

**PHILIPS**

Blu-ray Disc™ /  
DVD Player

BDP1502



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**User Manual**

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# 1. Introduction

## 1.1. Safety instruction

**Register online at [www.philips.com/support](http://www.philips.com/support) today to get the most benefits from your purchase.**

Registering your model with Philips makes you eligible for all of the valuable benefits listed below, so don't miss out. Register online at [www.philips.com/support](http://www.philips.com/support) to ensure:

### \* Product Safety Notification

By registering your product, you'll receive notification - directly from the manufacturer - in the rare case of a product recall or safety defect.

### \* Additional Benefits

Registering your product guarantees that you'll receive all of the privileges to which you're entitled, including special money-saving offers.

## Know these safety symbols

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



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



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

**WARNING:** TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPARATUS TO RAIN OR MOISTURE. APPARATUS SHALL NOT BE EXPOSED TO DRIPPING OR SPLASHING AND NO OBJECTS FILLED WITH LIQUIDS, SUCH AS VASES, SHALL BE PLACED ON THE APPARATUS.

**CAUTION:** To prevent electric shock, match wide blade of plug to wide slot, fully insert.

**ATTENTION:** Pour éviter les chocs électriques, introduire la lame la plus large de la fiche dans la borne correspondante de la prise et pousser jusqu'au fond.

The symbol for CLASS II (Double Insulation)

**The important note and rating are located on the rear or bottom of the cabinet.**

### For Customer Use

Please write the model and serial number of your unit (located on the cabinet) in the space below for future reference.

Model No. \_\_\_\_\_

Serial No. \_\_\_\_\_

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For fastest support visit us online at [www.philips.com/support](http://www.philips.com/support) for chat and self service solutions.

# Important safety instructions

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11. Only use attachments/accessories specified by the manufacturer.
12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart / apparatus combination to avoid injury from tip-over.
13. Unplug this apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.



## FCC warning

This equipment may generate or use radio frequency energy. Changes or modifications to this equipment may cause harmful interference unless the modifications are expressly approved in the manual. The user could lose the authority to operate this equipment if an unauthorized change or modification is made.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

## Supplier's declaration of conformity

**Trade name** : PHILIPS  
**Responsible party** : Funai Corporation, Inc.  
**Model** : BDP1502/F7 A, BDP1502/F7 B  
**Address** : 12489 Lakeland Road, Santa Fe Springs, CA 90670, USA  
**Telephone number** : 1 866 202 5960

## Radio-TV interference

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

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

**To completely turn off the unit, you must unplug the AC power plug.**

**Disconnect the AC plug to shut the unit off when trouble is found or when not in use. The AC plug shall remain readily available.**

## CAN ICES-3 (B)/NMB-3(B)

**CAUTION:** Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type.  
**WARNING:** Batteries (Battery pack or battery installed) shall not be exposed to excessive heat such as sunshine, fire or the like.

**Laser safety**

This apparatus is classified as a CLASS 1 LASER PRODUCT.

This apparatus employs a laser. Only a qualified service person should remove the cover or attempt to service this apparatus, due to possible eye injury.



**CAUTION:** Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

**Important copyright information**

Unauthorized copying, broadcasting, public performance and lending of discs are prohibited. This item incorporates copy protection technology that is protected by U.S. patents and other intellectual property rights of Rovi Corporation. Reverse engineering and disassembly are prohibited.

Never use a gas duster on this unit.

The gas trapped inside of this unit may cause ignition and explosion.

Do not place the unit on the furniture that is capable of being tilted by a child and an adult leaning, pulling, standing or climbing on it. A falling unit can cause serious injury or even death.

In order to avoid interruption of ventilation, this unit should not be placed in built-in equipment such as a book cabinet, rack, etc., and the vents of this unit should not be covered with anything such as a tablecloth, curtain, newspaper, etc. Make sure to leave a space of 5.9 inches (15 cm) or more around this apparatus.

When installing this unit in a temperate environment, avoid a place with rapid temperature changes.

This unit should not be used in a tropical environment as it has not been evaluated under such conditions.

No objects should be placed directly on or under this unit, especially lighted candles or other flaming objects.

