



LG

Life's Good

OWNER'S MANUAL

LED LCD TV / LCD TV

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

LED LCD TV MODELS

32LS3400 22LS3500 22LS3510 47LS4500
42LS3400 26LS3500 26LS3510 55LS4500
32LS3410 32LS3500 32LS3510
32LS3450
42LS3450

LCD TV MODELS

32CS460 32CS560
32CS461 37CS560
42CS530 42CS560

IMPORTANT SAFETY INSTRUCTIONS

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



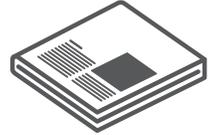
TO REDUCE THE RISK OF ELECTRIC SHOCK DO NOT REMOVE COVER (OR BACK). NO USER SERVICEABLE PARTS INSIDE. REFER TO QUALIFIED SERVICE PERSONNEL.

 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).



- 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.



- Do not stick metal objects or any other conductive material into the power cord. Do not touch the end of the power cord while it is plugged in.

- Keep the packing anti-moisture material or vinyl packing out of the reach of children. Anti-moisture material is harmful if swallowed. If swallowed by mistake, force the patient to vomit and visit the nearest hospital. Additionally, vinyl packing can cause suffocation. Keep it out of the reach of children.

- 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.



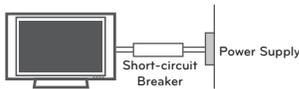
- **Warning** - To reduce the risk of fire or electrical shock, do not expose this product to rain, moisture or other liquids. Do not touch the TV with wet hands. Do not install this product near flammable objects such as gasoline or candles, or expose the TV to direct air conditioning.



- 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**
(Except for devices which are not grounded.) 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, lightning rods, or gas pipes.



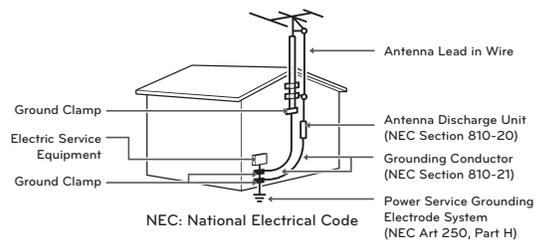
- **DISCONNECTING DEVICE FROM THE MAIN POWER**
Mains plug is the disconnecting device. The plug must remain readily operable.

- As long as this unit is connected to the AC wall outlet, it is not disconnected from 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



- **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 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 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 odors coming from the TV, unplug the power cord and contact an authorized service center.
- Do not press strongly upon the panel with a hand or a sharp object such as a nail, pencil or pen, or make a scratch on it.
- Keep the product away from direct sunlight.



- 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.

- **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.
- 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.

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.

For USA and Canada

FCC NOTICE

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 the receiver.
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference and (2) this device must accept any interference received, including interference that may cause undesired operation of the device. Any changes or modifications in construction of this device which are not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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.

Additional information of the manual

Viewing the owner's manual

The owner's manual in PDF file format is supplied on the enclosed CD. Install the Adobe Acrobat Reader to view the owner's manual on your PC.

- 1 Insert the supplied CD.
The web page appears automatically.
- 2 Click Owner's Manual on the web page.
- 3 View the owner's manual.



NOTE

- If the web page does not appear automatically, access My computer and then click LG and **index.html** to view the owner's manual.

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NOTE

- 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.
- New features may be added to this TV in the future.

INSTALLATION PROCEDURE

- 1 Open the package and make sure all the accessories are included.
- 2 Attach the stand to the TV set.
- 3 Connect an external device to the TV set.

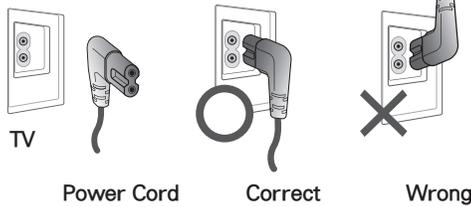
ASSEMBLING AND PREPARING

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.

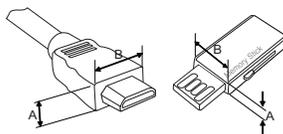
CAUTION

- 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.
- Power Cord Installation Guide
-If the power cord provided with the TV looks like the below picture, please ensure that it is inserted in the correct direction.



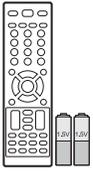
NOTE

- 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.
- For an optimal connection, HDMI cables and USB devices should have bezels less than 10 mm (0.39 inches) thick and 18 mm (0.7 inches) width.
- Use an extension cable that supports USB 2.0 if the USB cable or USB memory stick does not fit into your TV's USB port.

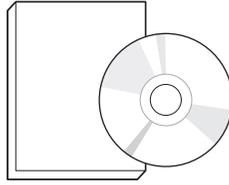


*A ≤ 10 mm (0.39 inches)
*B ≤ 18 mm (0.7 inches)

For CS460, CS461, LS3400, LS3410 series



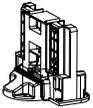
**Remote control,
Batteries (AAA)**
(See p.40)



**Owner's manual,
CD manual**



Power Cord



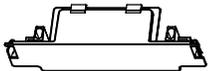
Stand Body
(See p.21)



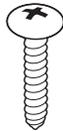
Stand Base
(See p.21)



Stand Screws
8 EA, M4 x 20
(See p.21)

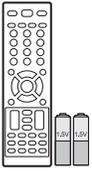


Protection cover
(See p.28)



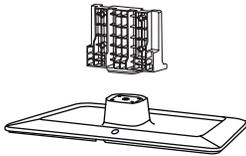
Desk-mount Screw
(See p.29)

For LS3450 series



**Remote control,
Batteries (AAA)**
(See p.40)

(for 32LS3450)



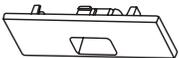
Stand Body / Stand Base
(See p.22)

(for 32LS3450)

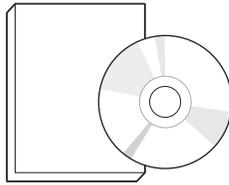


Stand Screws
2 EA, P4 x 16
4 EA, M4 x 20
(See p.22)

(for 32LS3450)

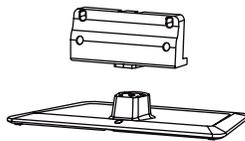


Protection cover
(See p.28)



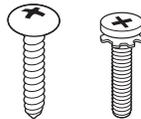
**Owner's manual,
CD manual**

(for 42LS3450)



Stand Body / Stand Base
(See p.23)

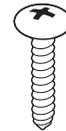
(for 42LS3450)



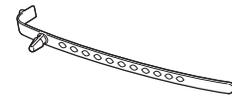
Stand Screws
4 EA, P4 x 16
4 EA, M4 x 14
(See p.23)



Power Cord

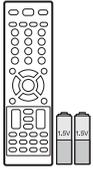


Desk-mount Screw
(See p.29)

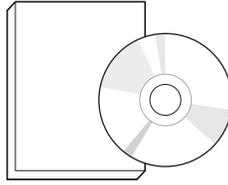


Cable holder
(See p.32)

For CS530, CS560 series



**Remote control,
Batteries (AAA)**
(See p.40)



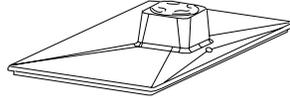
**Owner's manual,
CD manual**



Power Cord



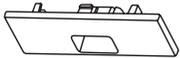
Stand Body
(See p.24)



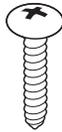
Stand Base
(See p.24)



Stand Screws
8 EA, M4 x 20
(See p.24)

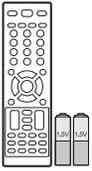


Protection cover
(See p.28)

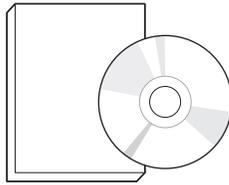


Desk-mount Screw
(See p.29)

For 22/26LS3500, 22/26LS3510



**Remote control,
Batteries (AAA)**
(See p.40)



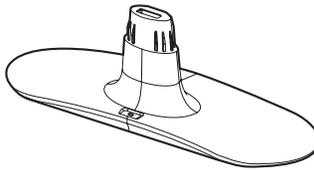
**Owner's manual,
CD manual**



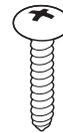
Power Cord



Stand Body
(See p.25)



Stand Base
(See p.25)



Stand Screws
2 EA, P4 x 16
(See p.25)

(For 22LS3500, 22LS3510)

(For 26LS3500, 26LS3510)



Stand Screws
2 EA, M4 x 14
(See p.25)

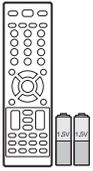


Cable holder
(See p.32)

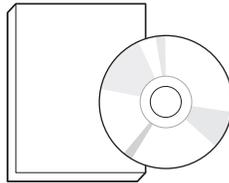


AC/DC Adapter

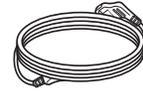
For 32LS3500, 32LS3510



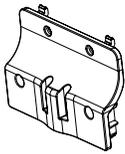
**Remote control,
Batteries (AAA)**
(See p.40)



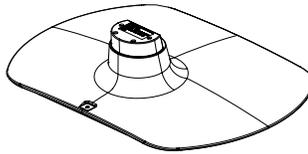
**Owner's manual,
CD manual**



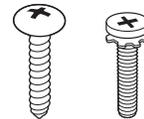
Power Cord



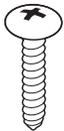
Stand Body
(See p.26)



Stand Base
(See p.26)



Stand Screws
4 EA, P4 x 16
4 EA, M4 x 14
(See p.26)

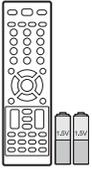


Desk-mount Screw
(See p.29)

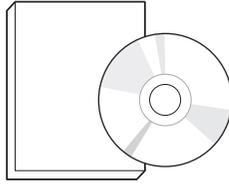


Cable holder
(See p.32)

For 47LS4500, 55LS4500



**Remote control,
Batteries (AAA)**
(See p.40)



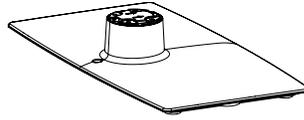
**Owner's manual,
CD manual**



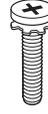
Wall Mount Inner Spacers
4 EA
(See p.31)



Stand Body
(See p.27)

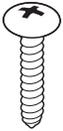


Stand Base
(See p.27)



Stand Screws
8 EA, M4 x 20
(See p.27)

(for 47LS4500)



Desk-mount Screw
(See p.29)



