



## OWNER'S MANUAL

# Network Blu-ray Disc<sup>TM</sup> / DVD Home Theater System

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

### MODEL

HB994PK (HB994PK / SB94PK-L/S/D, W94-P)

P/NO : MFL65899793



**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.

CLASS 1 LASER PRODUCT  
KLASSE 1 LASER PRODUKT  
LUXUS 1 LASER APPARAT  
KLASS 1 LASER APPARAT  
CLASSE 1 PRODUIT LASER

**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 shall 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:** This product employs a Laser System. To ensure proper use of this product, please read this owner's manual carefully and retain it for future reference. Shall the unit require maintenance, contact an authorized service center.

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

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

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

**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. When installing the product, ensure that the plug is easily accessible.

## Notes on Copyrights

- Because AACS (Advanced Access Content System) is approved as content protection system for BD format, similar to use of CSS (Content Scramble System) for DVD format, certain restrictions are imposed on playback, analog signal output, etc., of AACS protected contents. The operation of this product and restrictions on this product may vary depending on your time of purchase as those restrictions may be adopted and/or changed by AACS after the production of this product. Furthermore, BD-ROM Mark and BD+ are additionally used as content protection systems for BD format, which imposes certain restrictions including playback restrictions for BD-ROM Mark and/or BD+ protected contents. To obtain additional information on AACS, BD-ROM Mark, BD+, or this product, please contact an authorized Customer Service Center.
- Many BD-ROM/DVD discs are encoded with copy protection. Because of this, you should only connect your player directly to your TV, not to a VCR. Connecting to a VCR results in a distorted picture from copy-protected discs.
- This product incorporates copyright protection technologies that are protected by certain U.S. patents and other intellectual property rights owned by Macrovision Corporation and other rights owners. Use of this copyright protection technology must be authorized by Macrovision Corporation and is intended for home and other limited viewing uses only, unless otherwise authorized by Macrovision Corporation. Reverse engineering or disassembly is prohibited.
- Under the U.S. Copyright laws and Copyright laws of other countries, unauthorized recording, use, display, distribution, or revision of television programs, videotapes, BD-ROM discs, DVDs, CDs and other materials may subject you to civil and/or criminal liability.

### To use BD-Live functionality

You must attach an external USB device using the USB port (see page 23).



### 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; Play, Pause, Scan, Skip, Stop, Power Off, etc.
- Refer to the TV owner's manual for the details of SIMPLINK function.
- LG TV's with SIMPLINK function have the logo as shown above.

### Notes:

- Depending on the disc type or playing status, some SIMPLINK operation may differ from your purpose or not work.
- If "SIMPLINK" function does not work, check that your HDMI cable supports by CEC (Consumer Electronics Control) for HDMI.
- If the sound is output from both the system's speakers and TV speaker or not output from both them during SIMPLINK operation, reset speaker setting of LG TV's SIMPLINK menu.

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"x.v.Colour" is a trademark of Sony Corporation.

"Blu-ray Disc" is a trademark.

"BONUSVIEW" is trademark of Blu-ray Disc Association.

This product is licensed under the AVC patent portfolio license and VC-1 patent portfolio license for the personal and non-commercial use of a consumer to (i) encode video in compliance with the AVC Standard and VC-1 Standard ("AVC/VC-1 Video") and/or (ii) decode AVC/VC-1 Video that was encoded by a consumer engaged in a personal and non-commercial activity and/or was obtained from a video provider licensed to provide AVC/VC-1 Video. No license is granted or shall be implied for any other use. Additional information may be obtained from MPEG LA, LLC. See <http://www.mpeglallc.com>.

"AVCHD" and the AVCHD logo are trademarks of Panasonic and Sony Corporation.

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Before connecting, operating or adjusting this product,  
please read this instruction booklet carefully and completely.

## Introduction

To ensure proper use of this product, please read this owner's manual carefully and retain for future reference.

This manual provides information on the operation and maintenance of your player. Should the unit require service, contact an authorized service location.

### About the Symbol Display

"  " may appear on your TV display during operation and indicates that the function explained in this owner's manual is not available on that specific media.

### Symbols Used in this Manual

#### **Note:**

Indicates special notes and operating features.

#### **Tip:**

Indicates tips and hints for making the task easier.

A section whose title has one of the following symbols are applicable only to the disc represented by the symbol.

<b>ALL</b>	All discs listed below
<b>BD</b>	BD-ROM disc
<b>DVD</b>	DVD-Video, DVD±R/RW in Video mode or VR mode and finalized
<b>AVCHD</b>	DVD±R/RW in AVCHD format
<b>ACD</b>	Audio CDs
<b>MOVIE</b>	Movie files contained in the USB/Disc
<b>MOVIE-N</b>	Movie files in the DLNA server
<b>MUSIC</b>	Music files contained in the USB/Disc
<b>MUSIC-N</b>	Music files in the DLNA server

## 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.

### **Maintaining the Unit**

The unit is a high-tech, precision device. If the optical pick-up lens and disc drive parts are dirty or worn, the picture quality could be diminished.

For details, please contact your nearest authorized service center.

## Notes on Discs

### **Handling Discs**

Do not touch the playback side of the disc. Hold the disc by the edges so that fingerprints do not get on the surface. Never stick paper or tape on the disc.

### **Storing Discs**

After playing, store the disc in its case. Do not expose the disc to direct sunlight or sources of heat and never leave it in a parked car exposed to direct sunlight.

### **Cleaning Discs**

Fingerprints and dust on the disc can cause poor picture quality and sound distortion. Before playing, clean the disc with a clean cloth. Wipe the disc from the center out.

Do not use strong solvents such as alcohol, benzine, thinner, commercially available cleaners, or anti-static spray intended for older vinyl records.

## Playable Discs



### Blu-ray Disc

- Discs such as movies that can be purchased or rented
- BD-R/RE discs that contain Movie, Music or Photo files.



### DVD-VIDEO (12 cm disc)

- Discs such as movies that can be purchased or rented



### DVD-R (12 cm disc)

- Video mode and finalized only
- Supports the dual layer disc also
- AVCHD format
- DVD-R discs that contain Movie, Music or Photo files.



### DVD-RW (12 cm disc)

- VR mode, Video mode and finalized only
- AVCHD format
- DVD-RW discs that contain Movie, Music or Photo files.



### DVD+R (12 cm disc)

- Finalized disc only
- Supports the dual layer disc also
- AVCHD format
- DVD+R discs that contain Movie, Music or Photo files.



### DVD+RW (12 cm disc)

- Video mode and finalized only
- AVCHD format
- DVD+RW discs that contain Movie, Music or Photo files.



### Audio CD (12 cm disc)

- Audio CDs or CD-Rs/CD-RWs in audio CD format that can be purchased



### CD-R/CD-RW (12 cm disc)

- CD-R/CD-RW discs that contain audio titles, Movie, Music or Photo files.

## Notes:

- Depending on the conditions of the recording equipment or the CD-R/RW (or DVD±R/RW) disc itself, some CD-R/RW (or DVD±R/RW) discs cannot be played on the unit.
- Do not attach any seal or label to either side (the labeled side or the recorded side) of a disc.
- Do not use irregularly shaped CDs (e.g., heart-shaped or octagonal). Doing so may result in malfunctions.
- Depending on the recording software & the finalization, some recorded discs (CD-R/RW or DVD±R/RW) may not be playable.
- DVD±R/RW and CD-R/RW discs recorded using a personal computer or a DVD or CD Recorder may not play if the disc is damaged or dirty, or if there is dirt or condensation on the player's lens.
- If you record a disc using a personal computer, even if it is recorded in a compatible format, there are cases in which it may not play because of the settings of the application software used to create the disc. (Check with the software publisher for more detailed information.)
- This player requires discs and recordings to meet certain technical standards in order to achieve optimal playback quality. Pre-recorded DVDs are automatically set to these standards. There are many different types of recordable disc formats (including CD-R containing MP3 or WMA files) and these require certain pre-existing conditions to ensure compatible playback.
- Customers should note that permission is required in order to download MP3 / WMA files and music from the Internet. Our company has no right to grant such permission. Permission should always be sought from the copyright owner.
- You have to set the disc format option to [Mastered] in order to make the discs compatible with the LG players when formatting rewritable discs. When setting the option to Live System, you cannot use it on LG player. (Mastered/Live File System : Disc format system for windows Vista)

## BD-ROM Disc Features

BD-ROM Discs can store 25 GB (single layer) or 50 GB (dual layer) on a single sided disc - about 5 to 10 times the capacity of a DVD.

BD-ROM Discs also support the highest quality HD video available in the industry (up to 1920 x 1080) - Large capacity means no compromise on video quality. Furthermore, a BD-ROM disc has the same familiar size and look as DVD.

- The following BD-ROM disc features are disc dependent and will vary.
- Appearance and navigation of features will also vary from disc to disc.
- Not all discs will have the features described below.
- BD-ROM, Hybrid disc have both BD-ROM and DVD (or CD) layers on one side. On such discs, BD-ROM layer will be only played back in this player.

### Video highlights

The BD-ROM format for movie distribution supports three highly advanced video codecs, including MPEG-2, MPEG4 AVC (H.264), and SMPTE VC1. HD video resolutions are also available:

- 1920 x 1080 HD
- 1280 x 720 HD

### Graphic planes

Two individual, full HD resolution (1920x1080) graphic planes (layers) are available, on top of the HD video layer. One plane is assigned to video-related, frame accurate graphics (like subtitles), and the other plane is assigned to interactive graphic elements, such as buttons or menus.

For both planes, various wipes, fades and scroll effects may be available.

### For High-Definition Playback

To view high-definition contents from BD-ROM discs, an HDTV is required. Some discs may require HDMI OUT for viewing of high-definition contents. Ability to view high-definition contents in BD-ROM discs may be limited depending on the resolution of your TV.

### Menu sounds

When you highlight or select a menu option, sounds can be heard such as button clicks or a voice-over explaining the highlighted menu choice.

### Multi-page/PopUp Menus

With DVD-Video, playback is interrupted each time a new menu screen is accessed. Due to BD-ROM disc's ability to preload data from the disc without interrupting playback, a menu can consist of several pages.

You can browse through the menu pages or select different menu paths, while the audio and video remain playing in the background.

### Interactivity

Certain BD-ROM Discs may contain animated menus and/or trivia games.

### User Browsable Slideshows

With BD-ROM Discs, you can browse through various still pictures while the audio remains playing.

### Subtitles

Depending on what is contained on the BD-ROM disc, you may be able to select different font styles, sizes and colours for some subtitles. Subtitles may also be animated, scrolled or faded in and out.

### BD-J Interactive Capability

The BD-ROM format supports Java for interactive functions. "BD-J" offers content providers almost unlimited functionality when creating interactive BD-ROM titles.

### BD-ROM Disc Compatibility

This player supports BD-ROM Profile 2.

- Discs supporting BD-Live (BD-ROM version 2 Profile 2) that allows interactive functions to be used when this unit is connected to the Internet in addition to the BONUSVIEW function.
- Discs supporting BONUSVIEW (BD-ROM version 2 Profile 1 version 1.1/Final Standard Profile) that allows Virtual packages or Picture-in-Picture functions to be used.

## Regional Code

This unit has a regional code printed on the rear of the unit. This unit can play only BD-ROM or DVD discs labeled same as the rear of the unit or "ALL".

## AVCHD (Advanced Video Codec High Definition)

- This player can playback AVCHD format discs. These discs are normally recorded and used in camcorders.
- The AVCHD format is a high definition digital video camera format.
- The MPEG-4 AVC/H.264 format is capable of compressing images at higher efficiency than that of the conventional image compressing format.
- Some AVCHD discs use the "x.v.Colour" format.
- This player can playback AVCHD discs using "x.v.Colour" format.
- "x.v.Colour" is a trademark of Sony Corporation.
- Some AVCHD format discs may not play, depending on the recording condition.
- AVCHD format discs need to be finalized.
- "x.v.Colour" offers a wider colour range than normal DVD camcorder discs.

## Compatibility Notes

- Because BD-ROM is a new format, certain disc, digital connection and other compatibility issues are possible. If you experience compatibility problems, please contact an authorized Customer Service Center.
- Viewing high-definition content and up-converting standard DVD content may require a HDMI-capable input or HDCP-capable DVI input on your display device.
- Some BD-ROM and DVD discs may restrict the use of some operation commands or features.
- Dolby Digital EX, DTS-ES and DTS 96/24 are output as Dolby Digital 5.1 or DTS 5.1.
- You can use the USB device that is used to store some disc related information, including downloaded on-line content. The disc you are using will control how long this information is retained.