**To avoid the hazards of electrical shock and fire**

Do not handle the power cord with wet hands.

Do not pull on the power cord when disconnecting it from an AC outlet. Grasp it by the plug.

Do not put your fingers or objects into the unit.

**Location and handling**

Do not install the unit in direct sunlight, near strong magnetic fields or in a place subject to dust or strong vibration.

Avoid a place with drastic temperature changes.

Install the unit in a horizontal and stable position. Do not place anything directly on top or bottom of the unit. Depending on your external devices, noise or disturbance of picture and/or sound may be generated if the unit is placed too close to them. In this case, please ensure enough space between external devices and the unit.

Depending on the environment, the temperature of this unit may increase slightly. This is not a malfunction.

Be sure to remove the disc and unplug the AC power cord from the outlet before carrying the unit.

**Dew condensation warning**

Dew condensation may form inside the unit in the following conditions. If so, do not use this unit at least for a few hours until its inside gets dry.

- The unit is moved from a cold place to a warm place.
- Under conditions of high humidity.
- After heating a cold room.

## Notice

Specifications are subject to change without notice. Trademarks are the property of Koninklijke Philips N.V. or their respective owners. Funai Corporation reserves the right to change products at any time without being obliged to adjust earlier supplies accordingly. The material in this manual is believed adequate for the intended use of the system. If the product, or its individual modules or procedures, are used for purposes other than those specified herein, confirmation of their validity and suitability must be obtained. Funai Corporation warrants that the material itself does not infringe any United States patents. No further warranty is expressed or implied. Funai Corporation cannot be held responsible for any errors in the content of this document, or for any problems as a result of the content in this document. Errors reported to Funai Corporation will be adapted and published on the Funai Corporation support website as soon as possible.

## Warranty

No components are user serviceable. Do not open or remove covers to the inside of the product. Repairs may only be done by Service Centers and official repair shops. Failure to do so shall void any warranty, stated or implied. Any adjustments or assembly procedures not recommended or authorized in this manual, or any operation expressly prohibited in this manual shall void the warranty.

## Important

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### Product safety notification

By registering your product you receive notification - directly from the manufacturer - in the rare case of a product recall or safety defect.

### Additional benefits of product ownership

Registering your product guarantees that you receive all of the privileges to which you're entitled, including special money-saving offers.

### For further assistance

For further assistance, call the customer support service in your country.

To obtain assistance in the U.S.A., Canada, Puerto Rico, or the U.S. Virgin Islands, contact Philips Customer Care Center at 1-866-202-5960

### Environmental care

The packaging of this product is intended to be recycled. Contact your local authorities for information about how to recycle the packaging. For Product recycling information, please visit - [www.recycle.philips.com](http://www.recycle.philips.com)



### Disposal of used batteries

In certain localities, disposing batteries with household waste is not permitted. Please ensure you dispose of batteries according to local regulations.

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## 1.2. Included accessories

- Quick start guide
- Remote control (NC098UL)

### Note

- An HDMI cable (not included) is necessary to connect the unit to a TV.

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## 2. Features

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### 2.1. Features

#### Blu-ray Disc™

You can enjoy Blu-ray Disc™ which is capable of storing five times more data than a conventional DVD.

#### BD-Java

With some Blu-ray™ discs which contain Java applications, you can enjoy interactive functions such as games or interactive menus.

#### DVD upscaling for enhanced picture quality

Your current DVD will look even better than before thanks to video upscaling. Upscaling will increase the resolution of standard definition DVD to high definition up to 1080p over an HDMI connection. The picture will be less jagged and more realistic for a near high definition experience.

#### Enjoy your content on different kinds of media

Full backwards compatibility with DVD, CD and USB memory stick ensures that you can continue to enjoy your current audio-video collection. Additionally, you can enjoy AVCHD (for DVD-RW/-R only) / photo files / music files.

#### Listen to rich multi-channel surround sound

Multi-channel surround sound, which realizes real-to-life sound and makes you feel that you are really there.

#### Easy and simple connection to your HDTV via HDMI

Connect this unit to your HDTV with one single HDMI (High-Definition Multimedia Interface) cable. It is recommended to use a High Speed HDMI cable for better compatibility. The high definition video output signal will be transferred to your HDTV without conversion to analog signals, so you will get excellent picture and sound quality, completely free from noise.