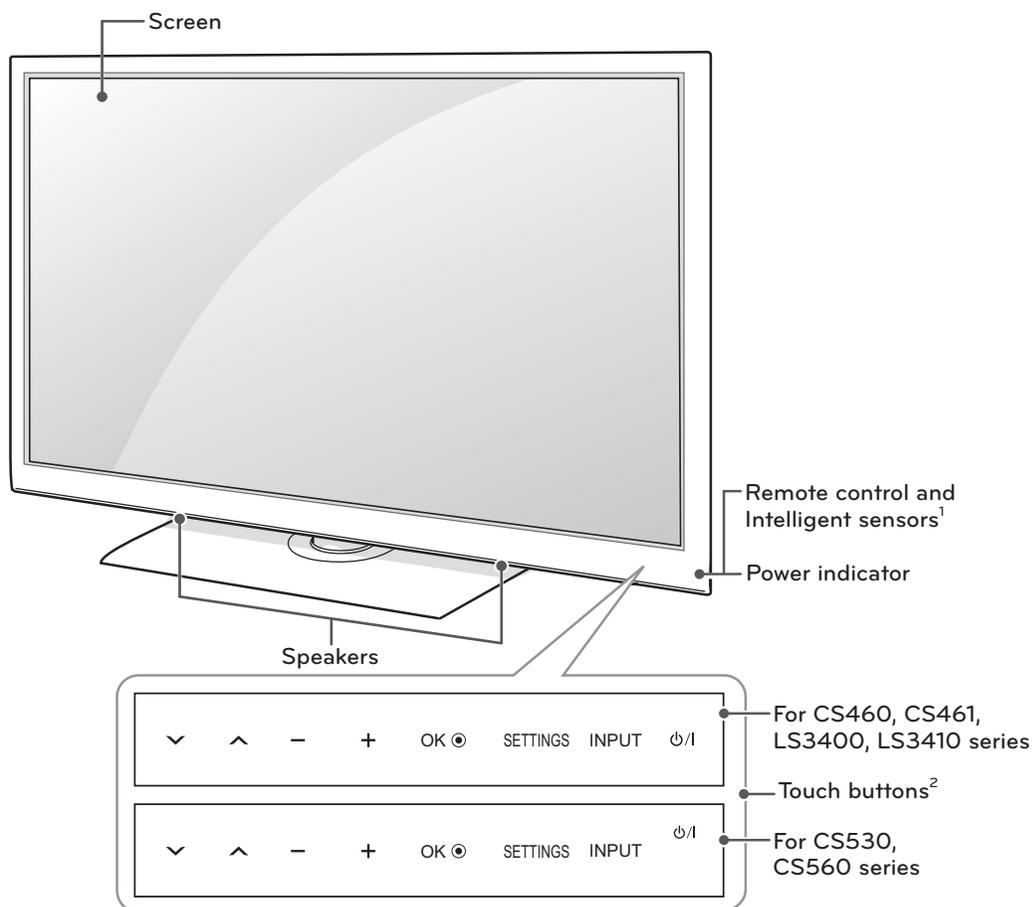
Cable holder
(See p.32)



Power Cord

Parts and buttons

For CS460, CS461, CS530, CS560, LS3400, LS3410 series

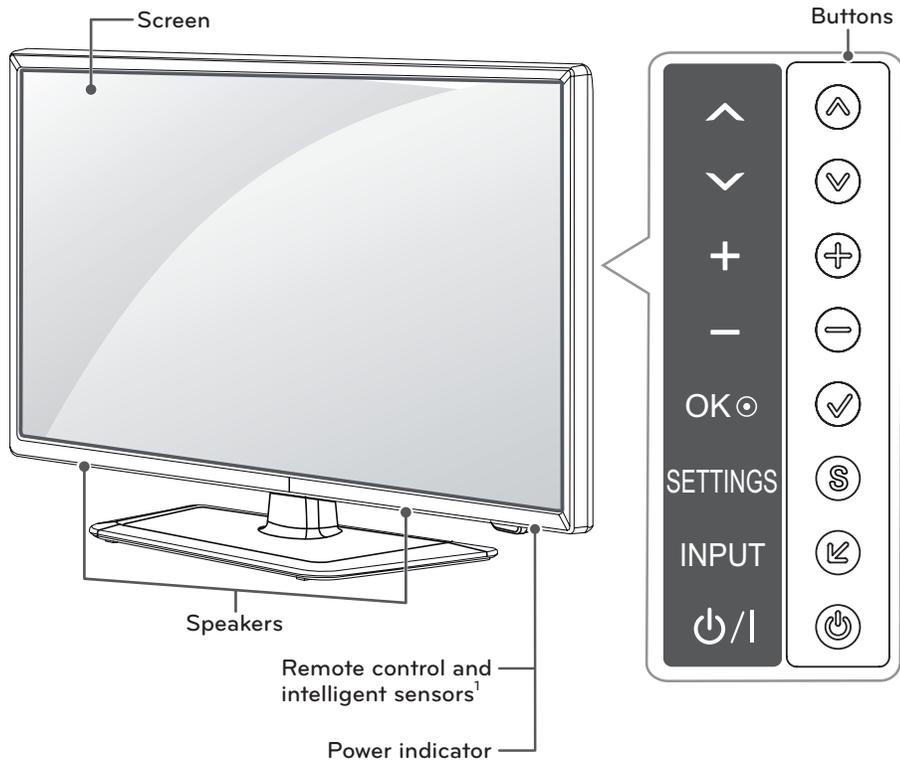


Touch button ²	Description
⏻ / ⏻	Turns the power on or off.
INPUT	Changes the input source.
SETTINGS	Accesses the main menus, or saves your input and exits the menus.
OK Ⓞ	Selects the highlighted menu option or confirms an input.
- +	Adjusts the volume level.
⏪ ⏩	Scrolls through the saved channels.

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.

For LS3450 series

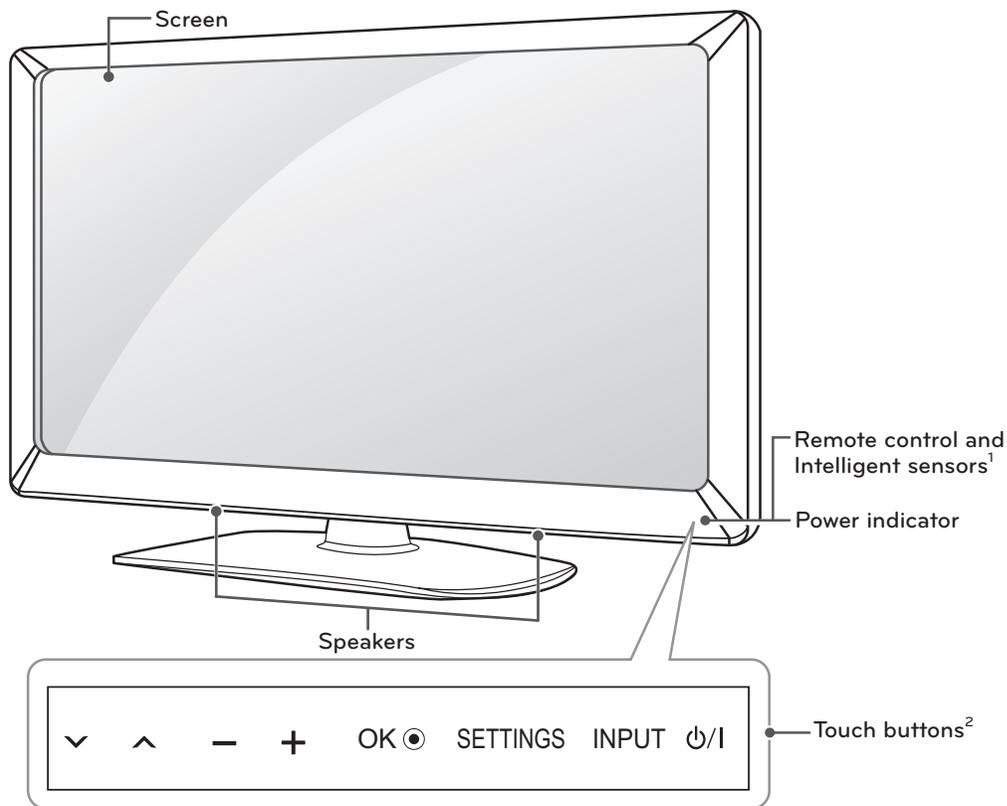


ENGLISH

Buttons	Description
⏻	Turns the power on or off.
INPUT ↵	Changes the input source.
SETTINGS S	Accesses the main menus, or saves your input and exits the menus.
OK ✓	Selects the highlighted menu option or confirms an input.
- +	Adjusts the volume level.
v ^	Scrolls through the saved channels.

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

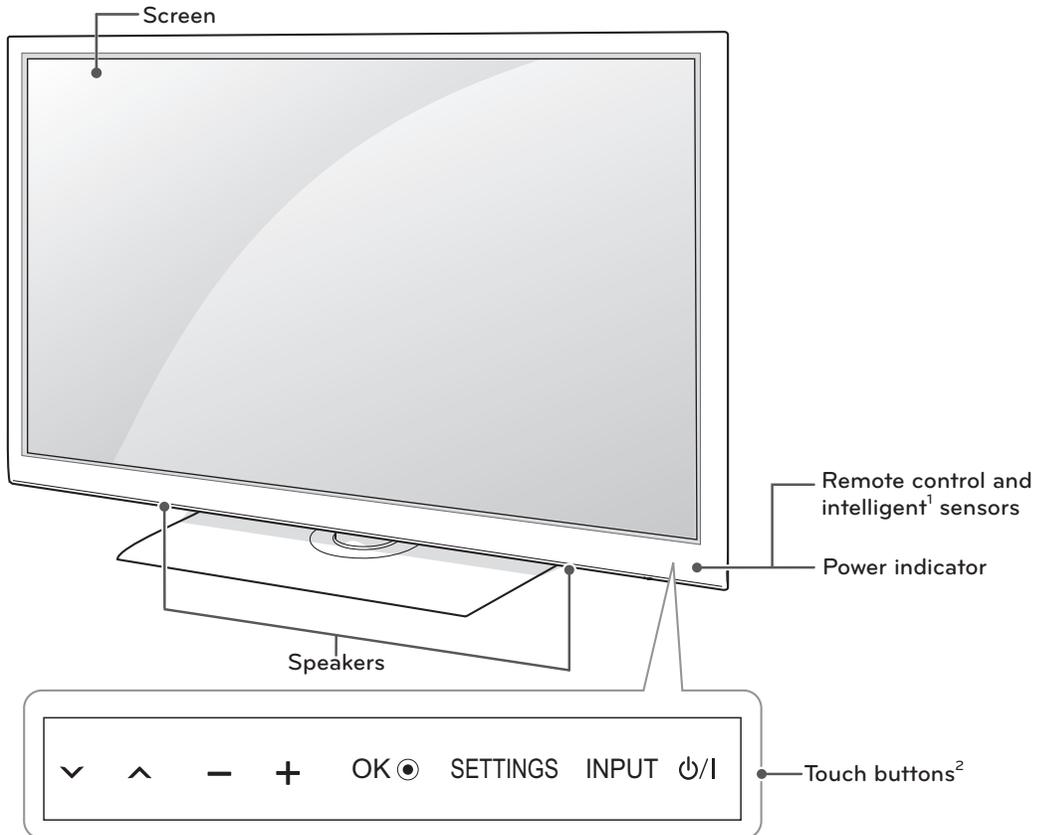
For LS3500, LS3510 series



Touch button ²	Description
⏻ / ⏻	Turns the power on or off.
INPUT	Changes the input source.
SETTINGS	Accesses the main menus, or saves your input and exits the menus.
OK Ⓞ	Selects the highlighted menu option or confirms an input.
- +	Adjusts the volume level.
⏪ ⏩	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.