## Certain System Requirements

For high definition video playback:

- High definition display that has HDMI input jacks.
- BD-ROM disc with high definition content.
- HDMI or HDCP capable DVI input on your display device is required for some content (as specified by disc authors).
- For up-conversion of standard definition DVD, a HDMI or HDCP capable DVI input on your display device is required for copy protected content.

## Important Notice for TV colour system

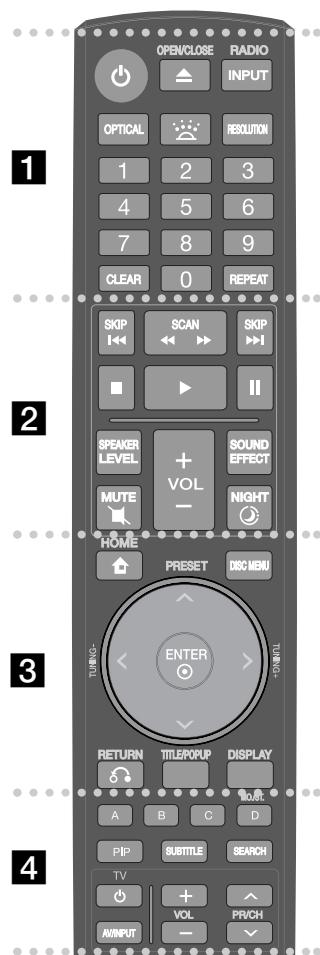
The colour system of this player differs according to currently playing discs. For example, when the player plays back the disc recorded in the NTSC colour system, the image is outputted as a NTSC signal.

Only the multi system colour TV can receive all signals outputted from the player.

### Notes:

- If you have a PAL colour system TV, you will see just distorted images when using discs recorded in NTSC.
- The multi system colour TV changes the colour system automatically according to input signals. In case that the colour system is not changed automatically, turn it off and then on to see normal images on screen.
- Even if the disc recorded in NTSC colour system are well displayed on your TV, these may not be recorded correctly on your recorder.

## Remote control



- ● ● ● ● 1 ● ● ● ● ● ●
- POWER:** Switches the player ON or OFF.
- OPEN/CLOSE (▲):** Raise and lower the disc tray.
- INPUT (RADIO):** Changes the input source (FM, OPTICAL, HDMI IN)
- OPTICAL:** Changes input source to OPTICAL directly.
- : Enters or exits the mood lighting mode.
- RESOLUTION:** Sets the output resolution for HDMI OUT jack.
- 0-9 numerical buttons:** Select numbered options in a menu.
- CLEAR:** Removes a number when setting the password.
- REPEAT:** Repeat a desired section.
- ● ● ● ● 2 ● ● ● ● ● ●
- SKIP (◀◀ / ▶▶):** Go to next or previous chapter / track / file.
- SCAN (◀◀ / ▶▶):** Searches backward or forward.
- : Stops playback.
- ▶: Starts playback.
- : Pauses playback.
- SPEAKER LEVEL:** Sets the sound level of desired speaker.
- SOUND EFFECT:** Selects a sound mode.
- MUTE:** Press MUTE to mute your unit. You can mute your unit in order, for example, to answer the telephone.
- VOL (+/-):** Adjusts speaker volume.
- NIGHT (⌚):** Sets the late night function.
- ● ● ● ● 3 ● ● ● ● ● ●
- HOME:** Displays or exits the [Home Menu].
- DISC MENU:** Accesses the menu on a disc.
- Direction buttons (↖ / ↘ / < / >):** Selects an option in the menu.

**PRESET (↖ / ↘):** Selects a preset radio programme.

**TUNING (+/-):** Tunes in the desired radio station.

**ENTER (◎):** Acknowledges menu selection.

**RETURN (↶):** Exits the menu or resumes playback. The resume play function may not work depending on the BD-ROM disc.

**TITLE/POPUP:** Displays the DVD title menu or BD-ROM's popup menu, if available.

**DISPLAY:** Displays or exits the On-Screen Display.

- ● ● ● ● 4 ● ● ● ● ● ●

**Coloured (A, B, C, D) buttons:** Use to navigate BD-ROM menus. They are also used for [MOVIE], [PHOTO], [MUSIC] menu.

- D button: Selects MONO or STEREO in FM mode.

**PIP\*:** Switches on/off Secondary Video (Picture-in-picture) (BD-ROM only).

**SUBTITLE:** Selects a subtitle language.

**SEARCH:** Skips the playback 15 seconds forward or backward.

**TV Control Buttons:** See page 47.

\* Depending on the disc type or the pre-recorded contents of the BD-ROM disc, different functions may be executed or there may be no response when pressing some buttons (depending on media used).

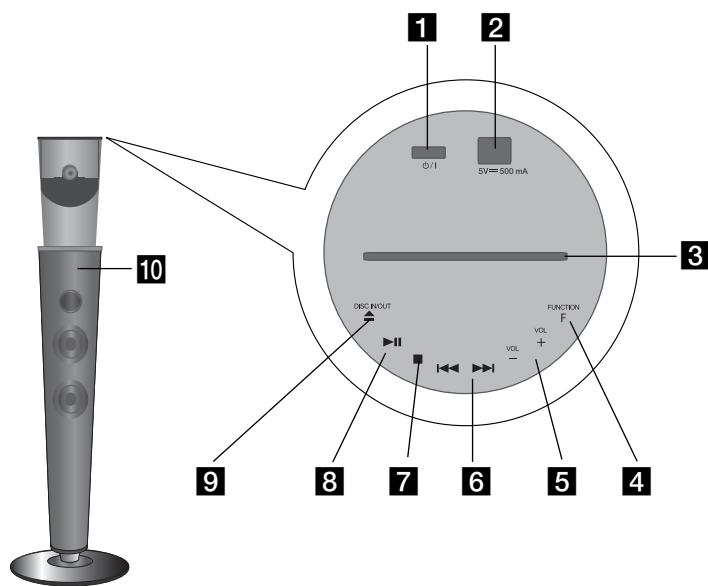
### Remote Control Operation

Point the Remote Control at the remote sensor and press the buttons.

#### Remote Control Battery Installation

Remove the battery cover on the rear of the Remote Control, and insert a R03 (size AAA) battery with **+** and **-** matched correctly.

## Main Unit (Front View)

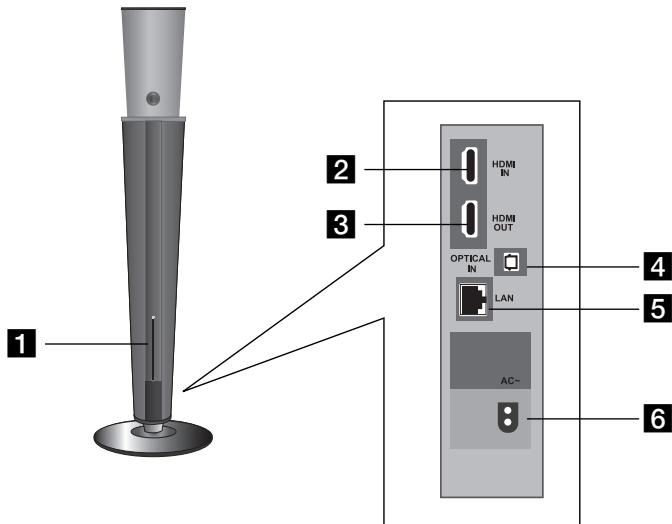


- 1** **POWER**  
Switches the unit ON or OFF.
- 2** **USB Port**  
Connect a USB device.
- 3** **Disc Slot**  
Insert a disc here.
- 4** **FUNCTION (F)**  
Changes the input source (FM, OPTICAL, HDMI IN) or displays On-Screen Display.
- 5** **VOL (+/-)**  
Adjusts speaker volume.
- 6** **◀◀ / ▶▶**  
Go to next or previous file/track/chapter.  
Searches backward or forward if you press and hold it.
- 7** **■**  
Stops playback.
- 8** **▶/■**  
Starts playback.  
Pause playback temporarily,  
press again to exit pause mode.
- 9** **△ (DISC IN/OUT)**  
Inserts or ejects a disc from the slot loader.
- 10** **Remote Sensor**  
Point the remote control here.

### 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 pressure, 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.

## Main Unit (Back View)



### 1 FM ANTENNA

### 2 HDMI IN (Type A)

Connect to an external source with HDMI outputs.

### 3 HDMI OUT (Type A)

Connect to TV with HDMI inputs. (Interface for digital audio and video)

### 4 OPTICAL IN

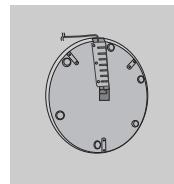
Connect to digital (optical) audio equipment.

### 5 LAN port

Connect a network with an always-on broadband connection.

### 6 AC IN Connector

Connect the supplied power cord.



#### Bottom of the floor base

Take up the slack in the cords by pulling from the bottom of the floor base and secure them by running through the cord retainer.

## Assembling the Rear Speakers

Before connecting the rear speakers, assemble the rear speakers.

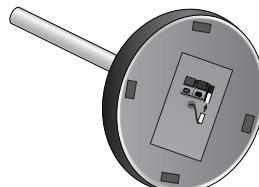
**1 Fix the post to the rear speaker by rotating the post.**



**2 Fix the rear speaker to the floor base by rotating the post.**



**3 Connect the connector cable between the rear speaker and the floor base.**



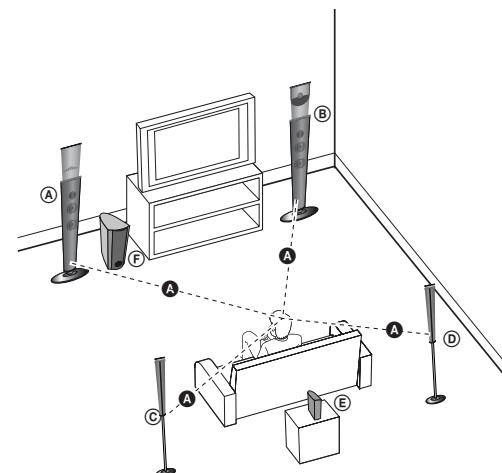
## Positioning the System

The following illustration shows an example of positioning the system. Note that the illustrations in these instructions differ from the actual unit for explanation purposes.

For the best possible surround sound, all the speakers other than the subwoofer should be placed at the same distance from the listening position (A).

To prevent injury, install the speakers in a horizontal position only, as the speaker may fall down.

- Ⓐ Wireless front left speaker/ Ⓑ Wireless front right speaker:  
Place the front speakers to the sides of the monitor or screen and as flush with the screen surface as possible.
- Ⓒ Rear left speaker/ Ⓑ Rear right speaker:  
Place these speakers behind your listening position, facing slightly inwards. Connect the wireless receiver (E) and the rear speaker (right, left) with the speaker cables.
- Ⓕ Wireless Subwoofer: The position of the subwoofer is not so critical, because low bass sounds are not highly directional. But it is better to place the subwoofer near the front speakers. Turn it slightly toward the center of the room to reduce the wall reflections.



## Connecting the System

### 1 Connect the rear speakers to the wireless receiver with the speaker cables.

Connect the black end of each wire to the terminal marked - (minus) and the other end to the terminal marked + (plus).

### 2 Connect the AC power cords.

1) Connect the AC power cords to the AC~ connector on the back of the wireless front left and right speakers.

Connect the other end to a wall outlet.

2) Connect the AC power cord to the AC connector on the bottom of the wireless subwoofer.

Connect the other end to a wall outlet.

3) Connect the AC power cord of the wireless receiver to a wall outlet.

### 3 Press (or )

- After the wireless light is flashing blue about a few seconds, the system will automatically establish a wireless link.

- When the wireless link is established, the wireless light of the wireless front left speaker is off and the wireless lights of the wireless subwoofer and the wireless receiver are solidly on blue.

- When the system is turned off, the wireless lights will turn red.

## Resetting the wireless link

If an interference occurs or you replace any part of the system, the wireless link should be set again.

1 Disconnect the power cord from the wall outlet on the wireless front left speaker, the wireless subwoofer, and the wireless receiver.

2 Press and hold the  button on the wireless front right speaker and the MUTE button on the remote control simultaneously.  
• The unit will display "REMARTE".

3 Reconnect the power cord to the wall outlet on the wireless front left speaker, the wireless subwoofer, and the wireless receiver.

### Be careful of the following

- If there is a strong electromagnetic wave product nearby, interference may occur. Put the system away from there.  
(Ex: Microwave oven)

- Be careful to make sure children do not put their hands or any objects into the \*speaker duct.

\*Speaker duct: A hole to allow for plentiful bass sound on speaker cabinet (enclosure).

- Set the distance of each system within 10m.

- Be sure to match the speaker cable to the appropriate terminal on the components: + to + and - to -. If the cables are reversed, the sound will be distorted and will lack bass.