#### EasyLink (HDMI CEC)

This unit supports HDMI CEC, which allows integrated system control over an HDMI cable and is part of the HDMI standard. This function may not work properly on some devices.

#### PiP (BONUSVIEW™)

Some BD-Videos have the PiP function which enables you to display the secondary video in the primary video. You can call up the secondary video by pressing [OPTIONS] whenever the scene contains a secondary video.

#### Pop menu

Some BD-Videos have a pop menu which is a navigation menu that can be called up and be operated on the TV screen without interrupting playback. You can call up the pop menu by pressing [POP MENU]. Contents in the pop menu vary depending on the disc.

#### HDMI 1080p/24 output (Blu-ray Disc™ only)

This unit is equipped with the feature which can provide smooth movement during playback of film originated material with a frame rate of 24 frames per second with progressive. (Available only when the display device is connected with an HDMI cable.) Refer to “HDMI video resolution” → (page 36).

#### Playing back contents from a USB memory stick

You can play back photo files / music files stored on a USB memory stick. BD-ROM discs sometimes store picture-in-picture commentary, subtitles or other extras on a USB memory stick for use during playback with the BD-Video.

#### Playing back AVCHD files

This unit supports playback of AVCHD format files (new format for high definition video camcorders) recorded on a disc / SD memory card using USB card reader. Your high definition personal archive is playable in HD quality.

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## 2.2. Version information

“Version Info” screen provides information about this unit’s software version.

You can also download the latest software from the Philips website and update it yourself if it is newer than the version currently on your unit. The current version of software on your unit can be seen on the “Version Info” screen.

To access “Version Info”, follow the procedure below.

1. Press [**HOME**].
2. Use [**▲ / ▼ / ◀ / ▶**] to select “Setup”, then press [**OK**].
3. Use [**▲ / ▼**] to select “Advanced”, then press [**OK**].
4. Use [**▲ / ▼**] to select “Version Info”, then press [**OK**].

---

## 2.3. Symbols used in this owner's manual

To specify which media type each function is applicable to, a combination of the symbols shown below will be depicted next to that function's explanation.

Symbol	Description
	Description refers to BD-Video
	Description refers to DVD-Video
	Description refers to Audio CD / DTS-CD
	Description refers to DVD-RW/-R with AVCHD files
	Description refers to BD-RE/-R, DVD-RW/-R, CD-RW/-R and USB memory stick with photo files
	Description refers to BD-RE/-R, DVD-RW/-R, CD-RW/-R and USB memory stick with music files

If you do not find any of the symbols listed above under the function heading, the operation is applicable to all media types.

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## 3. Functional overview

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### 3.1. Front panel



\* The unit can also be turned on by pressing this button.

1. **Disc tray**
2. **Infrared sensor window**
3. **▲ (OPEN/CLOSE) button\***
4. **▶|| (PLAY/PAUSE) button\***
  - Press to start playback.
  - During playback, press to pause playback.
5. **⏻ (POWER) button\***
6. **Power-on indicator**
7. **USB input**

#### ⚠ Caution

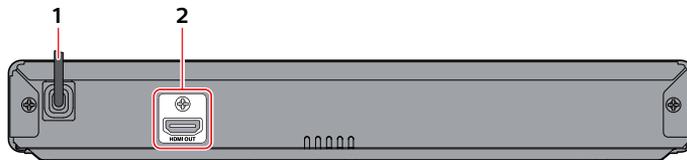
- Do not connect any device other than USB memory stick or USB card reader into the USB input. (e.g. PC, external HDD, digital camera, keyboard, mouse, etc.)
- When connecting a USB memory stick, connect it directly to the USB input. Do not use a USB extension cable.

#### 📌 Note

- Due to new ENERGY STAR® requirements, this unit will automatically turn on the screen saver after 5 minutes of inactivity and enter standby mode after 25 minutes of inactivity.

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### 3.2. Rear panel



1. **AC power cord**
2. **HDMI OUT jack**

#### ⚠ Caution

- Do not touch the inner pins of the jacks on the rear panel. Electrostatic discharge may cause permanent damage to the unit.
- This unit does not have a TV RF modulator.

