LG
Life's Good

ENGLISH

OWNER'S MANUAL
Woofer built-in sound bar

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

NB2520A

MFL67693314

NB2520A-NU_DSGPLL_ENG.indd   1   2012-10-17   9:31:07

Safety information

CAUTION

**RISK OF ELECTRIC SHOCK
DO NOT OPEN**

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

This 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 product.

WARNING: TO PREVENT FIRE OR ELECTRIC SHOCK HAZARD, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE.

WARNING: Do not install this equipment in a confined space such as a book case or similar unit.

CAUTION: Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
Slots and openings in the cabinet are provided for ventilation and to ensure reliable operation of the product and to protect it from over heating. The openings shall be never be blocked by placing the product on a bed, sofa, rug or other similar surface. This product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instruction has been adhered to.

CAUTION concerning the Power Cord

Most appliances recommend they 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 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 center. 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. To disconnect power from the mains, pull out the mains cord plug. hen installing the product, ensure that the plug is easily accessible.

This device is equipped with a portable battery or accumulator.

Safety way to remove the battery or the battery from the equipment: Remove the old battery or battery pack, follow the steps in reverse order than the assembly. To prevent contamination of the environment and bring on possible threat to human and animal health, the old battery or the battery put it in the appropriate container at designated collection points. Do not dispose of batteries or battery together with other waste. It is recommended that you use local, free reimbursement systems batteries and accumulators. The battery shall not be exposed to excessive heat such as sunshine, fire or the like.

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

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Getting Started

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4   Troubleshooting

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Unique features

Portable In

Listen to music from your portable device. (MP3, Notebook, etc)

Speaker ez (easy) Setup

Listen to sounds from TV, DVD or Digital device with vivid 2.1 or 2.0 ch mode.

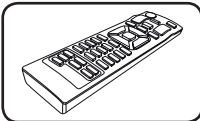# Introduction

Symbols Used in this Manual

ⓘ **Note**

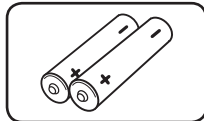Indicates special notes and operating features.

⚠ **Caution**

Indicates cautions for preventing possible damages from abuse.
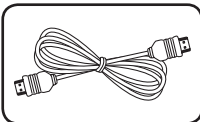
Accessories
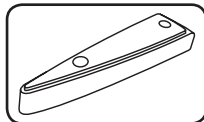
Please check and identify the supplied accessories.

Remote control (1)

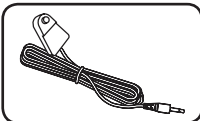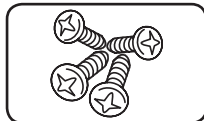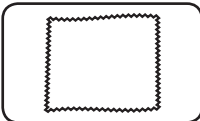Batteries (2)

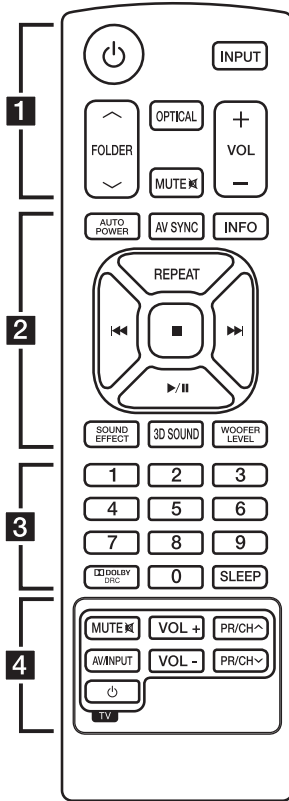HDMI cable (1)

Cover foot (2)

IR transmitter (1)

Screw (4)

Gauze (1)

Remote control

Battery Installation

Remove the battery cover on the rear of the Remote Control, and insert two (size AAA) battery with ⊕ and ⊖ matched correctly.

· · · · · · · · · · · **1** · · · · · · · · · ·

⏻ (Power) : Switches the unit ON or OFF.