- The speakers contain magnet parts, so color irregularity may occur on the TV screen or PC monitor screen. Please use the speakers away from the TV screen or PC monitor screen.

## Connections to Your TV

### Tip:

Please refer to the manuals of your TV or other devices as necessary to make the best connections.

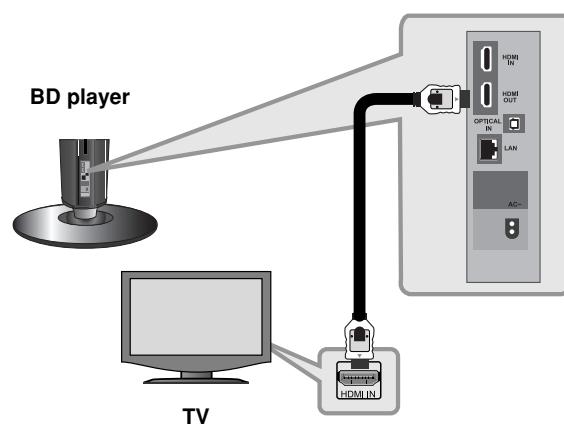
### Cautions:

- Make sure the player is connected directly to the TV. Tune the TV to the correct video input channel.
- Do not connect your player via your VCR. The image could be distorted by the copy protection system.

### HDMI Connection

If you have a HDMI TV or monitor, you can connect it to this player using a HDMI cable.

Connect the HDMI OUT jack on the player to the HDMI IN jack on a HDMI compatible TV or monitor.



Set the TV's source to HDMI (refer to TV's Owner's manual).

### Notes:

- You must select a HDMI audio output that your TV accepts using [HDMI Audio] options on the [Setup] menu (see page 27).
- If a connected HDMI device does not accept the audio output of the unit, the HDMI device's audio sound may be distorted or may not output.

### Tips:

- You can fully enjoy digital audio and video signals together with this HDMI connection.
- When you use HDMI connection, you can change the resolution for the HDMI output. (Refer to "Resolution Setting" on page 15-16.)
- Select the type of video output from the HDMI OUT jack using [HDMI Color Setting] option on the [Setup] menu (see page 25).

### Cautions:

- 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 or green screen or the snow noise may occur on the screen. In this case, check the the HDMI connection, or disconnect the HDMI cable.
- If there is noise or lines on the screen, please check the HDMI cable (length is generally limited to 4.5 m) and use a High Speed HDMI cable (Version 1.3).

## 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 720x576p, 1280x720p, 1920x1080i or 1920x1080p 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.
  - This player does not playback and TV screen is changed to black or green screen or the snow noise may occur on the screen.

## Resolution Setting

The player provides several output resolutions for HDMI OUT jack. You can change the resolution using [Setup] menu or pressing the RESOLUTION button in [Home Menu] and [Setup] Menu.

### **Note:**

Since several factors affect the resolution of video output, see "Available resolution according to the resolution setting" on page 16.

### **How to change the resolution using RESOLUTION button**

Press RESOLUTION repeatedly in [Home Menu] and [Setup] Menu to change the resolution. The display window will show you the current resolution.

### **How to change the resolution using the [Setup] menu**

- 1 Press HOME and the [Home Menu] appears.
- 2 Select the [Setup] and press ENTER. The [Setup] menu appears.
- 3 Use  $\wedge\vee$  to select [DISPLAY] option then press  $>$  to move to the second level.
- 4 Use  $\wedge\vee$  to select the [Resolution] option then press  $>$  to move to the third level.
- 5 Use  $\wedge\vee$  to select the desired resolution then press ENTER to confirm your selection.

### **Note:**

If the video signal from the HDMI OUT jack is not output from the TV screen when [Resolution] is set to [Auto], change the video output resolution by pressing RESOLUTION button.

## Available resolution according to the resolution setting

Resolution Setting	Video Output	HDMI OUT
576i		576p
576p		576p
720p		720p
1080i		1080i
1080p / 24Hz		1080p / 24Hz
1080p / 50Hz		1080p / 50Hz

### Note:

Depending on your display, some of the resolution settings may result in the picture disappearing or an abnormal picture appearing. In this case, press HOME then RESOLUTION repeatedly until the picture re-appear.

### HDMI OUT connection

- For the 576i resolution setting, real output resolution of HDMI OUT will change to 576p.
- If you select a resolution manually and then connect the HDMI jack to TV and your TV does not accept it, the resolution setting is set to [Auto].
- If you select a resolution that your TV does not accept, the warning message will appear. After resolution change, if you cannot see the screen, please wait 20 seconds and the resolution will automatically revert back to the previous resolution.
- The 1080p video output frame rate may be automatically set to either 24Hz or 50Hz depending both on the capability and preference of the connected TV and based on the native video frame rate of the content on the BD-ROM disc.

## Connecting to your Home Network

This player can be connected to a local area network (LAN) via the LAN port on the rear panel or the internal wireless module.

By connecting the unit to a broadband home network, you have access to services such as My Media and BD-Live interactivity.

### Wired network connection

Using a wired network provides the best performance, because the attached devices connect directly to the network and are not subject to radio frequency interference.

Please refer to the documentation for your network device for further instructions.

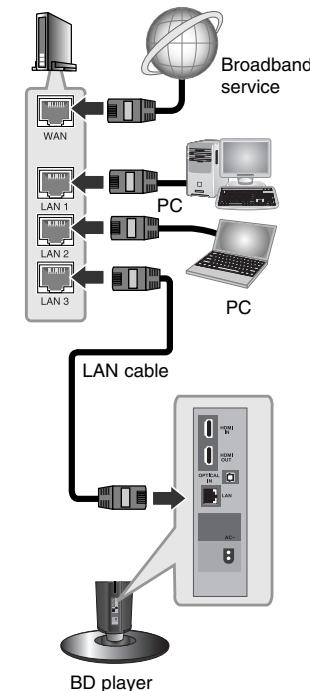
Connect the player's LAN port to the corresponding port on your Modem or Router using a commercially available LAN or Ethernet cable (CAT5 or better with RJ45 connector).

In the example configuration for wired connection below, this player would be able to access content from either of the PCs.

#### Notes:

- When plugging or unplugging the LAN cable, hold the plug portion of the cable. When unplugging, do not pull on the LAN cable but unplug while pressing down on the lock.
- Do not connect a modular phone cable to the LAN port.
- Since there are various connection configurations, please follow the specifications of your telecommunication carrier or internet service provider.
- If you want to access content from PCs or DLNA servers, this player must be connected to the same local area network with them via a router.

Router/Modem



## Wired Network Setup

If there is a DHCP server on the local area network (LAN) via wired connection, this player will automatically be allocated an IP address. After making the physical connection, a small number of home networks may require the player's network setting to be adjusted. Adjust the [NETWORK] setting as follows.

### Preparation

Before setting the wired network, you need to connect the broadband internet to your home network.

1.



Select the [Connection Setting] option in the [Setup] menu then press > or ENTER.

2.



The [Connection Setting] menu appear on the screen. Use  $\wedge/\vee$  to select [Wired] and press ENTER.

3.



Use  $\wedge/\vee$  to select the IP mode between [Dynamic] and [Static]. Normally, select [Dynamic] to allocate an IP address automatically.

### Note:

If there is no DHCP server on the network and you want to set the IP address manually, select [Static] then set the [IP Address], [Subnet Mask], [Gateway] and [DNS Server] using  $\wedge/\vee$  and numerical buttons. If you make a mistake while entering a number, press CLEAR to clear the highlighted part.

4. Select [OK] and press ENTER to apply network settings.

5. The player will ask you to test the network connection. Select [OK] and press ENTER to complete the network connection.

6.



If you select [Test] and press ENTER at step 5 above, the network connection status is displayed on the screen. You can also test it on the [Connection Status] in the [Setup] menu.

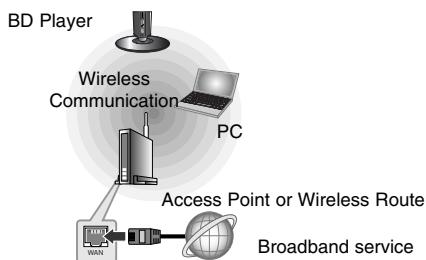
## Wireless network connection

Another connection option is to use an Access Points or an wireless router. In the example configuration for wireless connection below, this player would be able to access content from either of the PCs.

The network configuration and connection method may vary depending on the equipment in use and the network environment.

This player is equipped with an IEEE 802.11n wireless module, which also supports the 802.11b/g standards. For the best wireless performance, we recommend using a IEEE 802.11n certified Wi-Fi network (access point or wireless router).

Refer to the setup instructions supplied with your access point or wireless router for detailed connection steps and network settings.



### Note:

For best performance, a direct wired connection from this player to your home network's router or cable/DSL modem is always the best option. If the player is far away from your router or cable/DSL modem, Ethernet or LAN cables are available at many stores in lengths of 50 feet and longer. If you do chose to use the wireless option, note that performance can sometimes be affected by other electronic devices in the home.

## Wireless network setup

For the wireless network connection, the player needs to be set up for network communication. This adjustment can be done from the [Setup] menu. Adjust the [NETWORK] setting as follows.

Setting up the access point or the wireless router is required before connecting the player to the network.

### Preparation

Before setting the wireless network, you need to:

- connect the broadband internet to the wireless home network.
- set the access point or wireless router.
- note the SSID and security code of the network.

1.



Select the [Connection Setting] option in the [Setup] menu then press > or ENTER.

2.



The [Connection Setting] menu appear on the screen. Use  $\wedge/\vee$  to select [Wireless] and press ENTER.

3.



Selects [OK] and press ENTER to continue. The new connection settings resets the current network settings.

4.



The player scans the all available access points or wireless routers within range and display them as a list. Use  $\wedge/\vee$  to select an access point or wireless router on the list, and then press ENTER.

If you have security on your access point or wireless router, verify that the WEP or WPA key that was entered into the player matches the router's information exactly. You need to input the security code as necessary.

#### Notes:

- WEP security mode generally have 4 keys available on an access point or wireless router's setting. If your access point or wireless router use WEP security, enter the security code of the key "No.1" to connect on your home network.
- An Access Point is a device that allows you to connect to your home network wirelessly.

**[Push Button]** – If your access point or wireless router that supports Push Button Configuration method, select this option and press the Push Button on your access point or wireless router within 120 counts. You do not need to know the access point name (SSID) and security code of your access point or wireless router.

**[Manual]** – Your access point may not be broadcasting its access point name(SSID). Check your router settings through your computer and either set your router to broadcast SSID, or manually enter the access point name(SSID) in [Manual].

5. Use  $\wedge/\vee$  to select the IP mode between [Dynamic] and [Static]. Normally, select [Dynamic] to allocate an IP address automatically.

#### Note:

If there is no DHCP server on the network and you want to set the IP address manually, select [Static] then set [IP Address], [Subnet Mask], [Gateway] and [DNS Server] using  $\wedge/\vee$  and numerical buttons. If you make a mistake while entering a number, press CLEAR to clear the highlighted part.

6. Select [OK] and press ENTER to apply network settings.
7. The player will ask you to test the network connection. Select [OK] and press ENTER to complete the network connection.
8. If you select [Test] and press ENTER at step 7 above, the network connection status is displayed on the screen. You can also test it on the [Connection Status] in the [Setup] menu.

## Notes on Network Connection

- Many network connection problems during set up can often be fixed by re-setting the router or modem. After connecting the player to the home network, quickly power off and/or disconnect the power cable of the home network router or cable modem. Then power on and/or connect the power cable again.
- Depending on the internet service provider (ISP), the number of devices that can receive internet service may be limited by the applicable terms of service. For details, contact your ISP.
- Our company is not responsible for any malfunction of the player and/or the internet connection feature due to communication errors/malfunctions associated with your broadband internet connection, or other connected equipment.
- The features of BD-ROM discs made available through the Internet Connection feature are not created or provided by our company, and our company is not responsible for their functionality or continued availability. Some disc related material available by the Internet Connection may not be compatible with this player. If you have questions about such content, please contact the producer of the disc.
- Some internet contents may require a higher bandwidth connection.
- Even if the player is properly connected and configured, some internet contents may not operate properly because of internet congestion, the quality or bandwidth of your internet service, or problems at the provider of the content.
- Some internet connection operations may not be possible due to certain restrictions set by the Internet service provider (ISP) supplying your broadband Internet connection.
- Any fees charged by an ISP including, without limitation, connection charges are your responsibility.
- A 10 Base-T or 100 Base-TX LAN port is required for wired connection to this player. If your internet service does not allow for such a connection, you will not be able to connect the player.
- You must use a Router to use xDSL service.
- A DSL modem is required to use DSL service and a cable modem is required to use cable modem service. Depending on the access method of and subscriber agreement with your ISP, you may not be able to use the internet connection feature contained in this player or you may be limited to the number of devices you can connect at the same time. (If your ISP limits subscription to one device, this player may not be allowed to connect when a PC is already connected.)
- The use of a "Router" may not be allowed or its usage may be limited depending on the policies and restrictions of your ISP. For details, contact your ISP directly.
- The wireless network operate at 2.4GHz radio frequencies that are also used by other household devices such as cordless telephone, *Bluetooth*® devices, microwave oven, and can be affected by interference from them.
- Turn off all unused network equipment in your local home network. Some devices may generate network traffic.
- For the purpose of the better transmission, place the player as close as possible to the access point.
- In some instances, placing the access point or wireless router at least 0.45 m above the floor may improve the reception.
- Move closer to the access point if possible or re-orient the player so there is nothing between it and the access point.
- The reception quality over wireless depends on many factors such as type of the access point, distance between the player and access point, and the location of the player.
- Set your access point or wireless router to Infrastructure mode. Ad-hoc mode is not supported.