### 3.3. Remote control



\* The unit can also be turned on by pressing these buttons.

1. **⏻ (POWER) button**
  - Press to turn on the unit, or to switch the unit into standby mode. (To completely turn off the unit, you must unplug the AC power cord.)
2. **TOP MENU button**
  - Blu-ray Disc™: Press to display the top menu.
  - DVD: Press to display the title menu.
3. **▲/▼/◀/▶ buttons**
  - Press to select items or settings.
4. **BACK button**
  - Press to return to the previously displayed menu or screen function.
5. **◀◀ (REVERSE) button**
  - During playback, press to Fast Reverse the playback.
6. **▶▶ (PLAY) button\***
  - Press to start playback or resume playback.
7. **⏮ (SKIP) button**
  - During playback, press once to return to the beginning of the current title, chapter, track or file.
  - During playback, press twice to return to the previous title, chapter, track or file.
  - During JPEG playback, press to return to the previous file.
8. **■ (STOP) button**
  - Press to stop playback.
9. **INFO button**
  - Press to display the on-screen display menu.
10. **REPEAT button**
  - Press to play back a chapter, title or disc repeatedly.
11. **RED / GREEN / YELLOW / BLUE buttons\***
  - Press to activate shortcut keys on some BD-video functions. When a file list is shown, press to switch between pages.
12. **🏠 (HOME) button**
  - Press to display the home menu.
13. **▲ (OPEN/CLOSE) button\***
  - Press to open or close the disc tray.
14. **POP MENU button**
  - Blu-ray Disc™: Press to display the pop menu.
  - DVD: Press to display the disc menu.
15. **OK button**
  - Press to confirm or select menu items.
16. **OPTIONS button**
  - During playback, press to display the play menu.
17. **▶▶ (FORWARD) button**
  - During playback, press to fast forward the playback.
  - When playback is in pause, press to slow forward the playback.
18. **⏭ (SKIP) button**
  - During playback, press to skip to the next chapter, track or file.
  - When playback is in pause mode, press to forward the playback picture by picture.
19. **|| (PAUSE) button**
  - Press to pause playback.
20. **AUDIO button**
  - Press to select the audio channel (such as audio languages) on a disc.
21. **SUBTITLE button**
  - Press to select subtitles on a disc.

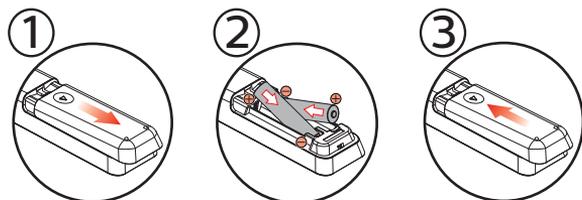
continued on next page

## Note

- Use the included remote control. Remote-control operation on any other remote control, such as a universal remote control, is not guaranteed.
- Make sure the component code on your universal remote control is set to our brand. Refer to the instruction book accompanying your remote control for more details.

## ■ Installing the batteries in the remote control

Install 2 AAA (1.5 V) batteries matching the polarity indicated inside battery compartment of the remote control.



\*Batteries not included.

## ⚠ Caution

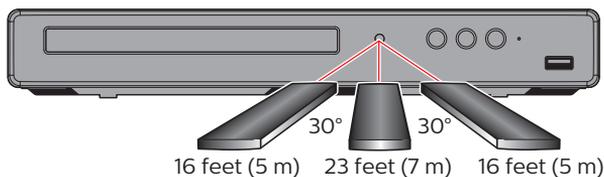
Incorrect use of batteries can result in hazards such as leakage and bursting. Please follow the guidelines below:

- Lithium or ni-cad and ni-mh rechargeable batteries are not recommended to use for remote control.
- Do not mix different types of batteries such as alkaline and standard (carbon-zinc).
- Do not mix new and old batteries together.
- Do not use different kinds of batteries together. Although they may look similar, different batteries may have different voltages.
- Make sure that the + and - ends of each battery match the indications in the battery compartment.
- Remove batteries from battery compartment, when the remote is not going to be used for a month or more.
- When disposing of used batteries, please comply with governmental regulations or environmental public rules that apply in your country or area.
- Do not recharge, short-circuit, heat, burn or disassemble batteries.