INPUT : Selects the function and the input source.

∧ / ∨ FOLDER : Searches for a folder of MP3/WMA files. When a USB containing MP3/WMA files in several folders is being played, press **∧ / ∨ FOLDER** to select the folder you want to play.

OPTICAL : Changes input source to OPTICAL directly.

MUTE ⓧ : Mutes the sound.

VOL +/- : Adjusts speaker volume.

· · · · · · · · · · · **2** · · · · · · · · · ·

AUTO POWER : This function is automatically turned on the unit. (Refer to the page 18)

AV SYNC : Synchronizes the audio and video.

INFO : Displays the information of a file or an input source.

REPEAT : Listens to your files repeatedly or randomly.

⏮ / ⏭ (Skip/Search) :
- Skips Fast backward or Forward.
- Searches for a section within a file.

■ (Stop) : Stops playback.

▶/❚❚ (Play/Pause) : Starts playback. / Pauses playback.

SOUND EFFECT : Selects a sound effect mode.

3D SOUND : Turns on and off the 3D Sound mode.

WOOFER LEVEL : Sets the sound level of woofer.

· · · · · · · · · · · **3** · · · · · · · · · ·

0 to **9** numerical buttons **:** Selects a file directly.

▯▯ DOLBY DRC : Sets the Dolby DRC.

SLEEP : Sets the system to turn off automatically at a specified time.

· · · · · · · · · · · **4** · · · · · · · · · ·

TV Control buttons : See page 21.

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Getting Started

Front panel

1 ⏻ / I
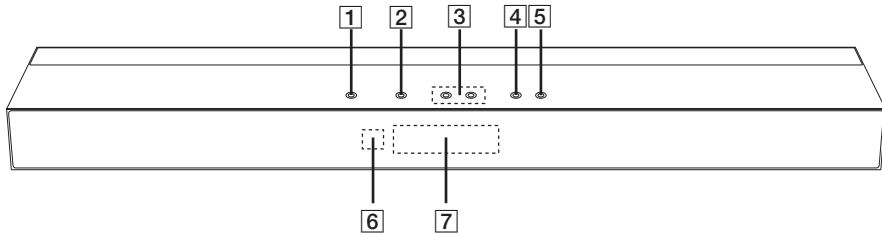
2 **F** (Function)
   Selects the function and input source.

3 **- / +** (Volume -/+)
   Adjusts volume level.

4 ▶❚❚ (Play/Pause)

5 ☐ (Stop)

6 Remote sensor

7 Display window

⚠ **Caution**

Precautions in using the touch buttons

- Use the touch buttons with clean and dry hands.
  - In a humid environment, wipe out any moisture on the touch buttons before using.

- Do not press the touch buttons hard to make it work.
  - If you apply too much strength, it can damage the sensor of the touch buttons.

- Touch the button that you want to work in order to operate the function correctly.

- Be careful not to have any conductive material such as metallic object on the touch buttons. It can cause malfunctions.

Rear panel
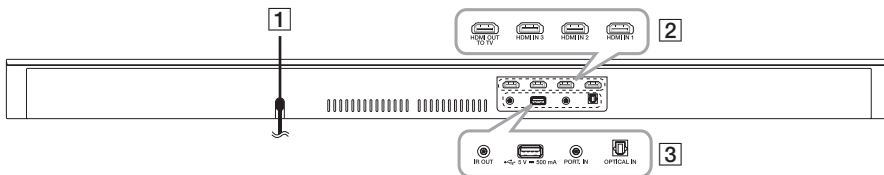
1 Power Cord

2 **HDMI OUT TO TV**
   HDMI IN 1/2/3

3 **IR OUT**
   USB port
   PORT. IN
   OPTICAL IN

Installing the sound bar

You can listen to sounds by connecting the unit to the other device : TV, Blu-ray disc player, DVD player, etc.