For LS4500 series



Touch button ²	Description
⏻/⏿	Turns the power on or off.
INPUT	Changes the input source.
SETTINGS	Accesses the Home menu, or saves your input and exits the menus.
OK ●	Selects the highlighted menu option or confirms an input
- +	Adjusts the volume level.
∨ ^	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.

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.

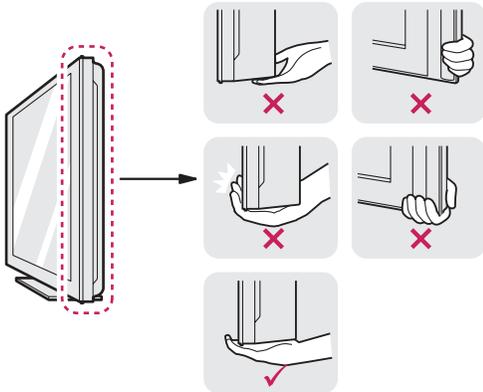
CAUTION

- 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

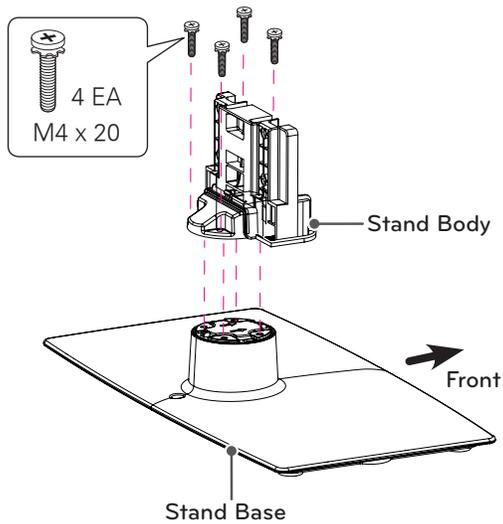
Put your TV on a pedestal stand and mount the TV on a table or wall.

Attaching the stand

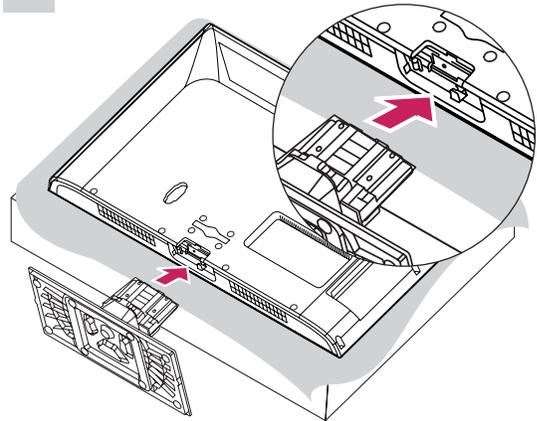
If you are not mounting the TV to a wall, use the following instructions to attach the stand.

For CS460, CS461, LS3400, LS3410 series

1



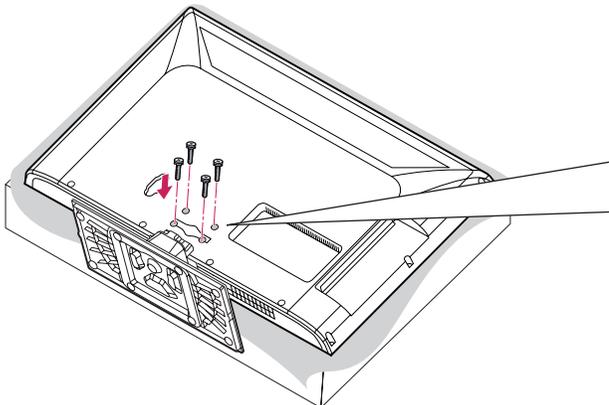
2



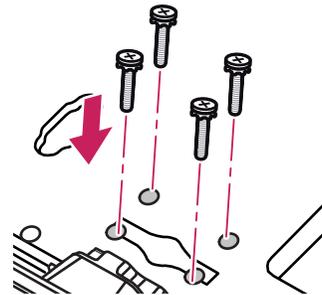
! CAUTION

- When attaching the stand to the TV set, place the screen facing down on a cushioned table or flat surface to protect the screen from scratches.

3



4 EA
M4 x 20



! CAUTION

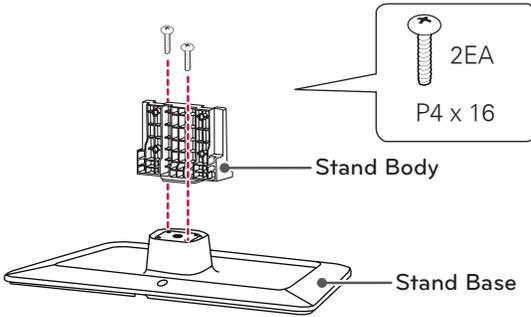
- Make sure that the screws are fastened completely. (If they are not fastened securely enough, the TV may tilt forward after being installed.)
- Do not fasten the screws with too much force; otherwise they may be worn out and get loosened.

! NOTE

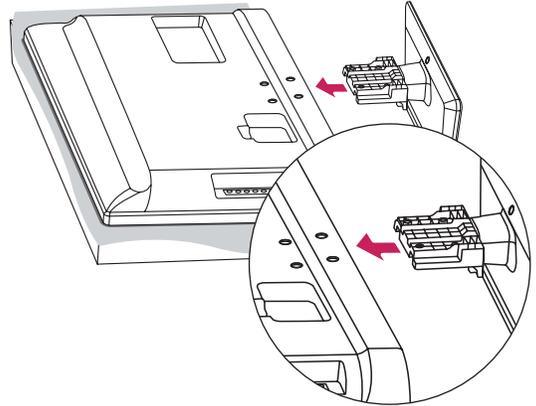
- Remove the stand before installing the TV on a wall mount by performing the stand attachment in reverse.

For 32LS3450

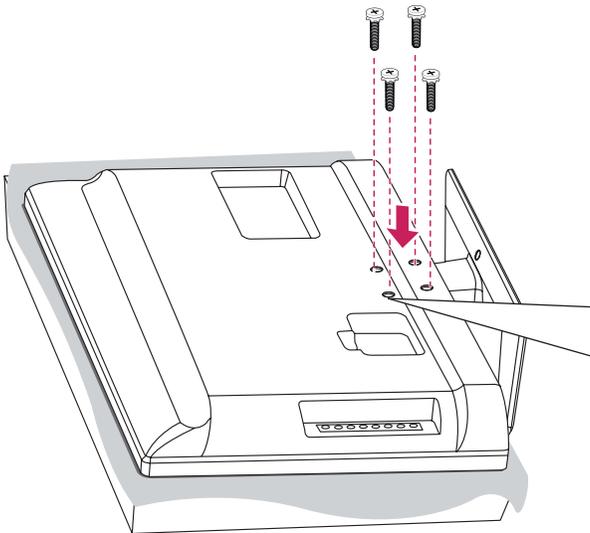
1



2

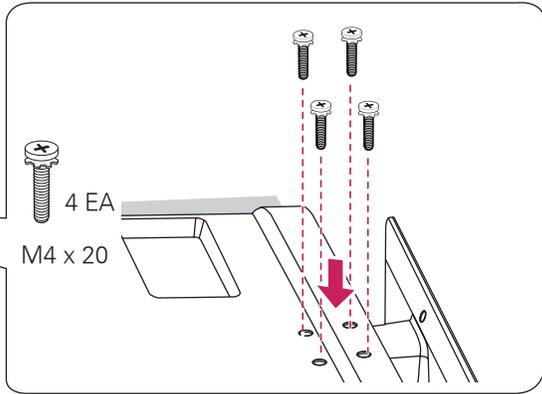


3



CAUTION

- When attaching the stand to the TV set, place the screen facing down on a cushioned table or flat surface to protect the screen from scratches.

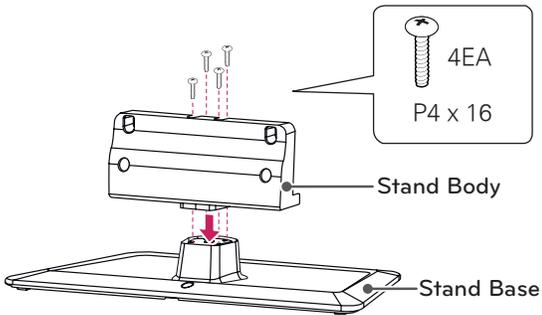


CAUTION

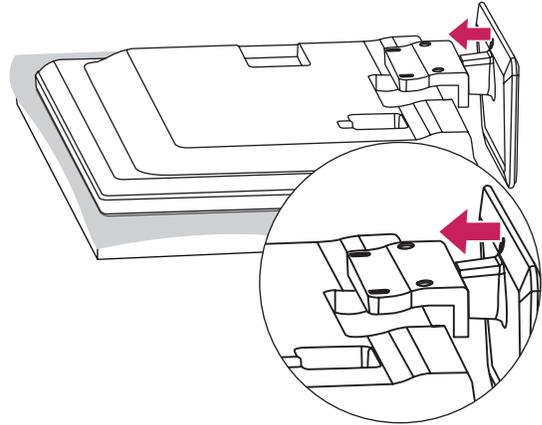
- Make sure that the screws are fastened completely. (If they are not fastened securely enough, the TV may tilt forward after being installed.)
- Do not fasten the screws with too much force; otherwise they may be worn out and get loosened.

For 42LS3450

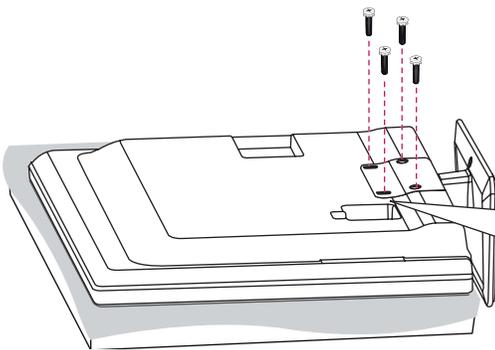
1



2



3



! CAUTION

- When attaching the stand to the TV set, place the screen facing down on a cushioned table or flat surface to protect the screen from scratches.