## ■ Using the remote control

Remote control usage guidelines:

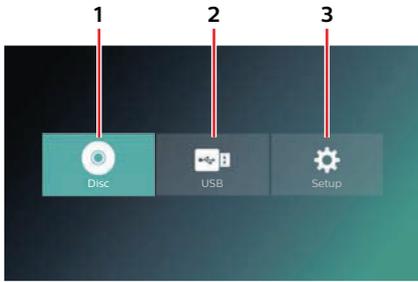
- Make sure that there are no obstacles between the remote control and the infrared sensor window on the unit.
- Remote operation may become unreliable if strong sunlight or fluorescent light is shining on the infrared sensor window of the unit.
- Remote controls of different devices can interfere with each other. Avoid using a remote control from another device which is located close to the unit.
- Replace the batteries when you notice a fall-off in the operating range of the remote control.
- The maximum operable ranges from the unit are as follows.
  - Line of sight:  
approx. 23 feet (7 m)
  - Either side of the center:  
approx. 16 feet (5 m) within 30°
  - Above:  
approx. 16 feet (5 m) within 15°
  - Below:  
approx. 10 feet (3 m) within 30°



### 3.4. Guide to on-screen display

#### ■ Home menu

When you turn on the unit, the home menu will appear automatically. Otherwise, press [**HOME**].



- 1. **“Disc”**: Initiates playback of inserted disc, displays a list of tracks / files or the media filter menu.
- 2. **“USB”**: Displays a list of tracks / files on the connected USB memory stick or the media filter menu  
For a list of supported file formats, refer to → (page 17).
- 3. **“Setup”**: Accesses the setup menu

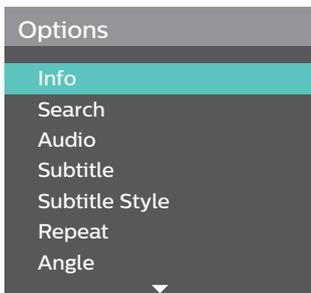
#### ■ Setup menu



- 1. **Category**
- 2. **Menus / Options**: Displays options for the highlighted item on the left whenever available

#### ■ Play menu

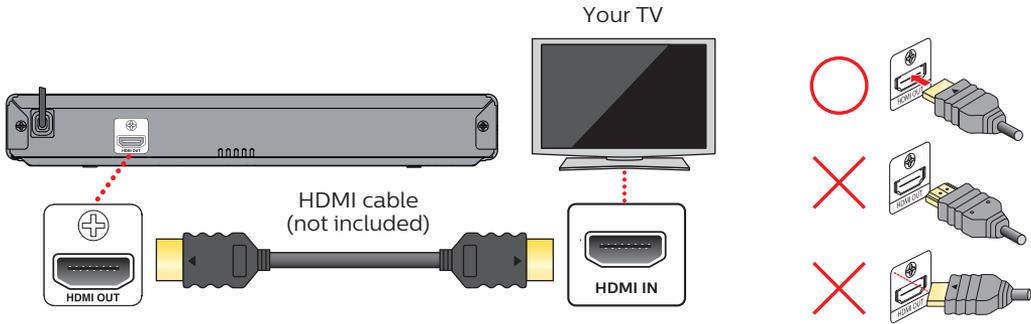
During playback, press [**OPTIONS**] to display the play menu.  
e.g.) Blu-ray Disc™



## 4. Connections

### 4.1. Connection to a TV

#### ■ HDMI connection (Supports up to 1080i(\*1), 1080p(\*2), 1080p/24(\*3) resolution.)



(\*1) 1080i: Outputs video data with a frame rate of 30 frames per second.

(\*2) 1080p: Outputs video data with a frame rate of 60 frames per second.

(\*3) 1080p/24: Outputs video data with a frame rate of 24 frames per second.