Place the unit in front of the TV and connect it to the device you want. (Refer to pp.11 - 16)
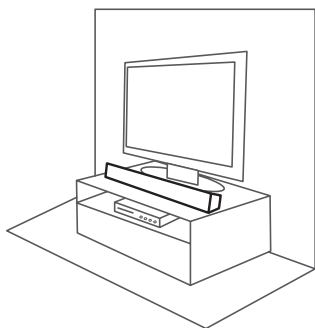
Installing the cover foot

You can extend the height of the unit.

1. Turn the unit upside down.
2. Put the cover foot on the foot of the unit.
3. Fix it with screws as shown in the illustration above.

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Getting Started

Connecting IR transmitter

IR transmitter is supplied as an accessory with the unit in order to communicate well with the remote control and the TV.

Remote control of your TV may not be operated if the unit hides the remote sensor of the TV.

You can solve the problem by connecting IR transmitter with LG TV.

Remote sensor of TV

Sensor of IR transmitter
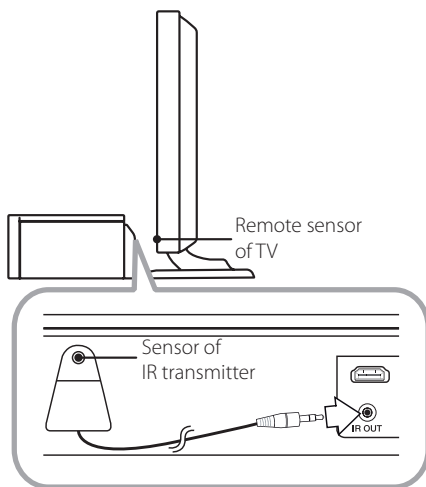
1. Remove the protective vinyl of IR transmitter.
2. Put IR transmitter on the back of the unit with the sensor of IR transmitter facing the remote sensor of the TV.
3. Connect the end of IR transmitter to IR OUT jack.

> ⚠ **Caution**
> - Do not block ventilation when you put IR transmitter on the unit.
> - Do not disconnect the power cord. If you want to use IR transmitter, keep the unit on standby mode.

> ❗ **Note**
> Depending on your TV, some or all buttons may not be function on the TV.

Connecting to your TV

You can listen to the sound from your TV via the unit. There are two ways of connecting your TV to the unit.

Using an HDMI cable

You must connect the TV that supports ARC function if you want to listen to TV sound using an HDMI cable. And turn on SIMPLINK of your TV.

1. Connect the HDMI OUT TO TV jack on the back of the unit to ARC jack on the TV using an HDMI cable (Type A, High speed HDMI™ cable with Ethernet).

HDMI OUT
TO TV

HDMI cable

ARC
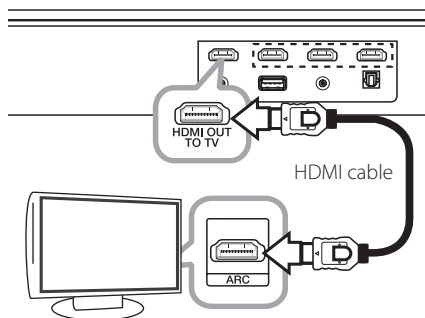
2. Turn TV and the unit on. ARC function is selected automatically.

What is SIMPLINK?

Some functions of this unit are controlled by the TV's remote control when this unit and LG TV's with SIMPLINK are connected through HDMI connection.

Controllable functions by LG TV's remote control : Power on/off, volume up/down, etc.

Refer to the TV owner's manual for the details of SIMPLINK function.

LG TV's with SIMPLINK function has the logo as shown above.

> **⚠ Note**
>
> Depending on the state of the unit, some SIMPLINK operation may differ from your purpose or not work.

ARC (Audio Return Channel) function

The ARC function enables an HDMI capable TV to send the audio stream to HDMI OUT TO TV of the unit.

To use this function :

- Your TV must support the HDMI-CEC and ARC function and the HDMI-CEC and ARC must be set to On.
- The setting method of HDMI-CEC and ARC may differ depending on the TV. For details about ARC function, refer to your TV manual.
- You must use the HDMI cable (Type A, High Speed HDMI™ cable with Ethernet).
- You must connect the HDMI OUT TO TV on the unit with HDMI IN of the TV that supports ARC function using an HDMI cable.
- You can connect only one Sound bar to TV compatible with ARC.

