HDMI input will not be displayed.





AV MODE

You can select the optimal images and sounds.





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



- If you select "Cinema" in AV mode, Cinema will be selected both for "PIC-TURE menu - Picture Mode" and "AUDIO menu - Sound Mode" respectively.
- If you select "Off" in AV mode, the "Picture Mode" and "Sound Mode" return to previous selected value.

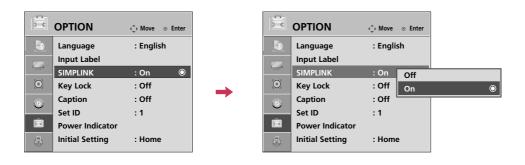


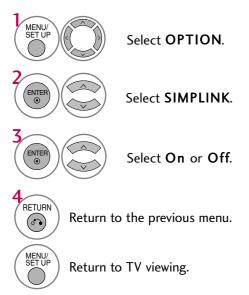
This function operates only with devices with the SIMPLINK logo.

The TV might not function properly when using it with other products with HDMI-CEC function.

This allows you to control and play other AV devices connected with HDMI cable without additional cables and settings.

To start using SIMPLINK, turn it on in the user menus.





NOTE

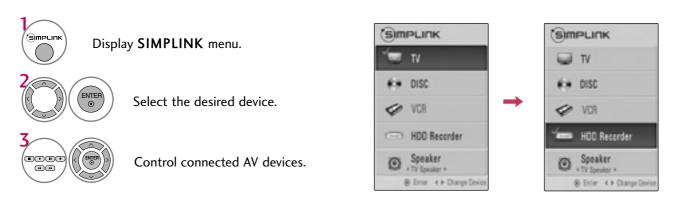
- ► Connect the HDMI/DVI IN or HDMI IN terminal of the TV to the rear terminal (HDMI terminal) of the SIM-PLINK device with the HDMI cable.
- ▶ When you switch the Input source with the INPUT button on the remote control, the SIMPLINK device will stop.
- ▶ When you select a device with home theater functionality,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

SIMPLINK Functions

- **Direct Play:** After connecting AV devices to the TV, you can directly control the devices and play media without additional settings.
- **Select AV device:** Enables you to select one of the AV devices connected to TV.
- **Disc playback:** Control connected AV devices by pressing the $\land \lor \lor \Rightarrow$, **ENTER**, \blacktriangleright , \blacksquare , \blacksquare , \blacksquare , and $\blacktriangleright \blacktriangleright$ buttons.
- Power off all devices: When you power off the TV, all connected devices are turned off.
- **Switch audio-out:** Offers an easy way to switch audio-out.
- Sync Power on: When you play the connected AV device, TV will automatically turn on.

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

Note: To operate SIMPLINK, an HDMI cable over Version 1.2 with *CEC function support should be used. (*CEC: Consumer Electronics Control).



SIMPLINK Menu

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



DVD OPERATION

NOTES ON DISCS

Symbol used in this manual

"⊘" may appear on the TV screen during operation. A "⊘" means that the operation is not permitted by the unit or is not available on the disc.

On handling discs

■ Do not touch the playback side of the disc.



Playback side

Do not attach paper or tape to discs.





On cleaning discs

Fingerprints and dust on the disc cause picture and sound deterioration. Wipe the disc from the center outwards with a soft cloth. Always keep the disc clean.





Do not use any type of solvent such as thinner, benzine, commercially available cleaners or antistatic spray for vinyl LPs. It may damage the disc.

On storing discs

- Do not store discs in a place subject to direct sunlight or near heat sources.
- Do not store discs in places subject to moisture and dust such as a bathroom or near a humidifier.
- Store discs vertically in a case. Stacking or placing

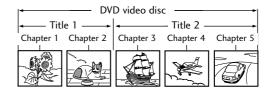
objects on discs outside of their case may cause warping.



Structure of disc contents

Normally, DVD video discs are divided into titles, and the titles are sub-divided into chapters. Video CDs and Audio CDs are divided into tracks.

DVD video disc



Video CD/Audio CD



Each title, chapter or track is assigned a number, which is called "title number", "chapter number" or "track number" respectively.

There may be discs that do not have these numbers.

Title: When two or more movies are recorded on a disc, the disc is divided into two or more parts. Each part is called a "TITLE".