- Do not tilt the connector when inserting it into the HDMI jack, and make sure the shapes of the jack and the connector are matched.
- When connected to an HDCP incompatible display device, the picture will not be displayed properly.
- Use an HDMI cable with the HDMI logo (a certified HDMI cable) for this connection. High Speed HDMI cable (also known as HDMI category 2 cable) is recommended for better compatibility.

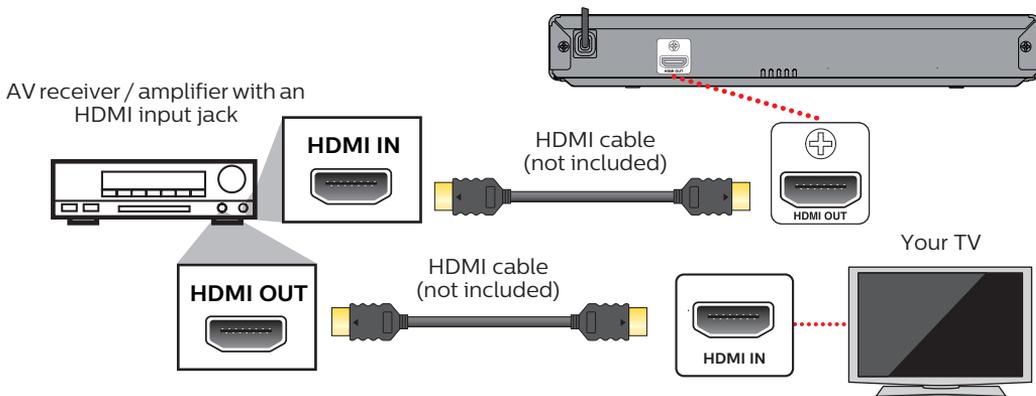
#### ⓘ Note

- If the TV receives no audio / video signal after properly connecting the unit and the TV with an HDMI cable, it may be the TV. Please refer to the TV's user's manual.
- If the TV receives no audio signal after properly connecting the unit and the TV with an HDMI cable, make sure the TV input is not an HDMI-DVI input terminal.

### 4.2. Connection to an audio system

- When you change the connections, all devices should be turned off.
- When connecting the unit to an external audio system, refer to the user manual for setup / configuration help.

#### ■ HDMI audio connection



### 4.3. HDMI audio output

	“AUDIO” > “HDMI audio” setting ➔	Bitstream	LPCM	Re-encode
Media	Source			
BD	Dolby Digital	Dolby Digital	2ch PCM	Dolby Digital
	Dolby Digital Plus	Dolby Digital Plus	2ch PCM	Dolby Digital Plus <sup>*1</sup>
	Dolby TrueHD	Dolby TrueHD	2ch PCM	Dolby TrueHD <sup>*1</sup>
	DTS	DTS	2ch PCM	DTS
	DTS-HD High Resolution	DTS-HD High Resolution	2ch PCM <sup>*2</sup>	DTS-HD High Resolution <sup>*3</sup>
	DTS-HD Master Audio	DTS-HD Master Audio	2ch PCM <sup>*2</sup>	DTS-HD Master Audio <sup>*3</sup>
DVD	LPCM	Multi LPCM	Multi LPCM	Multi LPCM <sup>*1</sup>
	Dolby Digital	Dolby Digital	2ch PCM	Dolby Digital
	DTS	DTS	2ch PCM	DTS
	MPEG	Multi LPCM	Multi LPCM	Multi LPCM
Audio CD	PCM	Multi LPCM	Multi LPCM	Multi LPCM
DTS-CD	LPCM	2ch PCM	2ch PCM	2ch PCM
AVCHD	DTS	DTS	2ch PCM	DTS
	Dolby Digital	Dolby Digital	2ch PCM	Dolby Digital
Audio File	LPCM	Multi PCM	Multi PCM	Multi PCM
	FLAC/WAV	2ch PCM	2ch PCM	2ch PCM

\*1 If there is secondary audio or Interactive audio, it will be output in Dolby Digital.

\*2 Only the core substream is decoded.

\*3 If there is secondary audio or Interactive audio, it will be output in DTS.