ENGLISH

! NOTE

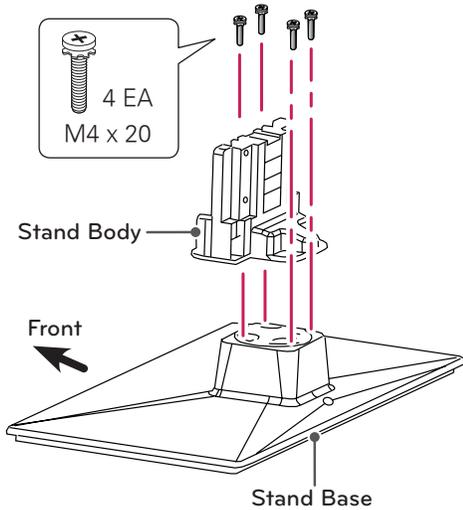
- Remove the stand before installing the TV on a wall mount by performing the stand attachment in reverse.

! CAUTION

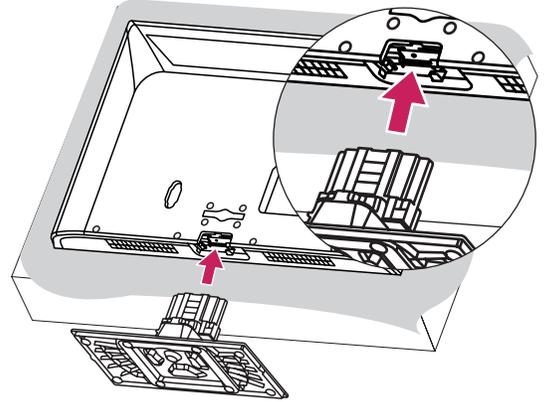
- Make sure that the screws are fastened completely. (If they are not fastened securely enough, the TV may tilt forward after being installed.)
- Do not fasten the screws with too much force; otherwise they may be worn out and get loosened.

For CS530, CS560 series

1

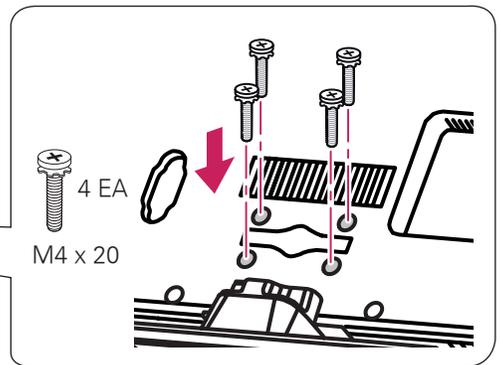
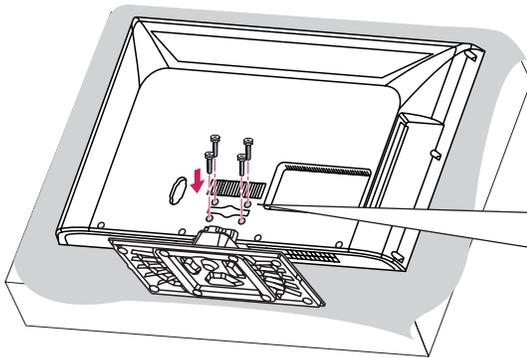


2

**CAUTION**

- When attaching the stand to the TV set, place the screen facing down on a cushioned table or flat surface to protect the screen from scratches.

3

**NOTE**

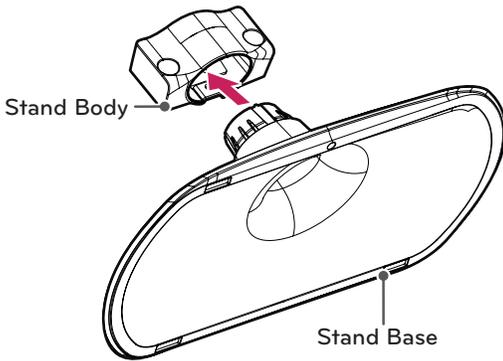
- Remove the stand before installing the TV on a wall mount by performing the stand attachment in reverse.

CAUTION

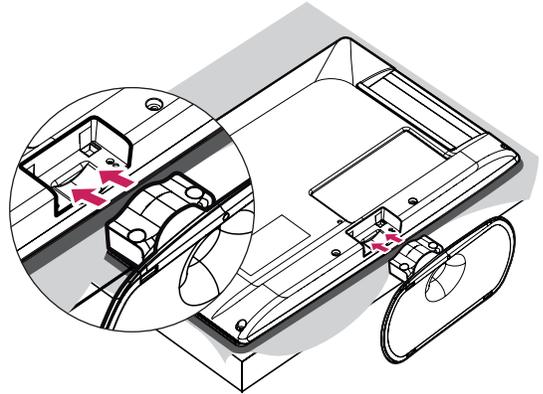
- Make sure that the screws are fastened completely. (If they are not fastened securely enough, the TV may tilt forward after being installed.)
- Do not fasten the screws with too much force; otherwise they may be worn out and get loosened.

For 22/26LS3500, 22/26LS3510

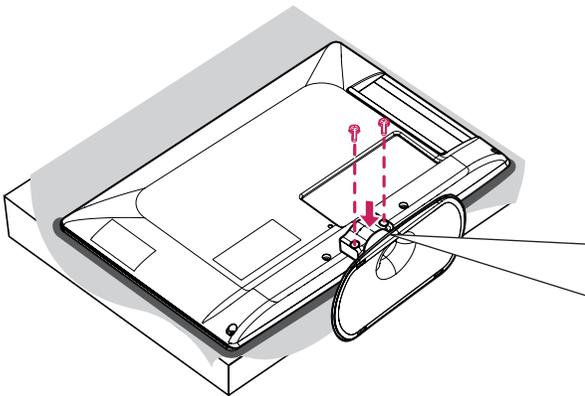
1



2



3



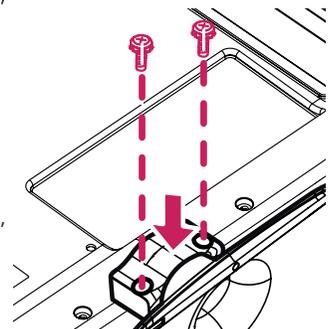
! CAUTION

- When attaching the stand to the TV set, place the screen facing down on a cushioned table or flat surface to protect the screen from scratches.

(For 22LS3500,
22LS3510)



(For 26LS3500,
26LS3510)



! NOTE

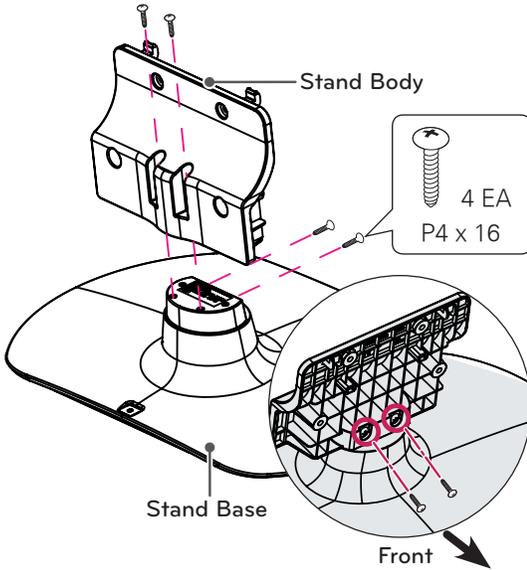
- Remove the stand before installing the TV on a wall mount by performing the stand attachment in reverse.

! CAUTION

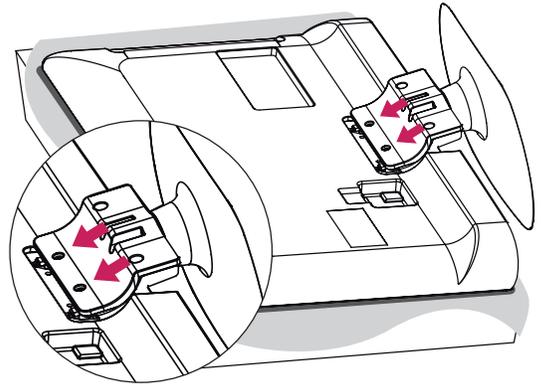
- Make sure that the screws are fastened completely. (If they are not fastened securely enough, the TV may tilt forward after being installed.)
- Do not fasten the screws with too much force; otherwise they may be worn out and get loosened.

For 32LS3500, 32LS3510

1



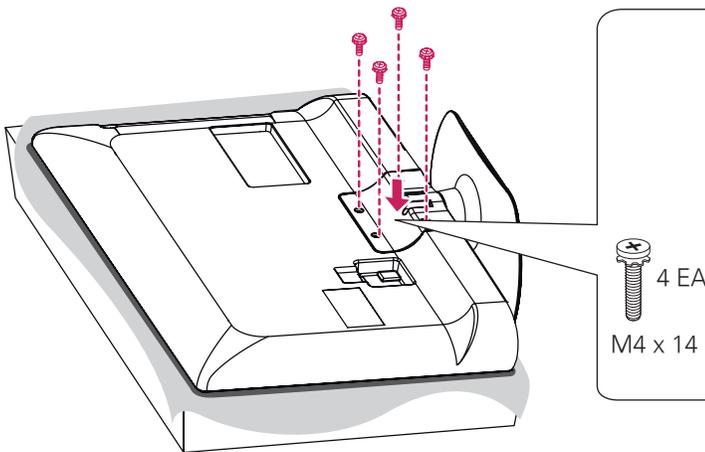
2



CAUTION

- When attaching the stand to the TV set, place the screen facing down on a cushioned table or flat surface to protect the screen from scratches.

3



CAUTION

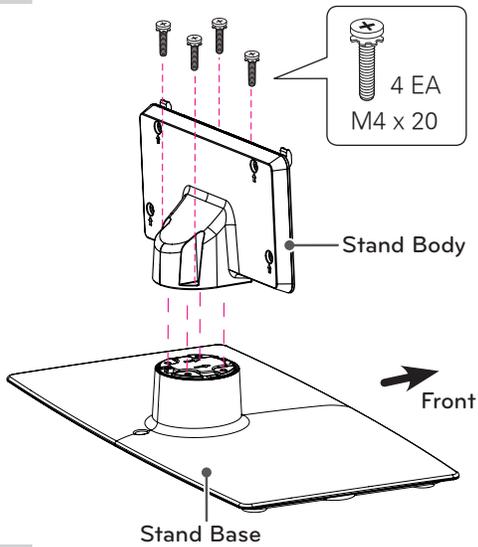
- Make sure that the screws are fastened completely. (If they are not fastened securely enough, the TV may tilt forward after being installed.)
- Do not fasten the screws with too much force; otherwise they may be worn out and get loosened.

NOTE

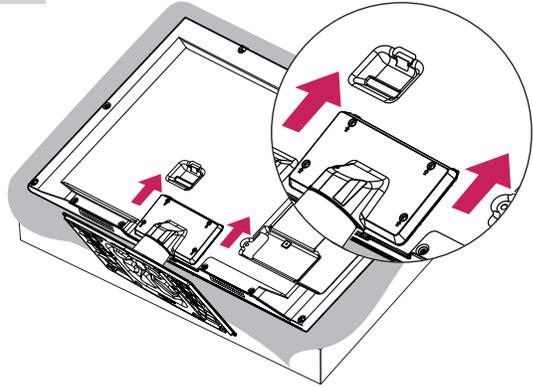
- Remove the stand before installing the TV on a wall mount by performing the stand attachment in reverse.