Chapter: The titles can be subdivided into many sections. Each section is called a "CHAPTER".

Track: An audio CD can contain several items. These are assigned to the tracks.

Note

• If an MP3 or JPG file CD is created using an incorrect method, the player may not be able to recognize it. If this happens, try reburning another CD after setting up the disc writing parameters correctly on your PC.

Types of Playable Discs

- DVD (8 cm / 12 cm disc)
- Video CD (VCD) (8 cm / 12 cm disc)
- Audio CD (8 cm / 12 cm disc)

In addition, this unit plays DVD -R, DVD +R, DVD -RW, DVD +RW, Kodak Picture CDs, SVCD, and CD-R / CD-RW that contains audio titles, MP3, and/or JPG files.

Note: Depending on the conditions of the recording equipment or the CD-R/RW (or DVD -R, DVD +R, DVD -RW, DVD +RW) disc itself, some CD-R/RW (or DVD -R, DVD +R, DVD -RW, DVD +RW) discs cannot be played on the unit.

Regional code of the DVD player and DVDs



This DVD player is designed and manufactured for playback of region "1" encoded DVD software. The region code on the labels of some DVD discs indicates which

type of player can play those discs. This unit can play only DVD discs labeled "1" or "ALL". If you try to play any other discs, the message "Wrong Region" will appear on the TV screen. Some DVD discs may not have a region code label even though their playback is prohibited by area limits.

CLASS 1 LASER PRODUCT KLASSE 1 LASER PRODUKT LUOKAN 1 LASER LAITE KLASS 1 LASER APPARAT CLASSE 1 PRODUIT LASER

CAUTION:

This Digital Video Disc Player employs a Laser System. To ensure proper use of this product, please read this owner's manual carefully and retain for future reference should the unit require maintenance, contact an authorized service location (see service procedure).

Use of controls, adjustments, or the performance of procedures other than those specified herein may result in hazardous radiation exposure.

To prevent direct exposure to laser beam, do not try to open the enclosure. Visible laser radiation when open. DO NOT STARE INTO BEAM.

CAUTION: The apparatus should not be exposed to water (dripping or splashing) and no objects filled with liquids, such as vases, should be placed on the apparatus.

Last Scene Memory

This player memorizes last scene from the last disc that is viewed. The last scene remains in memory even if you change the input source.

Note: This player does not memorize the scene of a disc if you remove the disc from the player or turn off the TV.

DVD OPERATION



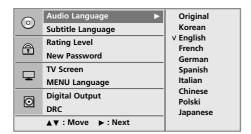
▶ Insert a DVD and press STOP button twice to access this DVD setup menu.

SELECTING LANGUAGE

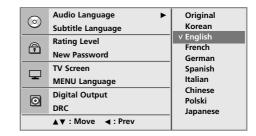
Selecting Audio Language

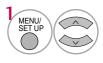
Select your preferred audio language. If an audio language is selected, the selected audio language is played whenever you start a new disc playback. (The disc must contain the selected language)

You can also select another available audio language during playback with the **AUDIO** button on the remote control during playback.









Select Audio Language.



Select desired language.

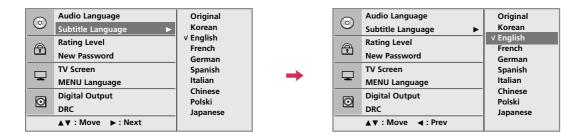


Return to normal playback.

Selecting Subtitle Language

Select your preferred subtitle language. If a subtitle language is selected, the selected subtitle language is played whenever you start a new disc playback. (The disc must contain the selected language)

You can also select another available subtitle language with the **SUBTITLE** button on the remote control during playback.





Select Subtitle Language.



Select desired language.

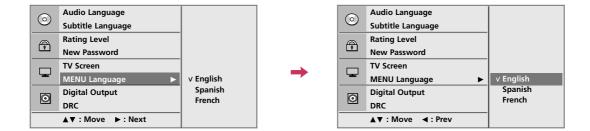


Return to normal playback.

DVD OPERATION

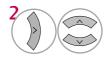
Selecting Disc OSD Language

The OSD (on screen display) can be shown on the screen in your specified language.





Select MENU Language.



Select desired language.

The menus and on screen displays will appear in the selected language.



Return to normal playback.