Additional Information for HDMI

- When you connect a HDMI or DVI compatible device make sure of the following:

  - Try switching off the HDMI/DVI device and this player. Next, switch on the HDMI/DVI device and leave it for around 30 seconds, then switch on this player.

  - The connected device's video input is set correctly for this unit.

  - The connected device is compatible with 720 x 576p, 1280 x 720p, 1920 x 1080i or 1920 x 1080p video input.

- Not all HDCP-compatible HDMI or DVI devices will work with this player.

  - The picture will not be displayed properly with non-HDCP device.

⚠ Note

- If a connected HDMI device does not accept the audio output of the player, the HDMI device's audio sound may be distorted or may not output.

- Changing the resolution when the connection has already been established may result in malfunctions. To solve the problem, turn off the player and then turn it on again.

- When the HDMI connection with HDCP is not verified, TV screen is changed to black screen. In this case, check the HDMI connection, or disconnect the HDMI cable.

- If there are noises or lines on the screen, please check the HDMI cable (length is generally limited to 4.5 m(15 ft).

- You cannot change the video resolution in the HDMI IN mode. Change the video resolution of the connected component.

- If the video output signal is abnormal when your personal computer is connected to HDMI IN jack, change the resolution of your personal computer to 576p, 720p, 1080i or 1080p.

Using an OPTICAL cable

1. Connect the OPTICAL IN jack on the back of the unit to OPTICAL OUT jack on the TV using an OPTICAL cable.

OPTICAL IN

Optical cable
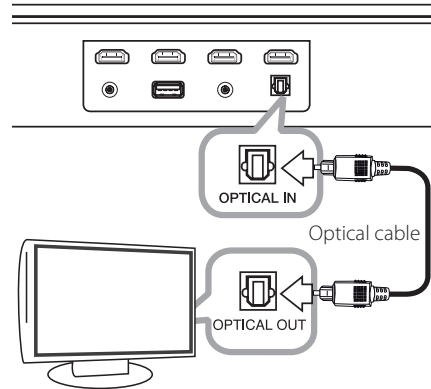
OPTICAL OUT

2. Set the INPUT source to OPTICAL. Press repeatedly **INPUT** on the remote control or **F** on the unit until the function is selected.

   For selecting directely the OPTICAL function, press **OPTICAL** on the remote control.

Optional equipment connection

HDMI connection

For enjoying sound only

You can enjoy the sound from the external device you connect.

To the Blu-ray disc player, DVD player, etc.
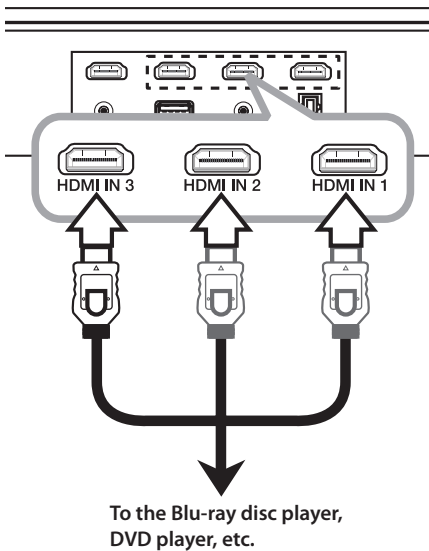
1. Connect HDMI IN 1, 2, or 3 jack on the back of the unit to HDMI OUT jack on the audio device such as Blu-ray disc player, DVD player, etc.

2. Set the INPUT source to HDMI IN 1, 2, or 3. Press repeatedly **INPUT** on the remote control or **F** on the unit until the function is selected.

For enjoying both sound and picture

You can enjoy both sound and picture from the external device you connect.