For 47/ 55LS4500

1

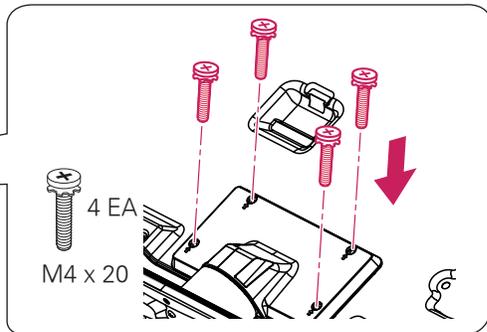
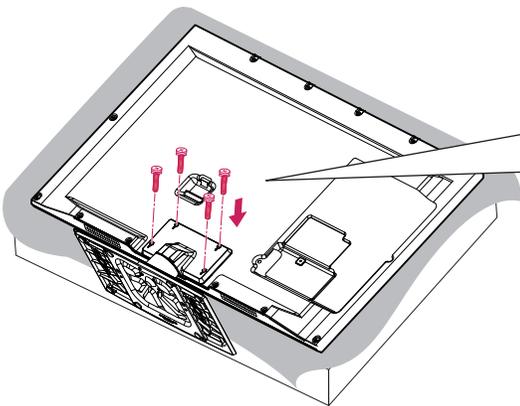


2

**CAUTION**

- When attaching the stand to the TV set, place the screen facing down on a cushioned table or flat surface to protect the screen from scratches.

3

**NOTE**

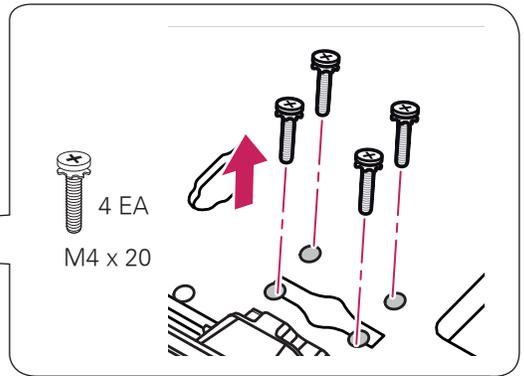
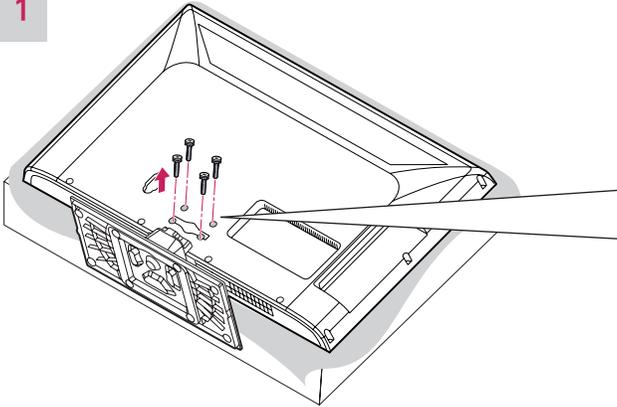
- Remove the stand before installing the TV on a wall mount by performing the stand attachment in reverse.

CAUTION

- Make sure that the screws are fastened completely. (If they are not fastened securely enough, the TV may tilt forward after being installed.)
- Do not fasten the screws with too much force; otherwise they may be worn out and get loosened.

To detach the stand,
(Depending on model)

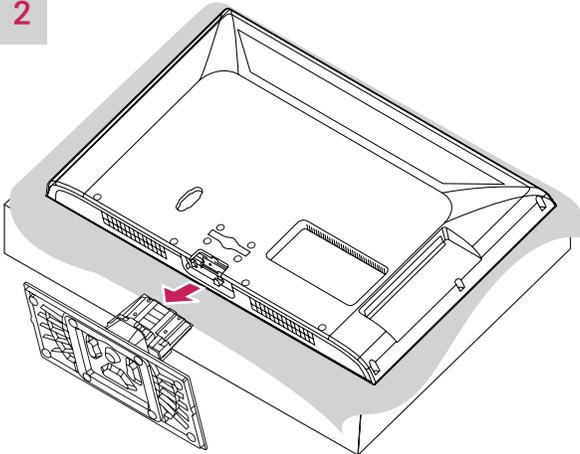
1



CAUTION

- When attaching the stand to the TV set, place the screen facing down on a cushioned table or flat surface to protect the screen from scratches.

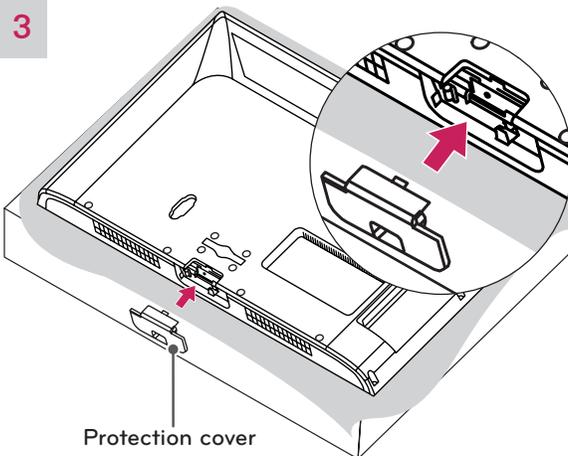
2



NOTE

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

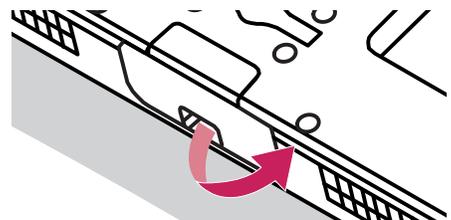
3



NOTE

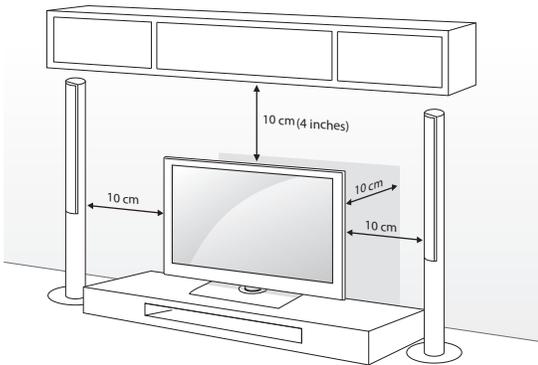
(For 32LS3450)

- When removing the Protection Cover from bottom of TV, insert your fingers into hole of cover. Hold firmly and pull upwards towards you to remove.



Mounting on a table

- Lift and tilt the TV into its upright position on a table.
 - Leave a 10 cm (4 inch) (minimum) space from the wall for proper ventilation.



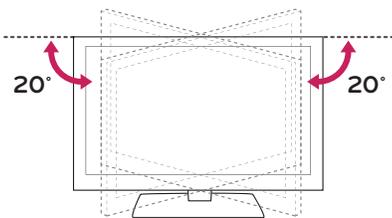
- Connect the power cord to a wall outlet.

CAUTION

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

Adjusting the angle of the TV to suit view

(Depending on model)
Swivel 20 degrees to the left or right and adjust the angle of the TV to suit your view.



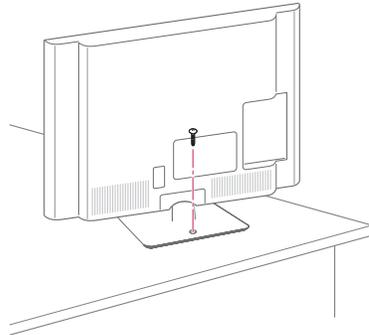
CAUTION

- When adjusting the angle of the TV, watch out for your fingers.
 - Personal injury may occur if hands or fingers are pinched. If the product is tilted too much, it may fall, causing damage or injury.

Securing the TV to a table

(For 32CS460, 32CS461, 42CS530, 32/37/42CS560, 32/42LS3400, 32LS3410, 32/42LS3450, 32LS3500, 32LS3510, 47LS4500)

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.

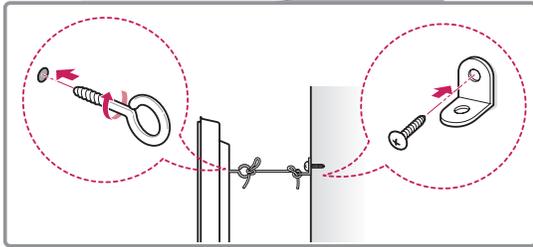
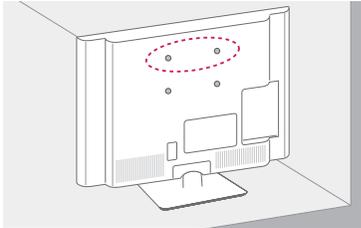


WARNING

- 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.

Securing the TV to a wall (optional)

(Depending on model)



- 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**

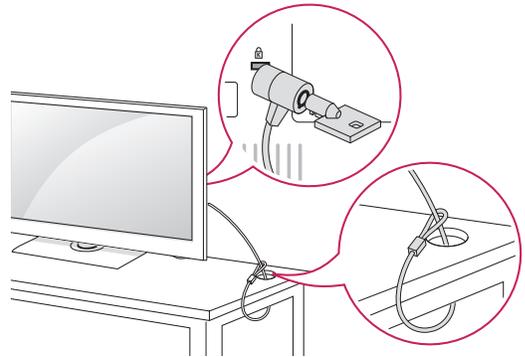
- Use a platform or cabinet that is strong and large enough to support the TV securely.
- Brackets, bolts and ropes are optional. You can obtain additional accessories from your local dealer.

Using the Kensington security system (optional)

(For 32CS460, 32CS461, 42CS530, 32/37/42CS560, 22/26LS3500, 22/26LS3510)

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.

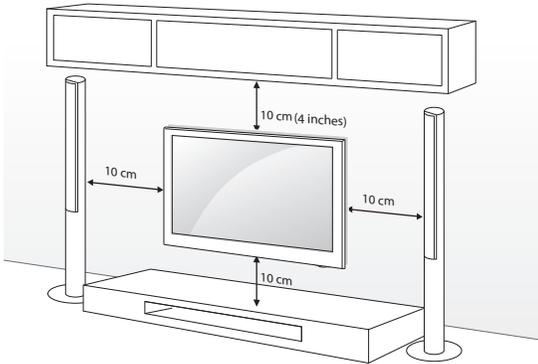
**NOTE**

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

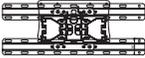
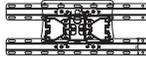
Mounting on a wall

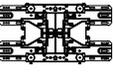
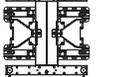
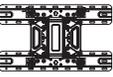
Attach an optional wall mount bracket at the rear of the TV carefully and install the wall mount bracket on a solid wall perpendicular to the floor. When you attach the TV to other building materials, please contact qualified personnel.