## Setting the sound mode

You can select a suitable sound mode. Press SOUND EFFECT repeatedly until the desired mode appears on the front panel display or the TV screen. The setting of the sound mode is not available when [HDMI Audio] is set to [On] (see page 27).

**[Natural] mode:** You can enjoy comfortable and natural sound.

**[Bypass] mode:** Software with multichannel surround audio signals are played according to the way it was recorded.

**[Bass Booster] mode:** Reinforce the bass sound effect from front left and right speaker and subwoofer.

**[News] mode:** This mode makes voice sound clear, improving the quality of voice sound.

**[Drama] mode:** You can enjoy more dynamic sound with improved center channel while watching a television drama.

**[Sports] mode:** This mode produces dynamic sound expansion for the sports program.

**[Game] mode:** You can enjoy more virtual sound while playing video games.

**[Concert] mode:** Creates the sound of concert hall.

**[Music ReTouch] mode:** When listening to MP3 files or other compressed music, you can enhance the sound. This mode is available only to 2 channel sources.

## Adjust the speaker level settings

You can adjust the sound level of each speaker.

Press SPEAKER LEVEL repeatedly to select a desired speaker to set.

Press VOL (+/-) to adjust the sound level of the selected speaker while the level setting menu is displayed on the front panel display or the TV screen. Repeat and adjust the sound level of the other speakers.

## Using the late night function

You can compress the dynamic range of the sound track.

Press NIGHT repeatedly.

This may be useful when you want to watch movies at low volumes late at night.

**[NIGHT OFF]:** Late night function off.

**[NIGHT ON]:** Reduction in dynamic range.

### Notes:

- The late night function may be less effective or even have no effect depending on the source.
- While the late night mode is on, the lighting of the touch buttons and the level meter are turned off.

## Using the mood lighting

You can set the mood lighting mode by pressing  button.

## Using USB devices

This unit can play the movie, music and photo files contained in the USB device.

	ON REMOTE
<b>1. Connect a USB device:</b>	–
<b>2 Displays the [Home Menu]:</b>	HOME
<b>3 Select a main option:</b> [Movie], [Photo] or [Music] option	< >, ENTER
<b>4 Select the [USB] option:</b>	< >
<b>5 Displays corresponding menu list:</b> [MOVIE], [PHOTO] or [MUSIC] menu appears. Details for the menu are on pages 36-40.	ENTER

### Tip:

If you select the [Movie], [Photo] or [Music] option when the USB device is connected and a disc is inserted simultaneously, the menu for selecting a media will appear. Select a media then press ENTER.

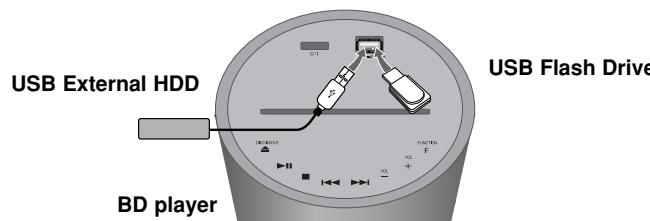
For example:



## Inserting/Removing the USB device

**Inserting the USB device** – Insert straight-in until it fits into place.

**Removing the USB device** – Withdraw the USB device or cable carefully.



### Notes:

- This player supports USB flash memory/external HDD formatted in FAT16, FAT32 and NTFS when accessing files (music, photo, movie). However, for BD-LIVE, only FAT16 and FAT32 formats are supported. Use the USB flash memory/external HDD formatted in either FAT16 or FAT32 when using BD-LIVE.
- The USB device can be used for the local storage for enjoying BD-Live discs with Internet.
- This unit can support up to 4 partitions of the USB device.
- Do not extract the USB device during operation (play, etc.).
- A USB device which requires additional program installation when you have connected it to a computer is not supported.
- USB device: USB device that support USB1.1 and USB2.0.
- Movie files, Music files and photo files can be played. For details of operations on each file, refer to relevant pages.
- Regular back up is recommended to prevent data loss.
- If you use a USB extension cable or USB HUB, the USB device may not be recognized.
- Some USB devices may not work with this unit.
- Digital camera and mobile phone are not supported.
- USB Port of the unit cannot be connected to PC. The unit cannot be used as a storage device.

## Using the Home Menu

### ON REMOTE

1 Displays the [Home Menu]:	HOME
2 Select an option:	< >
3 Displays the selected option menu:	ENTER
4 Exit the [Home Menu]:	HOME



[Movie] – Start video media's playback or displays the [MOVIE] menu.

[Photo] – Displays [PHOTO] menu. (page 39-40.)

[Music] – Displays [MUSIC] menu. (page 38.)

[My Media] – Display and play the shared contents from the selected server. (pages 41-44)

[Setup] – Displays the [Setup] menu. (page 24-29.)

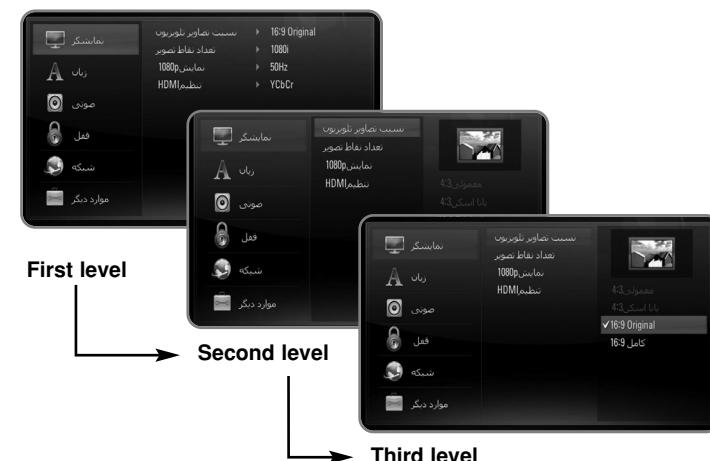
**Note:**

The unit will be in stop mode then the [Home Menu] will appear if you press HOME during playback.

## Adjust the Setup settings

### ON REMOTE

1 Displays the [Home Menu]:	HOME
2 Select the [Setup] option:	< >, ENTER
3 Select a desired option on the first level:	▲ ▼
4 Move to second level:	>
5 Select a desired option on the second level:	▲ ▼
6 Move to third level:	>
7 Adjust or confirm the setting: Some items require additional steps.	▲ ▼, ENTER
8 Go back to the previous level:	<
9 Exit the [Setup] menu:	HOME or RETURN



## [DISPLAY] Menu



### TV Aspect Ratio

**[4:3 Letter Box]** – Select when a standard 4:3 TV is connected.

Displays theatrical images with masking bars above and below the picture.

**[4:3 Pan Scan]** – Select when a standard 4:3 TV is connected.

Displays pictures cropped to fill your TV screen. Both sides of the picture are cut off.

**[16:9 Original]** – Select when a 16:9 wide TV is connected. The 4:3 picture is displayed with an original 4:3 aspect ratio, with black bars appearing at the left and right sides.

**[16:9 Full]** – Select when a 16:9 wide TV is connected. The 4:3 picture is adjusted horizontally (in a linear proportion) to fill the entire screen.

### Note:

You cannot select [4:3 Letter Box] and [4:3 Pan Scan] option when the resolution is set to higher than 720p.

### Resolution

Sets the output resolution of the HDMI video signal.

Refer to “Resolution Setting” on page 15-16 for details about the resolution.

**[Auto]** – If the HDMI OUT jack is connected for TVs providing display information (EDID), automatically selects the resolution best suited to the connected TV.

**[1080p]** – Outputs 1080 lines of progressive video (only for HDMI connection).

**[1080i]** – Outputs 1080 lines of interlaced video.

**[720p]** – Outputs 720 lines of progressive video.

**[576p]** – Outputs 576 lines progressive video.

**[576i]** – Outputs 576 lines of interlaced video.

### 1080p Display Mode

When the resolution is set to 1080p, select [24Hz] for smooth presentation of film material (1080/24p) with a HDMI-equipped display compatible with 1080/24p input.

### Notes:

- When you select [24Hz], you may experience some picture disturbance when the video switches video and film material. In this case, select [50Hz].
- Even when [1080p Display Mode] is set to [24Hz], if your TV is not compatible with 1080/24p, the actual frame frequency of the video output will be 50Hz or 60Hz to match the video source format.

### HDMI Color Setting

Select the type of output from the HDMI OUT jack. For this setting, please refer to the manuals of your display device.

**[YCbCr]** – Select when connecting to a HDMI display device.

**[RGB]** – Select when connecting to a DVI display device.

## [LANGUAGE] Menu



### Display Menu

Select a language for the [Setup] menu and on-screen display.

### Disc Menu / Disc Audio / Disc Subtitle

Select the language you prefer for the audio track (disc audio), subtitles, and the disc menu.

**[Original]** – Refers to the original language in which the disc was recorded.

**[Other]** – Press ENTER to select another language. Use number buttons then ENTER to enter the corresponding 4-digit number according to the language code list on page 48.

**[Off] (for Disc Subtitle)** – Turn off Subtitle.

### Note:

Depending on the disc, your language setting may not work for some discs.

## [AUDIO] Menu



### Speaker Setup

To obtain the best possible sound, use the Speaker Setup display to specify the volume of the speakers you have connected and their distance from your listening position. Use the Test to adjust the volume of the speakers to the same level.

**[Speaker]** – Select a speaker that you want to adjust.

**[Volume]** – Adjust the output level of each speaker. Be sure to set "Test" to "All" for easy adjustment.

**[Distance]** – Adjust the distance between each speaker and the listening position.

**[Test]** – The speakers will emit a test tone.

All: The test tone is emitted from each speaker in sequence.

To save your settings, press ENTER and select [Yes] by pressing < / >.

## HD AV Sync

Sometimes Digital TV encounters a delay between picture and sound. If this happens you can compensate by setting a delay on the sound so that it effectively 'waits' for the picture to arrive: this is called HD AV Sync.

Use  $\wedge/\vee$  to scroll up and down through the delay amount, which you can set at anything between 0 and 300m sec.

The delay will vary depending on which digital TV channel you are on. If you change channel you may need to readjust the HD AV Sync.

## HDMI Audio

You can set TV speaker output for the audio signal from the HDMI OUT jack.

**[Off]** – Audio signals are output to the system speakers only.

**[On]** – Audio signals are output from the TV's speaker and the system's front left and right speaker and subwoofer.

### Note:

When [HDMI Audio] is set to [On], the sound mode is switched to [BYPASS] automatically.

## [LOCK] Menu (Parental Control)

The [LOCK] settings affect only BD and DVD playback.



To access any features in [LOCK] settings, you must enter the 4-digit security code you have created.

If you have not entered a password yet, you are prompted to do so. Enter a 4-digit password and press ENTER. Enter it again and press ENTER to verify.

### Password

You can create, change or delete the password.

**[New]** – Enter a 4-digit password and press ENTER. Enter it again and press ENTER to create a new password.

**[Change]** – Enter the current password and press ENTER.

Enter a 4-digit password and press ENTER. Enter it again and press ENTER to create a new password.

**[Delete]** – Enter the 4-digit password and press ENTER to delete the password.

### Tip:

If you make a mistake before pressing ENTER, press CLEAR. Then input the correct password.

### If you forget your password

If you forget your password, you can clear it using the following steps:

- 1 Remove any disc that might be in the player.
- 2 Select [Password] option in the [Setup] menu.
- 3 Use Number buttons to enter "210499". The password is cleared.

## DVD Rating

Blocks playback of rated disc based on their content. (Not all discs are rated.)