Blu-ray disc player, DVD player, etc.
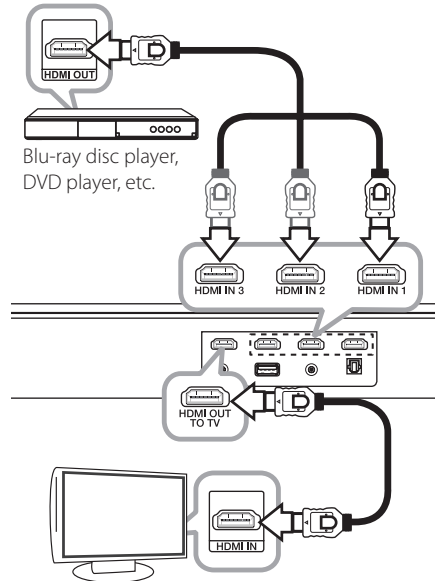
1. Connect HDMI IN 1, 2, or 3 jack on the back of the unit to HDMI OUT jack on the external device such as Blu-ray disc player, DVD player, etc.

2. Connect HDMI OUT TO TV jack on the back of the unit to HDMI IN jack on the TV.

3. Set the INPUT source to HDMI IN 1, 2, or 3. Press repeatedly **INPUT** on the remote control or **F** on the unit until the function is selected.

> **⚠ Note**
>
> Even though PCM multi channel is inputted to the unit through an HDMI cable, the unit can only output 2.1 channel.

PORT. (Portable) IN connection

MP3 player, etc...
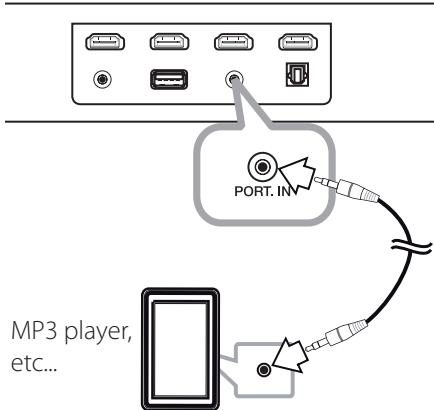
Listening to music from your portable player

The unit can be used to play the music from many types of portable players or external devices.

1. Connect the portable player to the PORT. (Portable) IN connector of the unit.

2. Turn the power on by pressing ⏻ (Power).

3. Select the PORTABLE function by pressing **INPUT**.

4. Turn on the portable player or external device and start playing it.

OPTICAL IN connection

Connect an optical output jack of external devices to the OPTICAL IN jack.

To the digital optical output jack of external device
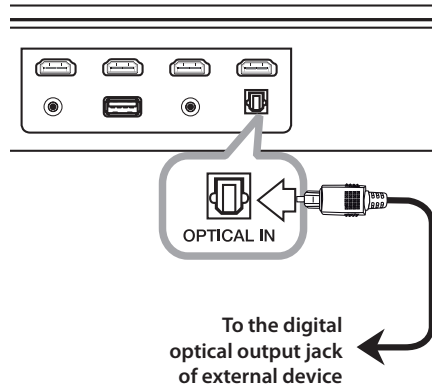
Speaker ez (easy) setup

Listens to sound from TV, DVD or Digital Device with 2.1 or 2ch mode.

1. Connect the OPTICAL IN jack on the back of the unit to optical out jack of your TV (or digital device etc.)

2. Select the input source to OPTICAL directly by pressing **OPTICAL**.

3. Listen to sound with 2.1 or 2ch speaker.

4. Press **OPTICAL** to exit from OPTICAL. Function is retuned to previous one.

2

Connecting

USB playback

Connect USB memory device to the USB port on the back of the unit.

Removing the USB Device from the unit.