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



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

Model	22/26LS3500 22/26LS3510	32CS460 32CS461 32CS560 32LS3400 32LS3410 32LS3450 32LS3500 32LS3510
VESA	100 x 100	200 x 100
Standard screw	M4	M4
Number of screws	4	4
Wall mount bracket (optional)	LSW100B 	LSW100B 

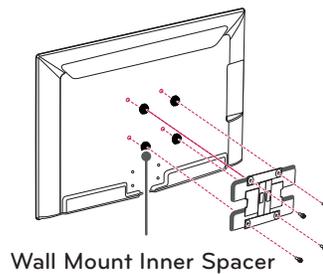
Model	42CS530 37/42CS560 42LS3400 42LS3450	47/55LS4500
VESA	200 x 200	400 x 400
Standard screw	M6	M6
Number of screws	4	4
Wall mount bracket (optional)	LSW200BX 	LSW400BX 
	LSW220BX 	LSW420BX 

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 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 only screws and wall mounts that meet the VESA standard. Any damages or injuries by misuse or using an improper accessory are not covered by the warranty.

NOTE

- Use only 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.
- When attaching a third-party wall mounting bracket to the TV, insert the wall mount inner spacers into the TV wall mount holes to move your TV in vertical angle. Please make sure not to use the spacers for LG wall mounting bracket. (For LS4500 series)

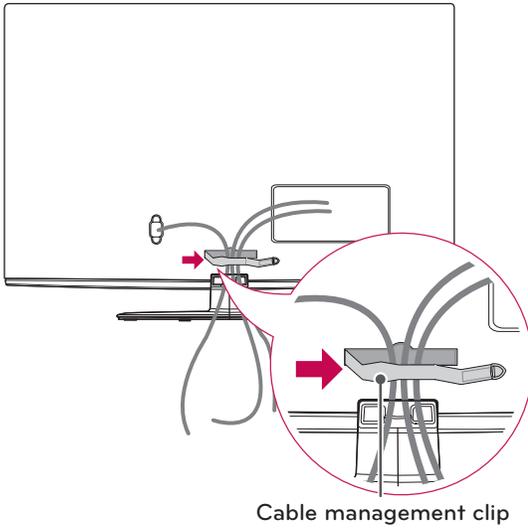


Wall Mount Inner Spacer

Tidying cables

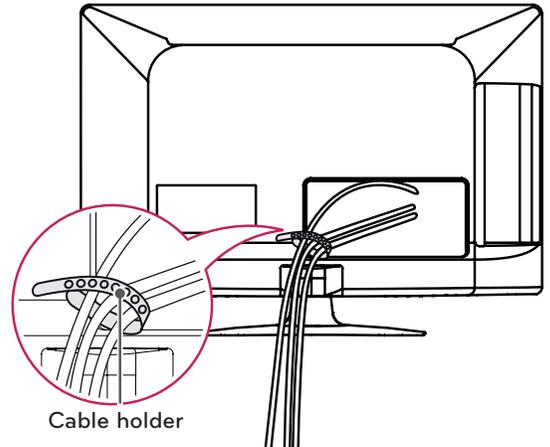
For CS460, CS461, CS530, CS560, LS3400, LS3410

- 1 Gather and bind the cables with the cable management clip.
- 2 Fix the cable management clip firmly to the TV.



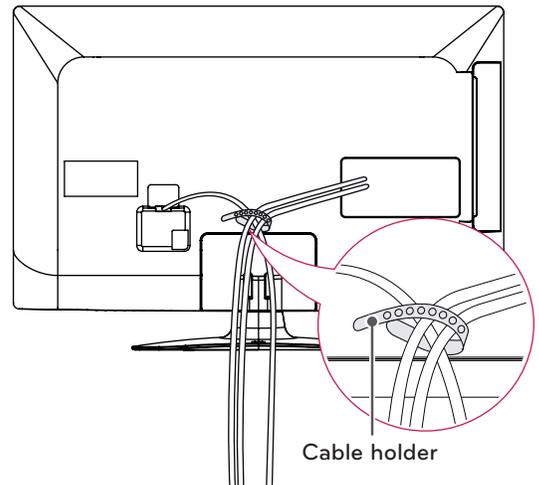
For 22/26LS3500, 22/26LS3510

- 1 Gather and bind the cables with the cable holder.



For 32LS3500, 32LS3510, 32/42LS3450, 47/55LS4500

- 1 Gather and bind the cables with the cable holder.



⚠ CAUTION

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

MAKING CONNECTIONS

- This part of MAKING CONNECTIONS mainly uses picture for LS4500 series.

Connect various external devices to the TV and switch input modes to select an external device.

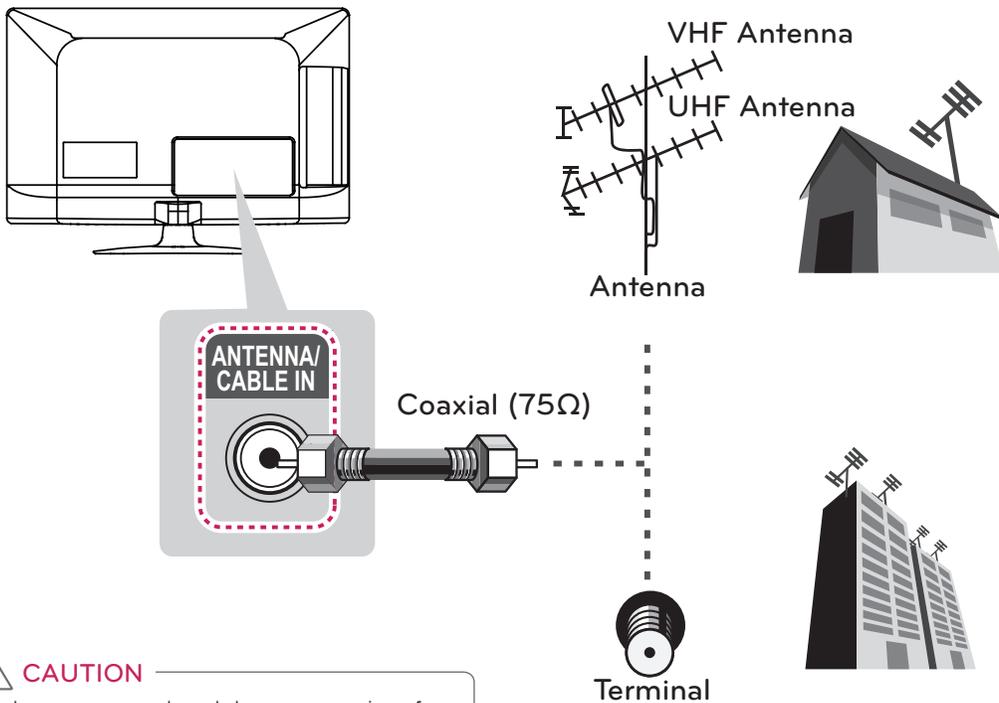
For more information of external device's connection, refer to the manual provided with each device.

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 of 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.

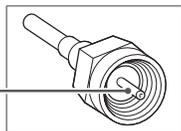
Connecting to an antenna or cable



! CAUTION

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

Copper wire



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

! NOTE

- Use a signal splitter to use more than 2 TVs.
- Visit '<http://lgknowledgebase.com>' for more information about the antenna and cable connection. Search for antenna.

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

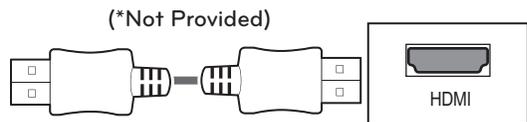
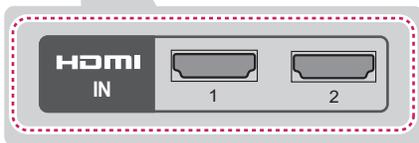
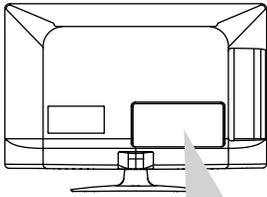
HDMI is the best way to connect a device.

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.

Choose any HDMI input port to connect.
It does not matter which port you use.



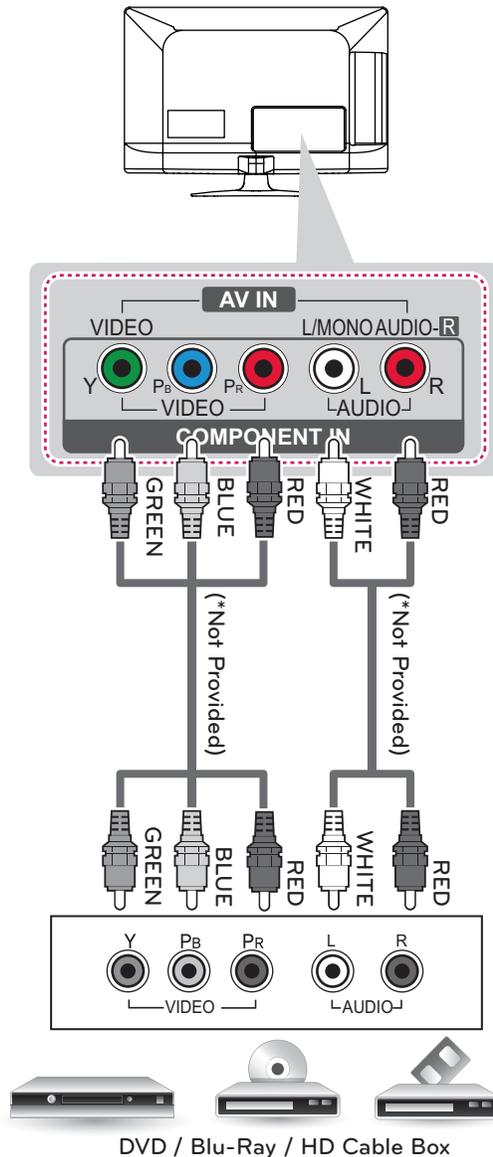
DVD / Blu-Ray / HD Cable Box / HD STB

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 cause the image to display in black and white or with distorted color.
- **Check to ensure the cable are matched with the corresponding color connection.**

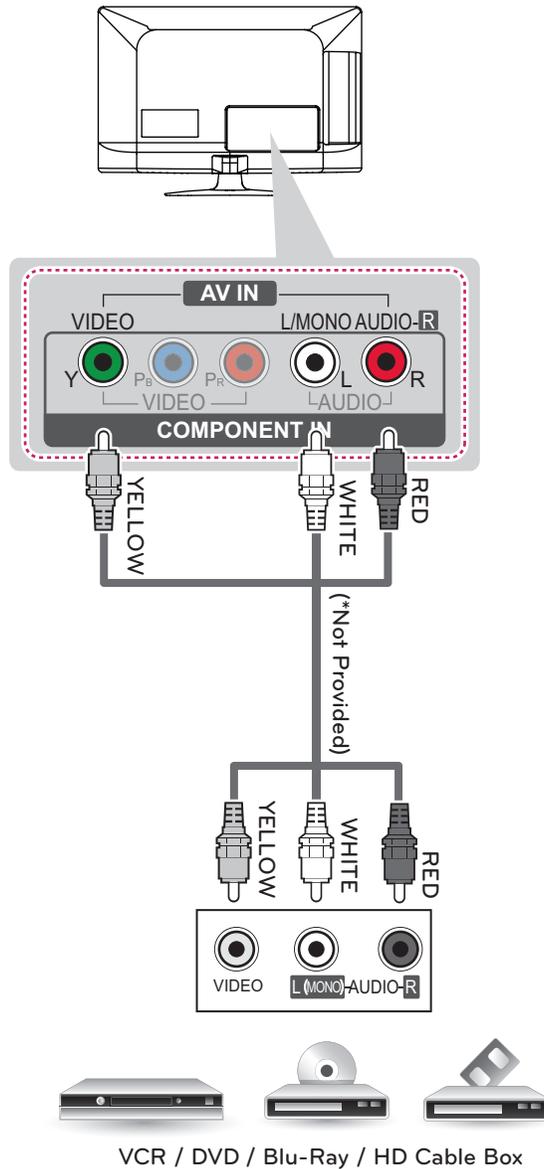


Composite Connection

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.