**[Rating 1-8]** – Rating one (1) has the most restrictions and rating eight (8) is the least restrictive.

**[Unlock]** – If you select unlock, parental control is not active and the disc plays in full.

## BD Rating

Set an age limit of BD-ROM play. Use number buttons to input an age limit for BD-ROM viewing.

**[255]** – All BD-ROM can be played.

**[0-254]** – Prohibits play of BD-ROM with corresponding ratings recorded on them.

### Note:

The [BD rating] will be applied only for the BD disc that containing the Advanced Rating Control.

## Area Code

Enter the code of the area whose standards were used to rate the DVD video disc, based on the list on page 48.

## [NETWORK] Menu

The [NETWORK] settings are needed to use the BD Live and My Media features.



### Connection Setting

If you have connected this player to a local area network (LAN), the player needs to be set up for network communication. (See “Connecting to your Home Network” on pages 17-21.)

### Connection Status

If you want to check the network status on this player, select the [Connection Status] options and press > or ENTER to check whether a connection to the network and the internet have been established.

### BD-LIVE connection

You can restrict Internet access when BD-Live functions are used.

**[Permitted]** – Internet access is permitted for all BD-Live contents.

**[Partially permitted]** – Internet access is permitted only for BD-Live contents which have content owner certificates. Internet access and AACCS Online functions are prohibited for all BD-Live contents without a certificate.

**[Prohibited]** – Internet access is prohibited for all BD-Live contents.

## [OTHERS] Menu



### Skin

Changes the background of the initial screen.

### Initialize

You can reset the player to its original factory settings, initialize the BD storage or deactivate the player.

**[Factory Set]** – If you need to, you can reset the player to all its factory settings. Some options cannot be reset. (Rating, Password and Area Code, etc.)

**[BD Storage Clear]** – Initializes the BD contents from the connected USB device.

### DivX VOD

**ABOUT DIVX VIDEO:** DivX® is a digital video format created by DivX, Inc. This is an official DivX Certified device that plays DivX video.

Visit [www.divx.com](http://www.divx.com) for more information and software tools to convert your files into DivX videos.

**ABOUT DIVX VIDEO-ON-DEMAND:** This DivX® Certified device must be registered in order to play DivX Video-on-Demand (VOD) content. To generate the registration code, locate the [DivX VOD] section in the [Setup] menu. Go to [vod.divx.com](http://vod.divx.com) with this code to complete the registration process and learn more about DivX VOD.

**[DivX Reg. Code]** – Displays the registration code of your player.

**[Deactivate]** – Deactivate your player and display the deactivation code.

### Note:

All the downloaded videos from DivX® VOD can only be played back on this unit.

### Disclaimer Notice

Press ENTER or > to view the notice of Network Service Disclaimer on page 52.

## Play a disc

	ON REMOTE
1 Raise the disc tray.	OPEN/CLOSE (▲)
2 Insert a disc: Load a disc with the label facing you.	-
3 Lower the disc tray:	OPEN/CLOSE (▲)
4 Adjust the disc menu settings: A disc menu may not appear on the screen depending on the disc.	▲ V < >, ENTER
5 Starts playback:	▶
6 Stops playback:	■

### Notes:

- When you turn on the player or replace a disc, the player returns to the initial default setting. Depending on the disc, a specific type of audio that the disc has is output.
- Depending on the pre-recorded contents of the BD-ROM, some functions may not be available or may be operated differently than other media.

### If a disc menu screen is displayed

**BD DVD AVCHD MOVIE**

The menu screen may be displayed first after loading a disc which contains a menu.

Use ▲/V/</> buttons to select the title/chapter you want to view, then press ENTER to start playback.

## Resume playback **ALL**

During playback, press ■ to stop playback.

The unit records the stopped point, depending on the disc. "■■" appears on the screen briefly. Press ▶ to resume playback (from the scene point). If you press ■ again or unload the disc ("■" appears on the screen.), the unit will clear the stopped point. (■■ = **Resume Stop**,

■ = **Complete Stop**)

### Notes:

- The resume point may be cleared when a button is pressed (for example; POWER, OPEN/CLOSE, etc).
- On BD-Video discs including BD-J, the resume play function does not work.
- On BD-ROM interactive title, the unit will be in Complete Stop mode if you press ■ once during playback.

## Skip to the next/previous chapter/track/file **ALL**

During playback, press ▶◀ or ▶▶ to go to the next chapter/track/file or to return to the beginning of the current chapter/track/file.

Press ▶◀ twice briefly to step back to the previous chapter/track/file.

### Note:

When you are playing a content in the [My Media] menu, there may be many types of contents in the current folder together. In this case, press ▶◀ or ▶▶ to go to the previous or next content with same type.

## Fast forward or fast reverse **ALL**

Press SCAN (◀◀ or ▶▶) to play fast forward or fast reverse during playback.

You can change the various playback speeds by pressing SCAN (◀◀ or ▶▶) repeatedly. Press ▶ to continue play at normal speed.

### Notes:

- This function may not work on some disc or titles.
- Some music files on the [My media] menu may not operate this function.

## Pause a playback **ALL**

During playback, press **II** to pause playback. Press **▶** to continue playback.

**Tip:** During Audio CD or MP3/WMA playback, press **II** once again to resume playback.

## Frame-by-Frame playback

**BD DVD AVCHD MOVIE MOVIE-N**

Press **II** repeatedly to play Frame-by-Frame playback.

## Slow down the playing speed

**BD DVD AVCHD MOVIE MOVIE-N**

While the playback is paused, press SCAN **▶▶** repeatedly to play in slow motion (4 steps, forward only).

## Playing repeatedly

**BD DVD AVCHD ACD MUSIC MUSIC-N**

During playback, press REPEAT repeatedly to select a desired repeat mode.

## BDs/DVDs

- ⌚ A-B: Selected portion will be repeated continually.
- ⌚ Chapter - The current chapter will be played back repeatedly.
- ⌚ Title - The current title will be played back repeatedly.

To return to normal playback, press REPEAT repeatedly to select [Off].

## Audio CDs/Music files

- ⌚ Track – The current track or file will be played back repeatedly.
- ⌚ All – All the tracks or files will be played back repeatedly.
- ⌚ – The tracks or files will be played back in random order.
- ⌚⌚ All – All the tracks or files will be played back repeatedly in random order.
- ⌚⌚⌚ A-B – Selected portion will be repeated continually. (Audio CD only)

To return to normal playback, press CLEAR.

### Notes:

- If you press **▶▶II** once during Repeat Chapter/ Track playback, the repeat playback cancels.
- This function may not work on some disc or title.

## Repeating a specific portion

**BD DVD AVCHD ACD**

This player can repeat a portion you have selected.

1. During playback, press REPEAT to select [A-] at the beginning of the portion you wish to repeat.
2. Press ENTER at the end of the portion.  
Your selected portion will be repeated continually.
3. To return to normal playback, press REPEAT repeatedly to select [Off].

### Notes:

- You cannot select a portion less than 3 seconds.
- This function may not work on some disc or title.

## Selecting a subtitle language

**BD DVD AVCHD MOVIE MOVIE-N**

During playback, press SUBTITLE repeatedly to select a desired subtitle language.

**OR**

During playback, press DISPLAY to display the playback menu. Use  $\wedge \vee$  to select the [Subtitle] option then use  $< >$  to select desired subtitle language.

**Note:**

Some discs allow you to change subtitle selections only via the disc menu. If this is the case, press TITLE/POPUP or DISC MENU button and choose the appropriate subtitle from the selections on the disc menu.

## Hearing a different audio

**BD DVD AVCHD MOVIE MOVIE-N**

During playback, press DISPLAY to display the playback menu.

Use  $\wedge \vee$  to select the [Audio] option then use  $< >$  to select desired audio language or audio track.

**Notes:**

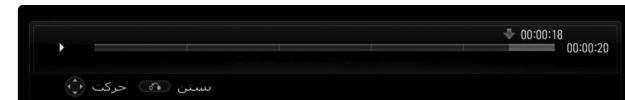
- Some discs allow you to change audio selections only via the disc menu. If this is the case, press TITLE/POPUP or DISC MENU button and choose the appropriate audio from the selections on the disc menu.
- Immediately after you have switched sound, there may be a temporary discrepancy between the display and actual sound.
- On BD-ROM disc, the multi audio format (5.1CH or 7.1CH) is displayed with [MultiCH] in the on-screen display.

## Using the search menu

**BD DVD AVCHD MOVIE MOVIE-N**

During playback, press SEARCH to display the search menu.

Press  $< >$  to skip the playback 15 seconds forward or backward.



**Tip:**

You can select a point that you want to skip by pressing and holding  $< >$  button.

**Notes:**

- This function may not work on some disc or titles.
- This function may not work on some [My media] content depending on the file type and ability of the DLNA server.

## Using coloured (A, B, C, D) Buttons **BD**

These buttons are available only during BD-J contents playback. Use the appropriate buttons as indicated by the display. Depending on the disc contents, the functions of each button may differ.

## Viewing the Title menu or Popup menu

**BD DVD**

Press TITLE/POPUP to display the title menu or popup menu.

If the current DVD or BD-ROM disc has a menu, the Title menu or Popup menu appears on the screen. Depending on the disc, the menu may not be available.

## Last Scene Memory **BD** **DVD**

This unit memorizes the last scene from the last disc that is viewed. The last scene remains in memory even if you remove the disc from the unit or switch off the unit. If you load a disc that has the scene memorized, the scene is automatically recalled.

### Notes:

- Settings are stored in memory for use any time.
- This unit does not memorize settings of a disc if you switch off the unit before commencing to play it.
- Last Scene Memory function for a previous disc is erased once a different disc is played.
- This function may not work depending on the disc.

## Screen Saver

The screen saver appears when you leave the player in Stop mode for about five minutes.

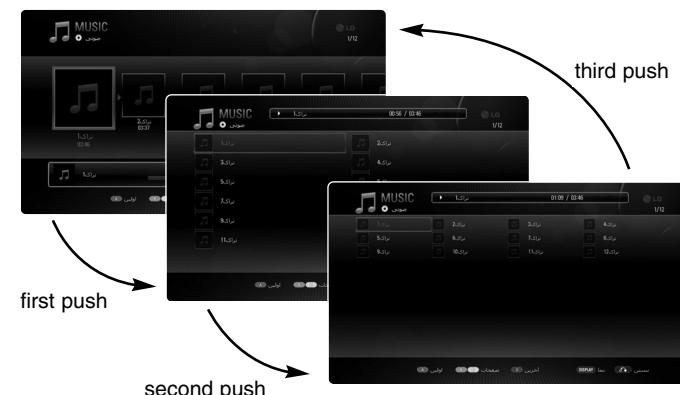
### Note:

Depending on the unit status, the screen saver may not appear.

## Changing content list view

### **MOVIE** **MOVIE-N** **ACD** **MUSIC** **MUSIC-N**

On the [Movie], [Music], [Photo] and [My Media] menu, you can change the content list view by pressing **DISPLAY** repeatedly.



### Note:

The equalizer will disappear when you change the music contents list view.

## Displaying disc information

### ON REMOTE

1 Play the disc loaded on the unit:	▶
2 Displays the playback menu:	DISPLAY
3 Select an item:	▲ ▼
4 Adjust the playback menu settings:	< >
5 Exit the disc playback menu:	DISPLAY



- 1 Title – Current title number/total number of titles.
- 2 Chapter – Current chapter number/total number of chapters.
- 3 Time – Elapsed playing time.
- 4 Audio – Selected audio language or channel.
- 5 Subtitle – Selected subtitle.
- 6 Angle – Selected angle/total number of angles.

#### Notes:

- If no button is pressed for a few seconds, the on-screen display disappears.
- A title number cannot be selected on some discs.
- An item may not be available on some discs or titles.
- If BD interactive title is playing back, some setting information is displayed on the screen but prohibited to be changed.

## Moving to another title/chapter

### BD DVD AVCHD MOVIE

When a disc has more than one title/chapter, you can move to another title/chapter/track.

Press DISPLAY during playback then use ▲/▼ to select the [Title/Chapter] icon. Then, press the appropriate numbered button (0-9) or </> to select a title/chapter number.

## Playing from selected time

### BD DVD AVCHD MOVIE MOVIE-N

Press DISPLAY during playback. The time search box shows the elapsed playing time. Select the [Time] option and then input the required start time in hours, minutes, and seconds from left to right. For example, to find a scene at 2 hours, 10 minutes, and 20 seconds, enter “21020” and press ENTER. If you enter the wrong numbers, press CLEAR and enter the correct numbers.

#### Notes:

- This function may not work on some disc or titles.
- This function may not work on some [My media] content depending on the file type and ability of the DLNA server.