1. Choose a different function/mode or press ■ twice in a row.

2. Remove the USB device from the unit.

Playable file

MP3/ WMA file requirement

MP3/ WMA file compatibility with this unit is limited as follows :

• Sampling frequency : within 32 to 48 kHz (MP3), within 32 to 48 kHz (WMA)

• Bit rate : within 32 to 320 kbps (MP3), 40 to 192 kbps (WMA)

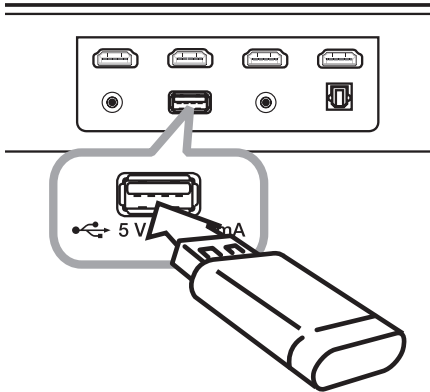• Maximum files : Under 999

• File extensions : ".mp3"/".wma"

• A protected file by DRM(Digital rights management) cannot be played on the unit.

Compatible USB devices

• MP3 Player : Flash type MP3 player.

• USB Flash Drive : Devices that support USB1.1.

• The USB function of this unit does not support some USB devices.

USB device requirement

• The file name is limited to 255 characters.

• Using NTFS file system is not supported. (Only FAT(16/32) file system is supported.)

• Depending on the size and the number of the files, it may take several minutes to read the contents on the media.

• Devices which require additional program installation connected to a computer, are not supported.

• Do not extract the USB device while in operation.

• For a large capacity USB, it may take longer than a few minutes to be searched.

• To prevent data loss, back up all data.

• If you use a USB extension cable or USB hub, the USB device is not recognized.

• This unit is not supported when the total number of files is 1000 or more.

• External HDD, Card readers, Locked devices, or hard type USB devices are not supported.

• The unit's USB Port cannot be connected to PC. The unit can not be used as a storage device.

Basic operations

USB operation

1. Connect the USB device to the USB port.
2. Select the USB function by pressing **INPUT**.
3. Select a file you want to play by pressing ◄◄ or ►►►.

To	Do this
Stop	Press ■.
Playback	Press ►/❚❚.
Pause	During playback, press ►/❚❚.
Skip to the next/ previous file	During playback, press ◄◄ or ►►► to go to the next file or to return to the beginning of the current file. Press ◄◄ twice briefly to step back to the previous file.
Search for a section within a file	Press and hold ◄◄/►►► during playback and release it at the point you want to listen to.
Play repeatedly or randomly	Press **REPEAT** on the remote control repeatedly, the display will be changed in the following order, RPT 1 ➔ RPT D (DIRECTORY) ➔ RPT ALL ➔ RANDOM ➔ OFF.
Select a file directly	Press **0** to **9** numerical buttons on the remote control to go to the desired file directly.

Other operations

DOLBY DRC (Dynamic Range Control)

Make the sound clear when the volume is turned down (Dolby Digital only). Set to [DRC ON] by using ▢▢ **DOLBY DRC**.

AV Sync

When receiving audio signals from TV, sound and images may not be matched. In the case, this function can adjust the delay time.

1. Press **AV SYNC**.
2. Use ◄◄/►►► to scroll up and down through the delay amount, which you can set at anything between 0 and 300ms.

AUTO POWER On/Off

Before operating this function, make sure that you have selected OPTICAL and turn on the AUTO POWER.

This function automatically turns on/off the unit when you turn on/off the external device (TV, DVD Player, Blu-ray Disc Player, etc.) connected to this unit by the optical cable. This function turns on or off each time you press **AUTO POWER**.

Display	Operation
AUTO POWER ON	AUTO POWER function is turned on.
AUTO POWER OFF	AUTO POWER function is turned off.

> **ⓘ Note**
>
> • This function is intentionally designed to turn off the unit after 15 minutes of inactivity. If you did not connect external devices with optical cable or there is no digital audio signal going to the unit, the unit will turn off after 15 minutes of inactivity if AUTO POWER function is turned on.
>
> • Depending on the connected device by the optical cable, this function may not operate.
>
> • If you want to use AUTO POWER, SIMPLINK must be turned off. It takes for about 30 seconds to switch on or off SIMPLINK.
>
> • If SIMPLINK is set to ON, "AUTO POWER OFF" is just scrolled, even thouth you press **AUTO POWER**.
>
> • Once AUTO POWER is set, the unit will start as OPTICAL mode automatically next time, no matter what kind of function you selected before.