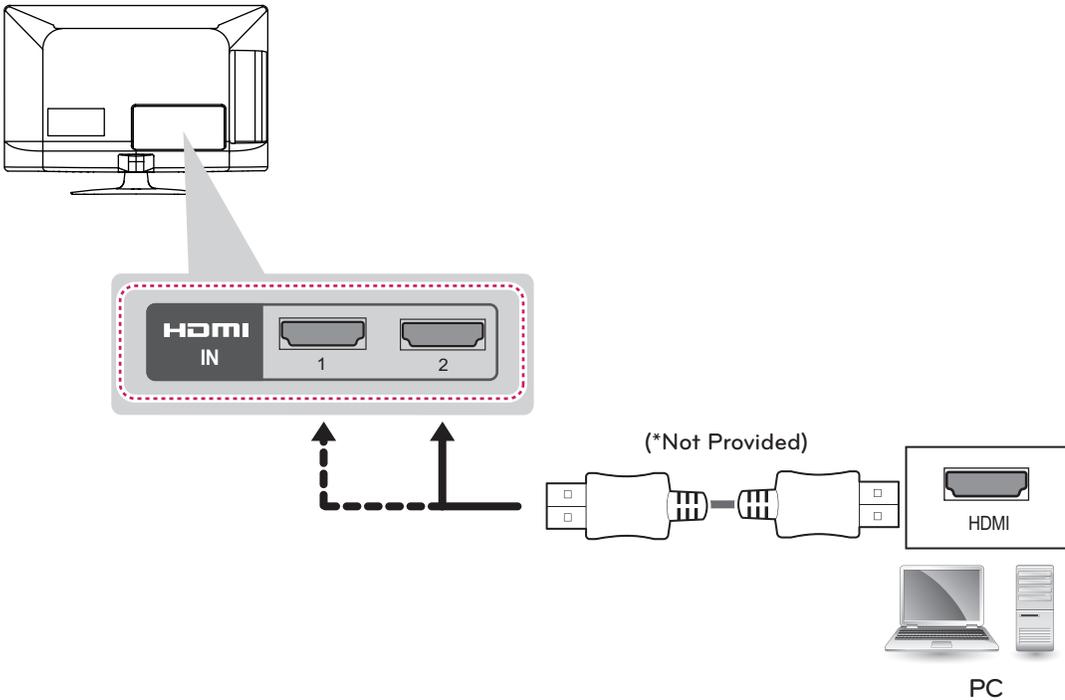
Connecting to a PC

NOTE

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

HDMI Connection

Choose any HDMI input port to connect.
It does not matter which port you use.



Connecting to an Audio System

(For LS4500)

You may use an optional external audio system instead of the built-in speaker.

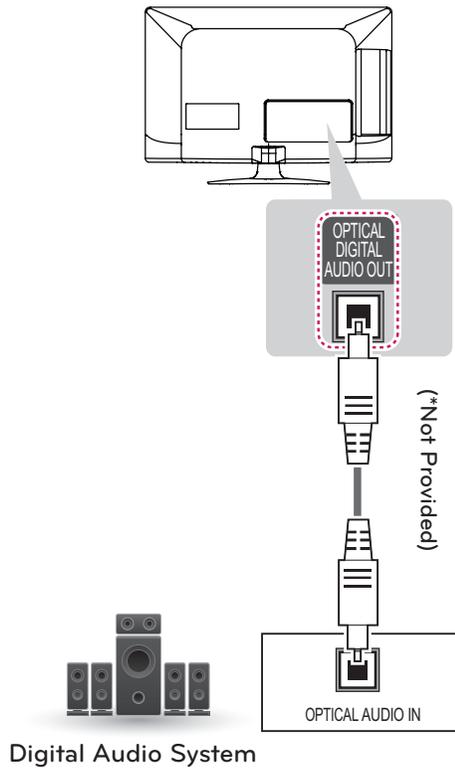


NOTE

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

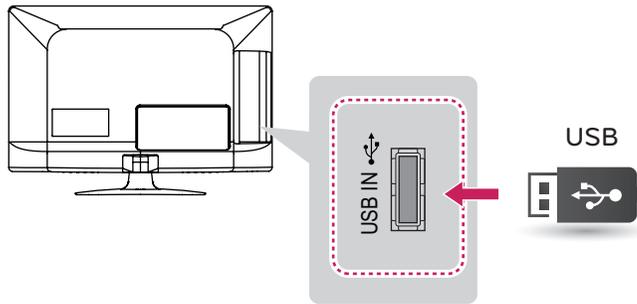
Digital Optical Audio Connection

Transmits a 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.



Connecting to a USB

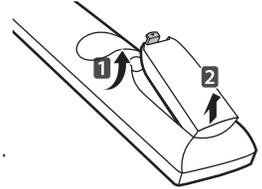
Connect a USB storage device such as a USB flash memory, external hard drive, or a USB memory card reader to the TV.



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.

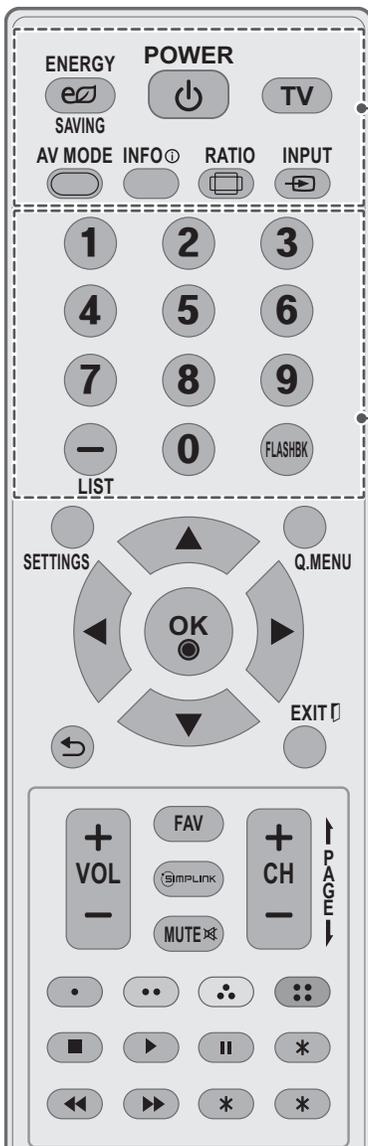
To replace batteries, open the battery cover, replace batteries (1.5 V AAA) matching the ⊕ and ⊖ ends to the label inside the compartment, and close the battery cover. To remove the batteries, perform the installation actions in reverse.



⚠ CAUTION

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

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



⏻ POWER

Turns the TV on or off.

⏻ ENERGY SAVING

Adjusts the brightness of the screen to reduce energy consumption.

TV

Returns to the last TV channel.

AV MODE

Selects an AV mode.

INFO ⓘ

Views the information of the current program and screen.

🖼 RATIO

Resizes an image.

📺 INPUT

Rotates through inputs.
Also switches the TV on from standby.

Number button

Enters numbers.

LIST

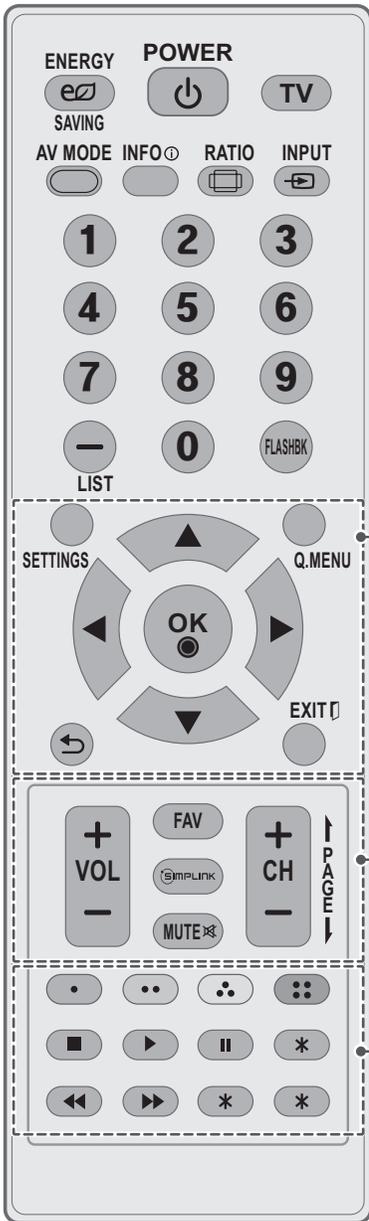
Accesses the saved channel list.

- (Dash)

Inserts a dash between numbers such as 2-1 and 2-2.

FLASHBK

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



SETTINGS

Accesses the main menu.

Q.MENU

Accesses the quick menu.

Navigation buttons (up/down/left/right)

Scrolls through menus or options.

OK

Selects menus or options and confirms your input.

↶ (BACK)

Returns to the previous level.

EXIT

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

+ VOL -

Adjusts the volume level.

FAV

Accesses your favorite channel list.

SIMPLINK

Accesses the AV devices connected to the TV;
Opens the SIMPLINK menu.

MUTE

Mutes all sounds.

+ CH -

Scrolls through the saved channels.

↑ PAGE ↓

Moves to the previous or next screen.

Color buttons

These access special functions in some menus.

Control buttons

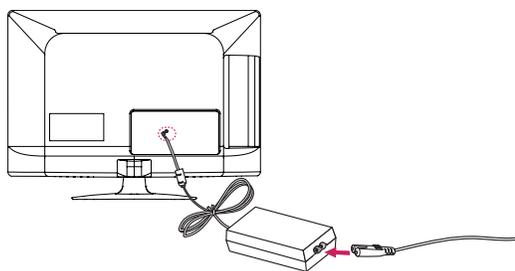
Controls the SIMPLINK compatible devices (USB, SIMPLINK).