## Watching from a different angle

### DVD

If the disc contains scenes recorded at different camera angles, you can change to a different camera angle during playback.

During playback, press DISPLAY to display the playback menu. Use ▲/▼ to select the [Angle] option, then use </> to select desired angle.

## Enjoying BD-LIVE™

### ON REMOTE

1 Raise the disc tray.	OPEN/CLOSE (▲)
2 Inserts a BD-ROM disc with BD-LIVE™ features:	–
3 Lower the disc tray.	OPEN/CLOSE (▲)
4 Check the network connection and settings: BD-Live features need the internet connection.	–
5 Connect a USB device: A USB device is required to use this function.	–
6 Select a BD-LIVE™ features on the disc menu:	▲ V < >, ENTER

This unit allows you to enjoy functions such as picture-in-picture, secondary audio and Virtual packages, etc., with BD-Video supporting BONUSVIEW (BD-ROM version 2 Profile 1 version 1.1/ Final Standard Profile). In addition to the BONUSVIEW function, BD-Video supporting BD-Live (BD-ROM version 2 Profile 2) that has a network extension function allows you to enjoy more functions such as online games by connecting this unit to the Internet.

## Enjoying BD-Live discs with Internet

This unit supports BD-Live, a new BD-Video function that allows you to use the following interactive functions when connected to the Internet. (The usable functions and the operating method may vary with each disc. For details, refer to the instructions for the disc.)

- Additional contents such as movie's trailer, subtitles and BD-J, etc. can be downloaded to USB device to play them.
- Special video data, etc. may be played back while they are being downloaded to a USB device.

### Preparations:

- The unit must be connected to the Internet and set up to use the BD-Live functions (see page 17-21 and 28).
- A USB device is required to use this function. Connect a USB device (see page 23).
- The free space in the USB device must be more than 1GB.

### Caution:

Do not extract the connected USB device while content is being downloaded or a Blu-ray disc is still in the disc tray. Doing so may damage the connected USB device and BD-Live features may not operate properly with the damaged USB device anymore.

If the connected USB device seems damaged from such an action, you can format the connected USB device from the PC and reuse it with this player.

### Notes:

- Some BD-Live contents may be restrictively accessed in some territories by contents provider's own decision.
- It may take up to several minutes to load and start enjoying BD-Live contents.
- Depending on a disc, the BD-Live function may not be operated if [BD-LIVE connection] option is set to [Partially permitted]. (See page 28.)
- The connection to the Internet may take time or the Internet may not be connected depending on the connection environment. It is required that you use a broadband connection.
- Do not remove the USB device during operation. The USB device may be damaged. Stop playback and turn off the menu beforehand.

### Tip:

Special video data, etc. may be played back while they are being downloaded to a USB device using one function of BD-Live. The playback may be paused depending on the communication environment. Some functions may be disabled to prevent skipping to sections that have not been downloaded, etc.

## AACS Online

When discs supporting BD-Live are played back, the player or disc IDs may be sent to the content provider via the Internet.

Services and functions to be provided differ depending on the disc.

- You can be introduced to other similar movies if you record your viewing history on the server by using these IDs.
- Game score histories can be saved.

## Playing secondary video (picture-in-picture)

Secondary video can be played from a disc compatible with the picture-in-picture function.

For the playback method, refer to the instructions for the disc.

To turn on/off secondary video, press PIP. Secondary video is played.

Press the button to turn it ON or OFF.

### Notes:

- Discs may not always be played back according to the settings on this unit, as certain playback formats are prioritized on certain discs.
- Only the primary video is played during search/slow-motion or frame-by-frame.
- This function may not work depending on the disc.

## Playing a movie

The player can play DivX files on the disc/USB device and video contents recorded on a DVD-RW(VR mode) discs. Before playing movie files, read "Movie file requirement (USB/DISC)" on page 37.

### ON REMOTE

1 Insert a disc/USB device containing movie contents.	—
2 Displays the [Home Menu]:	HOME
3 Select the [Movie] option:	< >, ENTER
4 Selects a movie from the [MOVIE] menu:	▲ ▼
5 Plays the selected movie:	▶
6 Stops the playback:	■

### Note:

- When the USB device is connected and a disc is inserted simultaneously, the menu for selecting a media will appear. Select a media then press ENTER.
- You can use various playback functions. Refer to pages 30-34.
- On the [MOVIE] menu, use red or blue button to move to the first or the last file or track and green or yellow button to move to the previous or next page.
- Unfinalized DVD VR format discs may not be played in this player.
- Some DVD-VR disc are made with CPRM data by DVD RECORDER. This unit cannot support these kinds of discs.
- Some DivX files may not play, depending on the DivX format or the recording format.
- Press DISC MENU to move to the list menu.

### What is CPRM?

CPRM is a copy protection system (with scramble system) only allowing the recording of 'copy once' broadcast programs. CPRM stands for Content Protection for Recordable Media.

## Notice for displaying the DivX subtitle

If the subtitle does not display properly, change the language code as described below.

- 1 Press and hold SUBTITLE for 3 seconds during playback.  
The language code will appear.
- 2 Press SUBTITLE repeatedly to select another language code until the subtitle is displayed properly and then press ENTER.

## Movie file requirement (USB/DISC)

Movie file compatibility with this player is limited as follows:

**Available resolution size:** 1920 x 1080 (W x H) pixels

**File extensions:** ".avi", ".divx", ".mpg", ".mpeg", ".mp4", ".mkv"

**Playable subtitle:** SubRip (.srt / .txt), SAMI (.smi),

SubStation Alpha (.ssa/.txt), MicroDVD (.sub/.txt), VobSub (.sub)

SubViewer 1.0 (.sub), SubViewer 2.0 (.sub/.txt), TMPlayer (.txt),

DVD Subtitle System (.txt)

**Playable Codec format:** "DIVX3.xx", "DIVX4.xx", "DIVX5.xx", "XVID", "DIVX6.xx" (Standard playback only), H.264/MPEG-4 AVC, DIVX-HD, MPEG1 SS, MPEG2 PS, MPEG2 TS

**Playable Audio format:** "Dolby Digital", "DTS", "MP3", "WMA", "AAC", "AC3"

**Sampling frequency:** between 32-48 kHz (WMA),  
between 16-48 kHz (MP3)

**Bit rate:** between 20-320 kbps (WMA), between 32-320 kbps (MP3)

**CD-R/RW, DVD±R/RW, BD-R/RE Format:**

ISO 9660+JOLIET, UDF and UDF Bridge format

**Maximum Files/Folder:**

Less than 2000 (total number of files and folders)

- The movie file name and subtitle are limited to 180 characters.
- Not all the WMA and AAC Audio format is compatible with this unit.
- HD movie files contained on the CD or USB 1.0/1.1 may not play properly. BD, DVD or USB 2.0 are recommended to play back HD movie files.
- This player support H.264/MPEG-4 AVC profile Main, High at Level 4.1. For a file with higher level, the warning message will be appeared on the screen.
- This player does not support the file that are recorded with GMC<sup>\*1</sup> or Qpel<sup>\*2</sup>. Those are video encoding techniques in MPEG4 standard, like DivX or XVID have.

<sup>\*1</sup> GMC – Global Motion Compensation

<sup>\*2</sup> Qpel – Quarter pixel

## Listening to a music

The player can play Audio CDs and MP3/WMA files. Before playing MP3/WMA files, read "MP3/WMA audio file requirement (USB/DISC)".

### ON REMOTE

<b>1 Inserts an Audio CD or a disc/USB Flash Drive containing MP3/WMA files.</b>	-
<b>2 Displays the [Home Menu]:</b>	<b>HOME</b>
<b>3 Select a [Music] option:</b>	<b>&lt; &gt;, ENTER</b>
<b>4 Selects a music from the [MUSIC] menu:</b>	<b>^ V</b>
<b>5 Plays the selected music:</b>	<b>▶</b>
<b>6 Stops the playback:</b>	<b>■</b>



Example) MP3 files

### Notes:

- When the USB device is connected and a disc is inserted simultaneously, the menu for selecting a media will appear. Select a media then press ENTER.
- You can use various playback functions. Refer to pages 30-34.
- The file name displayed in the [My Media] menu may differ from the file name on the media server.
- Playback quality on the [My Media] menu is affected by the server's ability and condition.

### Tips:

- To go directly to any track or file and play, enter the track/file number using the numbered buttons (0-9).
- The playback may start automatically if the Audio CD inserted.
- Use **^/V/</>** to select a folder then press **ENTER** and you can view the files in the folder. If you want to move to the upper or lower directory, use **^/V** to move to the desired directory.
- On the [MUSIC] menu, use red or blue button to move to the first or the last file or track and green or yellow button to move to the previous or next page.
- The equalizer indicator is not coupled with the music in play back.
- If there is impossible code to express in the file name, it may be displayed as illegible.

## MP3/WMA audio file requirement (USB/DISC)

**File extensions:** ".mp3", ".wma"

**Sampling frequency:** between 8 - 48 kHz (WMA),  
between 11 - 48 kHz (MP3)

**Bit rate:** between 8 - 320 kbps (WMA, MP3)

**CD-R/RW, DVD±R/RW, BD-R/RE Format:**  
ISO 9660+JOLIET, UDF and UDF Bridge format

**Maximum Files/Disc:**

Less than 2000 (total number of files and folders)

### Notes on MP3/WMA file

- Depending on the size and number of the MP3/WMA files, it may take several minutes to read the contents of the media.
- This unit cannot support the ID3 Tag embedded in the MP3 file.
- The total playback time indicated on the screen may not correct for VBR files.

## Viewing a photo

This unit can play a photo files. Before playing photo files, read "Photo file requirement (USB/DISC)" on page 40.

### ON REMOTE

1 Inserts a disc/USB device containing photo files.	-
2 Displays the [Home Menu]:	HOME
3 Selects a [Photo] option:	< >, ENTER
4 Selects a photo from the [PHOTO] menu:	^ V < >
5 Displays the selected photo in full screen:	ENTER
6 Displays the next or previous photo:	◀◀ / ▶▶
7 Return to the [PHOTO] menu screen:	STOP



### Notes:

- When the USB device is connected and a disc is inserted simultaneously, the menu for selecting a media will appear. Select a media then press ENTER.
- You can start the slide show by pressing ▶ while photo file is selected in the [PHOTO] or [My Media] menu.
- On the [PHOTO] menu, use red or blue button to move to the first or the last file and green or yellow button to move to the previous or next page.
- You can change the content list view by pressing DISPLAY repeatedly.

## Options during viewing a photo file in full screen

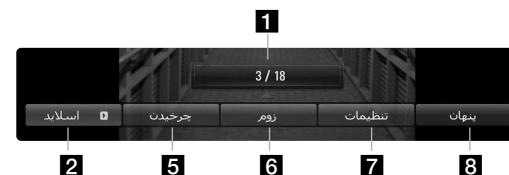
You can use various options during viewing a picture in full screen.

Use  $\wedge \vee < >$  to select an option and use the options as described below. Available options in the [PHOTO] menu and [My Media] menu are different as shown below.

### Options of [PHOTO] menu



### Options of [My Media] menu



- Use  $< >$  to advance to the previous or next file.
- Press ENTER to start or pause the slide show.
- Press ENTER to play or pause the background music. This option is available after the background music is selected using [Music Select] option. This option is not available on [My Media] menu.
- Selects the background music. This option is not available on [My Media] menu.
  - Press ENTER and the menu will appear.
  - Use  $\wedge \vee < >$  to select a media or folder where there are music file(s).
  - Press ENTER to confirm your selection.
- Press ENTER to rotate the picture clockwise. This option is not available during slide show.

- 6 Use green or yellow buttons to zoom in or out of the picture. You can move through the zoomed picture using  $\wedge$   $\vee$   $<$   $>$  buttons. Press RETURN to exit the [Zoom] menu and return to the normal picture size.
- 7 Use  $\wedge$   $\vee$  to select an option between [Effect] or [Delay]. Use  $<$   $>$  to adjust and press ENTER to set the selected option.
 

[Effect] – You can apply various effects during a photo slide show.

  - Off : Slide Show without any effect.
  - Random : Slide show effects are applied randomly.
  - Slide : Reveals a photo in a sliding motion from various directions.
  - Door : Photo will be appear like door opening.
  - Lattice : Photo will be appear from tiled pieces to full screen image

[Delay] – You can set the photo delaying time while Slide Show.
- 8 Press ENTER to exit the option menu.  
To access the menu again, press ENTER.