Notice for Auto Power Off

This unit will be off itself to save electronic consumption in the case main unit is not connected to external device and is not used for 25 minutes.

So does this unit after six hours since Main unit has been connected to other device using analog input.

But the unit can turns on automatically based on the [AUTO POWER] function you've set.

Turn off the sound temporarily

Press **MUTE** ⓧ to mute your unit.

You can mute your unit, for example, to answer the telephone, "MUTE" is displayed in the display window.

To cancel it, press **MUTE** ⓧ again on the remote control or change the volume level.

Displaying file and input source

You can display various information of the input source by pressing **INFO**.

USB : MP3/WMA containing file information

OPTICAL/ARC/HDMI IN 1/2/3 : Audio format, Audio channel

Sleep Timer Setting

Press **SLEEP** repeatedly to select the desired
time period options (in minutes):
(Display window off (LCD OFF) -> Sleep timer
value -> Display on)
In display window you see "LCD OFF" or Sleep
timer value and the display window turns off.
To check the remaining time, press **SLEEP**.
To cancel the sleep function, press **SLEEP**
repeatedly until "SLEEP 10" appears, and then
press **SLEEP** once again while "SLEEP 10" is
displayed.

> ### ⚠ Note
>
> • You can check the remaining time before
>   the unit turns off. Press **SLEEP** the
>   remaining time appears in the display
>   window.
> • When you operate the unit in sleep mode,
>   you can see operating information in display
>   window for about 5 seconds and the display
>   window turns off.

3

Operating

Sound adjustment

Setting the surround mode

This system has a number of pre-set surround sound fields. You can select a desired sound mode by using **SOUND EFFECT**.

The displayed items for the equalizer may be different depending on sound sources and effects.

On Display	Description
NATURAL	You can enjoy comfortable and natural sound.
BYPASS	You can enjoy the sound without equalizer effect.
BASS	The BASS is Bass Blast. During playback, reinforce the treble, bass and surround sound effect.
CLRVOICE	The CLRVOICE is Clear Voice. This program make voice sound clear, improving the quality of voice sound.
GAME	The GAME is Game Equalizer. You can enjoy more virtual sound while playing video games.
NIGHT	The NIGHT is Night Mode. This may be useful when you want to watch movies at low volume late at night.
UPSCALER	The UPSCALER is MP3 Up-Scaling. When listening to MP3 files or other compressed music, you can enhance the sound. This mode is available only to 2 channel sources.
LOUDNESS	Improves the bass and treble sound.

> **Note**
>
> - In some of surround modes, some speakers, there's no sound or low sound. It depends on the mode of surround and the source of audio, it is not defective.
> - You may need to reset the surround mode, after switching the input, sometimes even after the sound file changed.

3D Sound effect

3D Sound features deliver sound creating a wider spot so you can enjoy more immersive and cinematic surround sound. Press **3D SOUND** to turn on or off the 3D Sound mode.
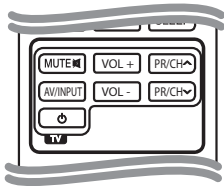
Adjust the woofer level settings

You can adjust the sound level of woofer.

1. Press **WOOFER LEVEL**.
2. Press **VOL +/-** to adjust the sound level of the woofer.

Operating

3

Controlling a TV with the supplied remote control

You can control your TV using the buttons below.

Button	Operation
MUTE 🔇	Turn the TV's volume on or off.
AV/INPUT	Switch the TV's input source between the TV and other input sources.
⏻ (TV POWER)	Turn the TV on or off.
VOL +/−	Adjust the volume of the TV.
PR/CH ∧ / ∨	Scan up or down through memorized channels.