Not functional.

WATCHING TV

Connecting to the AC/DC adapter

(For 22/26LS3500, 22/26LS3510)



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

CAUTION

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

Turning the TV on for the first time

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

- 1 Connect the power cord to a power outlet. The Power indicator turns red and the TV switches to Standby mode.
- 2 In Standby mode, press the power button on the remote control to turn the TV on. The Initial setting screen appears if you turn the TV on for the first time.

NOTE

- You can also access **Initial Setting** by accessing **OPTION** in the main menu.

- 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.
↓	
Time Setting	Selects the time zone and daylight saving.
↓	
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**, any customized settings will switch back to the default settings of **Store Demo** in 5 minutes.

- 4 When the basic settings are complete, press **OK**.

NOTE

- If you do not complete the Initial setting, 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.

TROUBLESHOOTING

Problem	Solution
Cannot control the TV with the remote control.	<ul style="list-style-type: none"> • 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 -).
No image display and no sound is produced.	<ul style="list-style-type: none"> • 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.
The TV turns off suddenly.	<ul style="list-style-type: none"> • Check the power control settings. The power supply may be interrupted. • Check if the Auto sleep feature is activated in the Time settings. • If there is no signal while the TV is on, the TV will turn off automatically after 15 minutes of inactivity.

OPEN SOURCE SOFTWARE NOTICE

To obtain the source code under GPL, LGPL, MPL and other open source licenses, that is contained in this product, please visit '<http://opensource.lge.com>'.

In addition to the source code, all referred license terms, warranty disclaimers and copyright notices are available for download.

LG Electronics will also provide open source code to you on CD-ROM for a charge covering the cost of performing such distribution (such as the cost of media, shipping and handling) upon email request to opensource@lge.com. This offer is valid for three (3) years from the date on which you purchased the product.

SPECIFICATIONS

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

Television System		NTSC-M, ATSC, 64 & 256 QAM
Program Coverage		VHF 2-13, UHF 14-69, CATV 1-135, DTV 2-69, CADTV 1-135
External Antenna Impedance		75 Ω
Environment condition	Operating Temperature	0 - 40 °C
	Operating Humidity	Less than 80 %
	Storage Temperature	-20 - 60 °C
	Storage Humidity	Less than 85 %

MODELS		32CS460 (32CS460-UC)
		32CS461 (32CS461-UA)
Dimensions (W x H x D)	With stand	794.0 x 565.0 x 207.0 mm (31.2 x 22.2 x 8.1 inch)
	Without stand	794.0 x 504.0 x 73.5 mm (31.2 x 19.8 x 2.8 inch)
Weight	With stand	9.0 kg (19.8 lbs)
	Without stand	8.0 kg (17.6 lbs)
Current Value / Power consumption		1.1 A / 110 W
Power requirement		AC100 - 240 V ~ 50/60 Hz

MODELS		42CS530 (42CS530-UB)	32CS560 (32CS560-UE)
Dimensions (W x H x D)	With stand	1019.0 x 698.0 x 265.0 mm (40.1 x 27.4 x 10.4 inch)	795.0 x 568.0 x 207.0 mm (31.2 x 22.3 x 8.1 inch)
	Without stand	1019.0 x 631.0 x 76.5 mm (40.1 x 24.8 x 3.0 inch)	795.0 x 504.0 x 73.5 mm (31.2 x 19.8 x 2.8 inch)
Weight	With stand	15.1 kg (33.2 lbs)	9.2 kg (20.2 lbs)
	Without stand	13.4 kg (29.5 lbs)	8.1 kg (17.8 lbs)
Current Value / Power consumption		1.7 A / 170 W	1.2 A / 120 W
Power requirement		AC100 - 240 V ~ 50/60 Hz	AC100 - 240 V ~ 50/60 Hz

MODELS		37CS560 (37CS560-UE)	42CS560 (42CS560-UE)
Dimensions (W x H x D)	With stand	913.0 x 639.0 x 265.0 mm (35.9 x 25.1 x 10.4 inch)	1019.0 x 698.0 x 265.0 mm (40.1 x 27.4 x 10.4 inch)
	Without stand	913.0 x 571.0 x 77.4 mm (35.9 x 22.4 x 3.0 inch)	1019.0 x 631.0 x 76.5 mm (40.1 x 24.8 x 3.0 inch)
Weight	With stand	12.8 kg (28.2 lbs)	15.1 kg (33.2 lbs)
	Without stand	11.1 kg (24.4 lbs)	13.4 kg (29.5 lbs)
Current Value / Power consumption		1.6 A / 160 W	1.7 A / 170 W
Power requirement		AC100 - 240 V ~ 50/60 Hz	AC100 - 240 V ~ 50/60 Hz

MODELS		32LS3400 (32LS3400-UA)	42LS3400 (42LS3400-UA)
		32LS3410 (32LS3410-UB)	
Dimensions (W x H x D)	With stand	795.0 x 566.0 x 207.0 mm (31.2 x 22.2 x 8.1 inch)	1018.0 x 696.0 x 261.0 mm (40.0 x 27.4 x 10.2 inch)
	Without stand	795.0 x 504.0 x 73.5 mm (31.2 x 19.8 x 2.8 inch)	1018.0 x 629.0 x 76.5 mm (40.0 x 24.7 x 3.0 inch)
Weight	With stand	9.1 kg (20.0 lbs)	14.7 kg (32.4 lbs)
	Without stand	8.1 kg (17.8 lbs)	13.1 kg (28.8 lbs)
Current Value / Power consumption		1.0 A / 70 W	1.2 A / 120 W
Power requirement		AC100 - 240 V ~ 50/60 Hz	AC100 - 240 V ~ 50/60 Hz

MODELS		32LS3450 (32LS3450-UA)	42LS3450 (42LS3450-UA)
		Dimensions (W x H x D)	With stand
Without stand	738.0 x 438.0 x 86.0 mm (29.0 x 17.2 x 3.4 inch)		972.0 x 571.0 x 86.0mm (38.2 x 22.4 x 3.4 inch)
Weight	With stand	7.5 kg (16.5 lbs)	11.8 kg (26.0 lbs)
	Without stand	6.9 kg (15.2 lbs)	10.7 kg (23.5 lbs)
Current Value / Power consumption		0.9 A / 60 W	1.3 A / 90 W
Power requirement		AC100 - 240 V ~ 50/60 Hz	AC100 - 240 V ~ 50/60 Hz

MODELS		22LS3500 (22LS3500-UD)	26LS3500 (26LS3500-UD)
		22LS3510 (22LS3510-UA)	26LS3510 (26LS3510-UA)
Dimensions (W x H x D)	With stand	523.0 x 376.0 x 140.0 mm (20.5 x 14.8 x 5.4 inch)	627.0 x 442.0 x 162.0 mm (24.6 x 17.4 x 6.3 inch)
	Without stand	523.0 x 339.0 x 31.6 mm (20.5 x 13.3 x 1.2 inch)	627.0 x 402.0 x 30.1 mm (24.6 x 15.8 x 1.1 inch)
Weight	With stand	3.5 kg (7.7 lbs)	4.5 kg (9.9 lbs)
	Without stand	3.2 kg (7.0 lbs)	4.2 kg (9.2 lbs)
Power requirement		24 V $\overline{=}$, 1.4 A	24 V $\overline{=}$, 1.8 A
Adapter (DC Power)		In: AC 100 - 240 V ~ 50/60 Hz	
		Out: DC 24 V, 2.7 A or 2.71 A	

MODELS		32LS3500 (32LS3500-UD)
		32LS3510 (32LS3510-UA)
Dimensions (W x H x D)	With stand	755.0 x 530.0 x 239.0 mm (29.7 x 20.8 x 9.4 inch)
	Without stand	755.0 x 479.0 x 45.8 mm (29.7 x 18.8 x 1.8 inch)
Weight	With stand	8.5 kg (18.7 lbs)
	Without stand	7.7 kg (16.9 lbs)
Current Value / Power consumption		0.6 A / 60 W
Power requirement		AC100 - 240 V ~ 50/60 Hz

MODELS		47LS4500 (47LS4500-UD)	55LS4500 (55LS4500-UD)
Dimensions (W x H x D)	With stand	1089.0 mm x 730.0 mm x 270.0 mm (42.8 inch x 28.3 inch x 10.5 inch)	1263.0 mm x 833.0 mm x 330.0 mm (49.7 inch x 32.8 inch x 12.9 inch)
	Without stand	1089.0 mm x 655.0 mm x 35.5 mm (42.8 inch x 25.7 inch x 1.3 inch)	1263.0 mm x 754.0 mm x 35.5 mm (49.7 inch x 29.6 inch x 1.3 inch)
Weight	With stand	17.0 kg (37.5 lbs)	25.2 kg (55.2 lbs)
	Without stand	14.9 kg (32.8 lbs)	21.9 kg (48.2 lbs)
Current Value / Power consumption		1.2 A / 120 W	1.5 A / 150 W
Power requirement		AC100 - 240 V ~ 50/60 Hz	AC100 - 240 V ~ 50/60 Hz

HDMI (DTV) supported mode

Resolution	Horizontal Frequency (KHz)	Vertical Frequency (Hz)
720 x 480p	31.47 31.50	59.94 60.00
1280 x 720p	44.96 45.00	59.94 60.00
1920 x 1080i	33.72 33.75	59.94 60.00
1920 x 1080p	26.97 27.00 33.71 33.75 67.432 67.50	23.976 24.00 29.97 30.00 59.94 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

Component supported mode

Resolution	Horizontal Frequency (KHz)	Vertical Frequency (Hz)
720 x 480i	15.73 15.73	59.94 60.00
720 x 480p	31.47 31.50	59.94 60.00
1280 x 720p	44.96 45.00	59.94 60.00
1920 x 1080i	33.72 33.75	59.94 60.00
1920 x 1080p	26.97 27.00 33.71 33.75 67.432 67.50	23.976 24.00 29.97 30.00 59.94 60.00



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

MODEL _____

SERIAL _____

The extended owner's manuals that contain information on the advanced features of this LG TV are located on the CD-ROM provided in an electronic version. To read these files, you will need to use the personal computer (PC) equipped with a CD-ROM drive.

LG Customer Information Center

For inquires or comments, visit www.lg.com or call;

1-888-542-2623 CANADA
1-800-243-0000 USA, Commercial User
1-888-865-3026 USA, Consumer User

Register your product Online!

www.lg.com

(For LS3400, LS3410, LS3450, LS3500, LS4500 series
USA, Canada, Mexico)



This product qualifies for ENERGY STAR in the "factory default (Home Use)" setting.

Changing the factory default settings or enabling other features may increase power consumption that could exceed the limits necessary to qualify for ENERGY STAR.