**Tips:**

- For the files that are contained in a disc or USB device, you can enter the file number using the numbered buttons (0-9) to go directly to a specific file.
- You can start the slide show without option menu by pressing  $\blacktriangleright$  during viewing a photo file in full screen.
- Use  $\wedge$   $\vee$   $<$   $>$  to select a folder then press ENTER and you can view the files in the folder. If you want to move to the upper or lower directory, use  $\wedge$   $\vee$  to move to the desired directory.
- If there is a code that is impossible to express in the file name, it may be displayed as illegible.
- Depending on the DLNA server, the file name displayed on the screen may differ from the original file name.

## Listening to music during slide show in [My Media] menu

You can view photos as a slide show while listening to music content on [My Media] menu.

1. Press HOME and select [My Media] in the [Home Menu].
2. Select a server from the list and press ENTER to display the shared folders from the server.
3. Select a music file from the menu and press  $\blacktriangleright$  to play the music.
4. Use  $\wedge$   $\vee$   $<$   $>$  to select a photo file from the menu and press ENTER to display in full screen.
5. Select [Slide Show] option and press ENTER to start slide show.

## Photo file requirement (USB/DISC)

**File extensions:** “.jpg”, “.jpeg”, “.png”

**Recommended size:**

Less than 4,000 x 3,000 x 24 bit/pixel

Less than 3,000 x 3,000 x 32 bit/pixel

**CD-R/RW, DVD±R/RW, BD-R/RE Format:**

ISO 9660+JOLIET, UDF and UDF Bridge format

**Maximum Files/Folder:** Less than 2000 (total number of files and folders)

### Notes on Photo file

- Progressive and lossless compression photo image files are not supported.
- Depending on the size and number of the photo files, it may take several minutes to read the contents of the media.

## Using My media features

This unit can browse and play content on DLNA Certified media servers connected on your home network.

### ON REMOTE

<b>1 Check the network connection and settings:</b> See pages 17-21 and 28.	HOME, $\wedge$ $\vee$ $<$ $>$ , ENTER
<b>2 Displays the [Home Menu]:</b>	HOME
<b>3 Selects a [My Media] option:</b>	$<$ $>$ , ENTER
<b>4 Selects a server from the server list:</b>	$\wedge$ $\vee$ , ENTER
<b>5 Selects a content from the list:</b>	$\wedge$ $\vee$ $<$ $>$
<b>6 Plays the selected content:</b>	▶
<b>7 Stops the playback:</b>	■
<b>8 Return to the server list menu:</b>	SEARCH

## About DLNA

This Player is a DLNA Certified digital media player that can display and play movie, photo and music content from your DLNA Certified network device and DLNA server.

The Digital Living Network Alliance (DLNA) is a cross-industry organization of consumer electronics, computing industry and mobile device companies. Digital Living provides consumers with easy sharing of digital media through a wired or wireless network in the home.

The DLNA certification logo makes it easy to find products that comply with the DLNA Interoperability Guidelines. This unit complies with DLNA Interoperability Guidelines v1.5.

When a PC running DLNA server software or other DLNA compatible device is connected to this player, some setting changes of software or other devices may be required. Please refer to the operating instructions for the software or device for more information.

## About Nero MediaHome 4 Essentials

Nero MediaHome 4 Essentials is a software for sharing movie, music and photo files stored on your computer to this player as a DLNA compatible digital media server.

### Notes:

- The Nero MediaHome 4 Essentials CD-ROM is designed for PCs and should not be inserted in this player or in any product other than a PC.
- The supplied Nero MediaHome 4 Essentials CD-ROM is a customized software edition only for sharing files and folders to this player.
- The supplied Nero MediaHome 4 Essentials software does not support the following functions: Transcoding, Remote UI, TV control, Internet services and Apple iTunes
- This manual explains operations with the English version of Nero MediaHome 4 Essentials as examples. Follow the explanation referring to the actual operations of your language version.

## Installing Nero MediaHome 4 Essentials

Nero MediaHome 4 Essentials is a software for sharing movie, music and photo files stored on your computer with this player.

Before you install Nero MediaHome 4 Essentials, check the system requirement shown below.

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

Start up your computer, and insert the Nero MediaHome 4 Essentials CD-ROM into your computer's CD-ROM drive. An installation wizard will walk you through the quick and uncomplicated installation process. To install Nero MediaHome 4 Essentials, proceed as follows:

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

## Sharing files and folders

On your computer, you must share the folder containing movie, music and/or photo content to play them using [My Media] features.

This part explains the procedure for selecting the shared folders on your computer.

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

### Notes:

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

## Playing back shared contents

This unit can browse and play content on DLNA Certified media servers connected on your home network.

1. Start a DLNA certified media server that connected on your home network.
2. Press HOME. The [Home Menu] appears on the screen.
3. Use < > to select [My Media] and press ENTER. The server list appears on the screen.



4. Use  $\wedge$   $\vee$  to select a server from the list and press ENTER to display the shared folders from the server.

### Notes:

- Depending on the media server, this player may need to get the permission from the server.
- If you want to re-scan available media server, press the blue (D) coloured button.



5. Use  $\wedge$   $\vee$   $<$   $>$  to navigate the shared contents list and select the content you want to playback. On the [My Media] menu, use the red or blue button to move to the first or the last file/folder and the green or yellow button to move to the previous or next page

6. Press ENTER or  $\blacktriangleright$  to playback the selected content.

**Note:** You can use various playback functions. Refer to pages 30-34.

7. Press  $\blacksquare$  to stop playback and go to the contents list menu.

## Notes on My Media features

- To play the file on the media server, the player and the media server must be connected to the same access point.
- Because the compatibility and available playback functions on the [My Media] menu are tested on the bundle DLNA server (Nero MediaHome 4 Essentials) environment, file requirements and playback functions on the [My Media] menu may differ depending on media servers.
- The file compatibility on page 44 are not always compatible. There may be some restrictions by the file features and media server's ability.
- If you press TITLE/POPUP while a movie file is selected, The file information is displayed on the screen. But, the information may not be correct compared to the actual file features.
- The thumbnail of the unplayable files can be displayed in the [My Media] menu, but those cannot be played on this player.
- If there is an unplayable music file in the [My Media] menu, the player skip the file and play the next file.
- The file information indicated on the screen may not be correct compared to the music and movie files in [My Media] menu.
- Playing a movie subtitle files are only available on DLNA media server created by the supplied Nero MediaHome 4 Essentials software on this player's package.
- The subtitle file name and movie file name have to be the same and located at the same folder.
- If subtitle files have been added after a directory has been indexed already, the user has to remove and re-add the folder to the list of shared media.
- The playback and operating quality of the [My Media] function may be affected by your home network condition.
- The files from removable media such as USB drive, DVD-drive etc. on your media server may not be shared properly.

## File compatibility

### Overall

**File extensions:** ".jpg", ".jpeg", ".png", ".avi", ".divx", ".mpg", ".mpeg", ".mkv", ".mp4", ".mp3", ".wma", ".pcm" (LPCM)

- Available file extensions differ depending on the server.

**Maximum Files/Folder:** Less than 2000 (total number of files and folders)

### Music Files

**Sampling frequency:** between 8 - 48 kHz (WMA),  
between 11 - 48 kHz (MP3), 44.1 and 48 kHz (LPCM)

**Bit rate:** between 8 - 320 kbps (WMA, MP3),  
768Kbps and 1.536Mbps (LPCM)

### Photo files

#### Recommended photo size:

Less than 4,000 x 3,000 x 24 bit/pixel

Less than 3,000 x 3,000 x 32 bit/pixel

### Movie files

**Available resolution size:** 1920 x1080 (W x H) pixels

**Playable subtitle :** SubRip (.srt / .txt), SAMI (.smi), SubStation Alpha (.ssa/.txt), MicroDVD (.sub/.txt), SubViewer 1.0 (.sub), SubViewer 2.0 (.sub/.txt), TMPlayer (.txt), DVD Subtitle System (.txt)

- The subtitle files are not displayed on the [My Media] menu.
- Viewing internal subtitle is not available for mkv/mp4 file playback.
- If there are more than 1 subtitle file within a folder, displaying priority is as follow:

Priority	High	←	→	Low	
File extension	“.smi”	“.sub”	“.srt”	“.txt”	“.ssa”

**Playable Codec format:** “DIVX3.xx”, “DIVX4.xx”, “DIVX5.xx”, “XVID”, “DIVX6.xx” (Standard playback only), DIVX-HD, MPEG1 SS, MPEG2 PS, MPEG2 TS

**Audio format:** “Dolby Digital”, “DTS”, “MP3”, “WMA”, “AAC”, “AC3”

**Sampling frequency:** between 32 - 48 kHz (WMA),  
between 16 - 48 kHz (MP3)

**Bit rate:** between 20 - 320 kbps (WMA), between 32 - 320 kbps (MP3)

- The movie file and subtitle names are limited to 128 characters.
- Not all WMA and AAC Audio formats are compatible with this unit.
- This player support H.264/MPEG-4 AVC profile Main, High at Level 4.1. For a file with higher level, the warning message will appear on the screen.
- This player does not support the file that are recorded with GMC\*<sup>1</sup> or Qpel\*<sup>2</sup>. Those are video encoding techniques in MPEG4 standard, like DivX or XVID have.

\*1 GMC – Global Motion Compensation

\*2 Qpel – Quarter pixel

## Listening to the radio

Be sure that FM antenna is connected.

### ON REMOTE

<b>1 Select FM:</b>	RADIO (INPUT)
<b>2 Select a radio station:</b>	TUNING -/+
<b>3 To save a radio station:</b> A preset number will show on the display. Up to 50 radio stations can be saved.	ENTER
<b>4 To confirm press:</b>	ENTER
<b>5 To select a saved station</b>	PRESET ▲ ▼

## Listening to the radio - more you can do

### Look for radio stations automatically

Press and hold TUNING -/+ for more than a second. The tuner will scan automatically and stop when it finds a radio station.

### Choose a preset number for a radio station

When storing a radio station, the preset number can be chosen. When this unit automatically shows a preset number, press PRESET ▲/▼ to change it. Press ENTER to save your chosen number.

### Delete all the saved stations

Press and hold ENTER for two seconds. ERASE ALL will flash up on the display. Press ENTER to erase all saved radio stations.

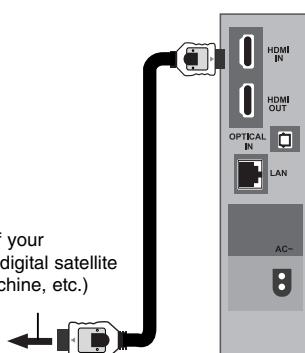
### Improve poor FM reception

Press MO/ST. This will change the tuner from stereo to mono and usually improve the reception.

## Using HDMI IN jack

You can enjoy the pictures and sound of your component with the HDMI OUT jack.

To the HDMI OUT jack of your component (set-top box, digital satellite receiver, video game machine, etc.)



### ON REMOTE

1 Connect the HDMI OUT jack of your component into the HDMI IN jack on the back of the wireless front right speaker.	-
2 Turn the power on:	⊕
3 Select the [HDMI IN] option:	RADIO (INPUT)
4 Turn down the volume of this unit:	VOL (+/-)
5 Turn your component on:	-
6 Adjust the volume of this unit:	VOL (+/-)

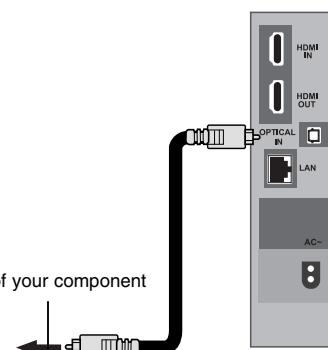
#### Note:

- You cannot change the video resolution at the HDMI IN mode. Change the video resolution of the connected component.
- You cannot operate SIMPLINK function at the HDMI IN mode.
- The setting of the sound mode is not available when Dolby Digital Plus, Dolby TrueHD and DTS-HD are played at HDMI IN mode.
- 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 DIGITAL AUDIO IN jacks

You can enjoy the sound of your component with the digital optical output jack from the speakers of the system.

To the digital optical output jack of your component



### ON REMOTE

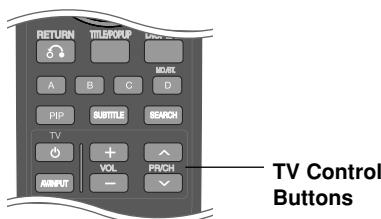
1 Connect the optical output jack of your component into the OPTICAL IN jack on the back of the wireless front right speaker.	-
2 Turn the power on:	⊕
3 Select the [OPTICAL] option:	RADIO (INPUT)
4 Turn down the volume:	VOL (+/-)
5 Turn your component on:	-
6 Adjust the volume:	VOL (+/-)

## Reference

### Controlling a TV with the Supplied Remote Control

You can control the volume, input source, and power state of your LG/GoldStar TV with the supplied Remote Control.