> **⚠ Note**
> • Depending on the unit being connected, you may not be able to control your TV using some of the buttons.
> • The remote control of the unit performs basic operation of your TV. Please use the TV's remote control to enjoy advanced operation of your TV.

Setting up the remote to control your TV

You can operate your TV with the supplied remote control.
If your TV is listed in the table below, set the appropriate manufacturer code.

1. While holding down ⏻ (TV POWER) button, and press the manufacturer code for your TV with the numerical buttons (see the table below).

Manufacturer	Code Number
LG	1(Default), 2
Zenith	1, 3, 4
GoldStar	1, 2
Samsung	6, 7
Sony	8, 9
Hitachi	4

2. Release the ⏻ (TV POWER) button to complete setting.

Depending on your TV, some or all buttons may not function on the TV, even after entering the correct manufacturer code. When you replace the batteries of the remote, the code number you have set may be reset to the default setting. Set the appropriate code number again.

Troubleshooting

PROBLEM	CAUSE & CORRECTION
No Power	• The power cord is unpluged. Plug in the power cord. • Check the condition by operating other electronic devices.
No sound	• Incorrect input source is selected. Check the input source and select the correct input source. • The mute function is activated. Press **MUTE** 🔇 or adjust the volume level to cancel the mute function.
No LED	• The Dimmer or the Sleep function is activated. Press **SLEEP** to cancel the function.
The remote control does not work properly.	• The remote control is too far from the unit. Operate the remote control within about 23 ft (7m). • There is an obstacle in the path of the remote control and the unit. Remove the obstacle. • The batteries in the remote control is exhausted. Replace the batteries with new one.
The AUTO POWER function does not work.	• Check the state of SIMPLINK and turn off SIMPLINK. • Depending on the connected device by the optical cable, this function may not operate.
When you sense that outputted sound of the unit is low.	Check the details below and adjust the unit according to them. • Switch [ON] state of DRC function to [OFF] by using remote controller. • With the sound bar connected with TV, change the AUDIO DIGITAL OUT setting on TV Setup Menu from [PCM] to [AUTO] or [BITSTREAM]. • With the sound bar connected with Player, change the AUDIO DIGITAL OUT setting on Player Setup Menu from [PCM] to [PRIMARY PASS-THROUGH] or [BITSTREAM]. • Change Audio DRC setting on Player setup menu to [OFF] state.

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Specifications

General	
Power requirements	Refer to the main label.
Power consumption	Refer to the main label.
Dimensions (W x H x D)	880 x 81 (94) x 119 mm (with foot)
Net Weight (Approx.)	3.5 kg
Operating temperature	41 °F to 95 °F (5 °C to 35 °C)
Operating humidity	5 % to 90 %
Bus Power Supply	DC 5 V ⎓ 500 mA

Input/Output	
OPTICAL IN	3 V (p-p), Optical jack x 1
PORT. IN	0.5 Vrms (3.5 mm stereo jack)
HDMI IN	19 Pin (Type A, HDMI™ connector) x 3
HDMI OUT	19 Pin (Type A, HDMI™ connector) x 1

Amplifier	
Stereo mode	18 W + 18 W (4 Ω at 1 kHz)
Subwoofer	44 W (4 Ω at 80 Hz) : Built-In

Designs and specifications are subject to change without prior notice.

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Appendix

Maintenance

Handling the unit

When shipping the unit

Please save the original shipping carton and packing materials. If you need to ship the unit, for maximum protection, re-pack the unit as it was originally packed at the factory.

Keeping the exterior surfaces clean

- Do not use volatile liquids such as insecticide spray near the unit.
- Wiping with strong pressure may damage the surface.
- Do not leave rubber or plastic products in contact with the unit for a long period of time.

Cleaning the unit

To clean the player, use a soft, dry cloth. If the surfaces are extremely dirty, use a soft cloth lightly moistened with a mild detergent solution. Do not use strong solvents such as alcohol, benzine, or thinner, as these might damage the surface of the unit.

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Appendix

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