You can control your LG/GoldStar TV using the buttons below.



By pressing	You can
TV 	Turn the TV on or off.
AV/INPUT	Switch the TV's input source between the TV and other input sources.
PR/CH 	Scan up or down through memorized channels.
VOL 	Adjust the volume of the TV.

### Setting up the remote to control your TV

You can operate your LG/GoldStar TV with the supplied remote control.

While holding down TV  button, press PR/CH  or  . Release the TV  button to complete setting.

When you replace the batteries of the remote, you may have reset the remote control.

## Language Codes

Use this list to input your desired language for Disc Audio, Disc Subtitle and Disc Menu.

Language	Code	Language	Code	Language	Code	Language	Code	Language	Code	Language	Code
Afar	6565	Croatian	7282	Hausa	7265	Lingala	7678	Quechua	8185	Tajik	8471
Afrikaans	6570	Czech	6783	Hebrew	7387	Lithuanian	7684	Rhaeto-Romance	8277	Tamil	8465
Albanian	8381	Danish	6865	Hindi	7273	Macedonian	7775	Rumanian	8279	Telugu	8469
Ameharic	6577	Dutch	7876	Hungarian	7285	Malagasy	7771	Russian	8285	Thai	8472
Arabic	6582	English	6978	Icelandic	7383	Malay	7783	Samoan	8377	Tonga	8479
Armenian	7289	Esperanto	6979	Indonesian	7378	Malayalam	7776	Sanskrit	8365	Turkish	8482
Assamese	6583	Estonian	6984	Interlingua	7365	Maori	7773	Scots Gaelic	7168	Turkmen	8475
Aymara	6588	Faroese	7079	Irish	7165	Marathi	7782	Serbian	8382	Twi	8487
Azerbaijani	6590	Fiji	7074	Italian	7384	Moldavian	7779	Serbo-Croatian	8372	Ukrainian	8575
Bashkir	6665	Finnish	7073	Japanese	7465	Mongolian	7778	Shona	8378	Urdu	8582
Basque	6985	French	7082	Kannada	7578	Nauru	7865	Sindhi	8368	Uzbek	8590
Bengali; Bangla	6678	Frisian	7089	Kashmiri	7583	Nepali	7869	Singhalese	8373	Vietnamese	8673
Bhutani	6890	Galician	7176	Kazakh	7575	Norwegian	7879	Slovak	8375	Volapük	8679
Bihari	6672	Georgian	7565	Kirghiz	7589	Oriya	7982	Slovenian	8376	Welsh	6789
Breton	6682	German	6869	Korean	7579	Punjabi	8065	Spanish	6983	Wolof	8779
Bulgarian	6671	Greek	6976	Kurdish	7585	Pashto, Pushto	8083	Sudanese	8385	Xhosa	8872
Burmese	7789	Greenlandic	7576	Laothian	7679	Persian	7065	Swahili	8387	Yiddish	7473
Byelorussian	6669	Guarani	7178	Latin	7665	Polish	8076	Swedish	8386	Yoruba	8979
Chinese	9072	Gujarati	7185	Latvian, Lettish	7686	Portuguese	8084	Tagalog	8476	Zulu	9085

## Area Codes

Choose an area code from this list.

Area	Code	Area	Code	Area	Code	Area	Code	Area	Code	Area	Code
Afghanistan	AF	Costa Rica	CR	Greenland	GL	Maldives	MV	Paraguay	PY	Sri Lanka	LK
Argentina	AR	Croatia	HR	Hong Kong	HK	Mexico	MX	Philippines	PH	Sweden	SE
Australia	AU	Czech Republic	CZ	Hungary	HU	Monaco	MC	Poland	PL	Switzerland	CH
Austria	AT	Denmark	DK	India	IN	Mongolia	MN	Portugal	PT	Taiwan	TW
Belgium	BE	Ecuador	EC	Indonesia	ID	Morocco	MA	Romania	RO	Thailand	TH
Bhutan	BT	Egypt	EG	Israel	IL	Nepal	NP	Russian Federation	RU	Turkey	TR
Bolivia	BO	El Salvador	SV	Italy	IT	Netherlands	NL	Saudi Arabia	SA	Uganda	UG
Brazil	BR	Ethiopia	ET	Jamaica	JM	Netherlands Antilles	AN	Senegal	SN	Ukraine	UA
Cambodia	KH	Fiji	FJ	Japan	JP	New Zealand	NZ	Singapore	SG	United States	US
Canada	CA	Finland	FI	Kenya	KE	Nigeria	NG	Slovak Republic	SK	Uruguay	UY
Chile	CL	France	FR	Kuwait	KW	Norway	NO	Slovenia	SI	Uzbekistan	UZ
China	CN	Germany	DE	Libya	LY	Oman	OM	South Africa	ZA	Vietnam	VN
Colombia	CO	Great Britain	GB	Luxembourg	LU	Pakistan	PK	South Korea	KR	Zimbabwe	ZW
Congo	CG	Greece	GR	Malaysia	MY	Panama	PA	Spain	ES		

## Troubleshooting

Symptom	Possible Cause	Correction
No power.	<ul style="list-style-type: none"> <li>The power cord is disconnected.</li> </ul>	<ul style="list-style-type: none"> <li>Plug the power cord into the wall outlet securely.</li> </ul>
No picture.	<ul style="list-style-type: none"> <li>The TV is not set to receive DVD signal output.</li> </ul>	<ul style="list-style-type: none"> <li>Select the appropriate video input mode on the TV.</li> </ul>
	<ul style="list-style-type: none"> <li>The video cable is not connected securely.</li> </ul>	<ul style="list-style-type: none"> <li>Connect the video cable securely.</li> </ul>
	<ul style="list-style-type: none"> <li>The selected resolution is not capable with your TV.</li> </ul>	<ul style="list-style-type: none"> <li>Select another resolution using RESOLUTION button.</li> </ul>
No sound.	<ul style="list-style-type: none"> <li>The equipment connected with the audio cable is not set to receive disc signal output.</li> </ul>	<ul style="list-style-type: none"> <li>Select the correct input mode of the audio receiver so you can listen to the sound from the player.</li> </ul>
	<ul style="list-style-type: none"> <li>The power of the equipment connected with the audio cable is turned off.</li> </ul>	<ul style="list-style-type: none"> <li>Turn on the equipment connected with the audio cable.</li> </ul>
	<ul style="list-style-type: none"> <li>Check that the [MUTE] is displayed in the display window.</li> </ul>	<ul style="list-style-type: none"> <li>Press MUTE again.</li> </ul>
	<ul style="list-style-type: none"> <li>The player is in reverse play, fast forward, slow motion or pause mode.</li> </ul>	<ul style="list-style-type: none"> <li>Return to the normal playback.</li> </ul>
The player does not start playback.	<ul style="list-style-type: none"> <li>The disc is upside down.</li> </ul>	<ul style="list-style-type: none"> <li>Insert the disc with the playback side down.</li> </ul>
	<ul style="list-style-type: none"> <li>An unplayable disc is inserted.</li> </ul>	<ul style="list-style-type: none"> <li>Insert a playable disc. (Check the disc type and regional code.)</li> </ul>
	<ul style="list-style-type: none"> <li>The rating level is set.</li> </ul>	<ul style="list-style-type: none"> <li>Change the rating level.</li> </ul>
	<ul style="list-style-type: none"> <li>The disc was recorded on another unit and was not finalized.</li> </ul>	<ul style="list-style-type: none"> <li>Finalize the disc on that unit.</li> </ul>
The Remote Control does not work properly.	<ul style="list-style-type: none"> <li>The Remote Control is not pointed at the remote sensor on the player.</li> </ul>	<ul style="list-style-type: none"> <li>Point the Remote Control at the remote sensor of the player.</li> </ul>
	<ul style="list-style-type: none"> <li>The Remote Control is too far from the player.</li> </ul>	<ul style="list-style-type: none"> <li>Operate the Remote Control closer to the player.</li> </ul>
The level meter is not displayed.	<ul style="list-style-type: none"> <li>Check that the [NIGHT ON] is displayed in the display window.</li> </ul>	<ul style="list-style-type: none"> <li>Press NIGHT again.</li> </ul>
The lighting of the touch button is turned off.	<ul style="list-style-type: none"> <li>Check that the [NIGHT ON] is displayed in the display window.</li> </ul>	<ul style="list-style-type: none"> <li>Press NIGHT again.</li> </ul>

## Troubleshooting

Symptom	Possible Cause	Correction
BD-Live feature does not work.	• External USB device is not connected.	• Connect a FAT16 or FAT32 formatted USB device to the USB port (see page 23).
	• The connected USB device does not have enough space.	• Secure at least 1GB free space in the USB device for using BD-Live features.
	• Internet connection is not established.	• Ensure that the unit is correctly connected to the local area network and can access the internet (see page 17-21 and 28).
	• The [BD-LIVE connection] option in the [Setup] menu is set to [Prohibited].	• Set the [BD-LIVE connection] option to [Permitted].
Radio stations cannot be tuned in.	• The signal strength of the stations is too weak (when tuning in with automatic tuning).	• Use direct tuning.

## Customer Support

You can update the Player using the latest software to enhance the products operation and/or add new features.

To obtain the latest software for this player (if updates have been made), please visit <http://lgservice.com> or contact LG Electronics customer care centre.

- Design and specifications are subject to change without notice.

## Resetting the unit

**If you observe any of the following symptoms.**

- The unit is plugged in, but the power will not turn on or off.
- The front panel display is not working.
- The unit is not operating normally.

**You can reset the unit as follows.**

- Press and hold the  button for at least five seconds. This will force the player to power off. Press the  button again to turn the player back on.
- Unplug the power cord, wait at least five seconds, and then plug it in again.

# Specifications

## General

<b>Power requirements:</b>	Refer to main label.
<b>Power consumption:</b>	Refer to main label.
<b>Operating temperature:</b>	41 °F to 95 °F (5 °C to 35 °C)
<b>Operating humidity:</b>	5 % to 90 %

## Inputs/Outputs

<b>HDMI OUT (video/audio):</b>	19 pin (HDMI standard, Type A)
<b>HDMI IN (video/audio):</b>	19 pin (HDMI standard, Type A)
<b>DIGITAL IN (OPTICAL):</b>	3 V (p-p), Optical jack x 1

## Tuner FM

<b>FM Tuning Range:</b>	87.50 - 108.00 MHz
-------------------------	--------------------

## Amplifier

<b>Stereo mode:</b>	185 W + 185 W (4Ω at 1 KHz, THD 1 %)
<b>Surround mode:</b>	Left+Right: 185 W + 185 W (THD 1 %) Surround: 185 W + 185 W (4Ω at 1 KHz, THD 1 %) Subwoofer: 260 W (3Ω at 30 Hz, THD 1 %)

## System

<b>Laser:</b>	Semiconductor laser, wavelength: 405 nm / 650 nm
<b>Signal system:</b>	Standard PAL/NTSC colour TV system
<b>Frequency response:</b>	20 Hz to 20 kHz (48 kHz, 96 kHz, 192 kHz sampling)
<b>Signal-to-noise ratio:</b>	More than 100 dB (ANALOG OUT connectors only)
<b>Harmonic distortion:</b>	Less than 0.008%
<b>Dynamic range:</b>	More than 95 dB
<b>LAN port:</b>	Ethernet jack x 1, 10BASE-T / 100BASE-TX

## Speakers

	Front right speaker	Front left Speaker	Rear Speaker	Passive Subwoofer
<b>Type</b>	2 Way 3speaker	2 Way 3speaker	2 Way 3speaker	1 Way 1 speaker
<b>Impedance</b>	4Ω	4Ω	4Ω	3Ω
<b>Rated Input Power</b>	185 W	185 W	185 W	260 W
<b>Max. Input power</b>	370 W	370 W	370 W	520 W
<b>Net Dimensions (W x H x D)</b>	240 x 1285 x 340 mm	340 x 1285 x 340 mm	290 x 1170 x 290 mm	180 x 436 x 392 mm
<b>Net Weight</b>	12.6 kg	11.6 kg	5.1 kg	7.6 kg

## Wireless receiver

Power requirements	Refer to main label
Power consumption	Refer to main label
External dimensions (WxHxD)	64x213x252 mm
Net Weight	1 kg
Reception Output	5.8 GHz

## Accessories

Speaker cable (2), Remote control (1), Battery (2), HDMI cable (1), Nero MediaHome4 Essentials software CD-ROM (1), Optical cable (1)

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  - software written by Tim Hudson ([tjh@cryptsoft.com](mailto:tjh@cryptsoft.com)).
  - software developed by the OpenSSL Project for use in the OpenSSL Toolkit. (<http://www.openssl.org>)

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