#### Note

- If the connected device is not compatible with HDMI Bitstream, audio will be output as multi LPCM or 2-channel down-mixed LPCM depending on the capability of the connected device even if you select “Bitstream” in “HDMI Audio” setting.
- If “HDMI Audio” is set to “Bitstream” and this unit is connected to a Bitstream compatible device, only primary audio of the BD-Video will be output. (Secondary audio and button sounds will not be output.)
- In order to configure “HDMI Audio” settings, the following conditions must be met:
  - “Voice Guide” is set to “Off”.
  - This unit is not in resume-on-stop mode.  
If this unit is in resume-on-stop mode, remove the disc to enable configuration.

---

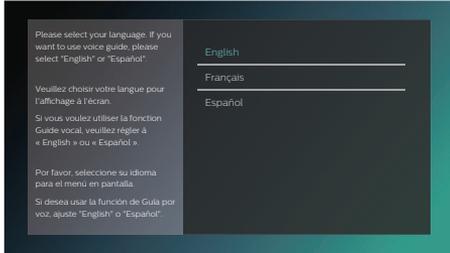
## 5. Before you start

---

### 5.1. Initial setup

After you have completed all of the connections to your TV, review the steps below.

1. Press [**⏻(POWER)**] to turn on the unit.
2. Turn on your TV.
3. Language setup screen will appear. Use [**▲ / ▼**] to select your language, then press [**OK**].
4. Voice guide setup screen will appear. Use [**▲ / ▼**] to select “On” or “Off”, then press [**OK**].



#### ■ How to reset the OSD language

You can reset the OSD language if you selected the wrong language.

1. Press [**🏠 (HOME)**] to display the home menu.
2. Use [**▲ / ▼ / ◀ / ▶**] to select “”, then press [**OK**].
  - This item is “Setup” (English) / “Installation” (French) / “Instalación” (Spanish).
  - From here on, please select one of the following items you can find on screen:
3. Use [**▲ / ▼**] to select “Preference” (English) / “Préférences” (French) / “Preferencias” (Spanish), then press [**OK**].
4. Use [**▲ / ▼**] to select “Menu Language” (English) / “Langage du menu” (French) / “Menú Idioma” (Spanish), then press [**OK**].
5. Use [**▲ / ▼**] to select your desired language, then press [**OK**].
6. If the items that were set are displayed in your desired language, then press [**🏠 (HOME)**] to exit.

## 6. Information on playback

### 6.1. Information on playback

#### ■ Playable discs and files

Playable discs	Logos
Blu-ray Disc™ • BD-video • BD-RE* (ver. 2.1) (Recorded in BDMV format) • BD-R* (ver. 1.1 / 1.2 / 1.3) (Recorded in BDMV format) (Unfinalized disc may not be played back.)	
DVD-video	
DVD-RW (finalized video mode discs only)	
DVD-R (finalized video mode discs only)	
CD-DA (audio CD)	
CD-RW	 
CD-R	 
DTS-CD	-

\* Due to the intentional progression of the Blu-ray Disc™ format by its standard setting authority, the company cannot guarantee or warrant the playability of future extensions of the Blu-ray Disc™ format with this product.

Playable files	Media
AVCHD	DVD-RW/-R SD memory card using USB card reader
JPEG / PNG / FLAC / WAV	BD-RE/-R DVD-RW/-R CD-RW/-R USB memory stick
Readable device	Playable files / data
USB memory stick	Photo files, music files, picture-in-picture commentary, subtitles or other extras for some BD-ROM

#### ⓘ Note

- This unit may not be able to play back discs recorded on PC's or other recorders.

## ■ Recommended specifications

### AVCHD

This unit cannot play back stand-alone AVCHD files (\*.m2ts, \*.mts or \*.m2t) written to a DVD or copied to an SD memory card. The DVD or SD memory card containing AVCHD files must have a proper file and folder structure meeting AVCHD format specifications. Please use AVCHD compliant device / software to burn or copy AVCHD files to DVD or SD memory card. (Please refer to user manuals of your device / software for more information.)

#### Music file

##### FLAC (.flac)

Sampling frequency : up to 192 kHz  
Number of bits : 8/12/16/20/24 bit

##### WAV (.wav)

Sampling frequency : up to 192 kHz  
Number of bits : 8/16/20/24 bit

#### Photo file

##### JPEG (.jpg/.jpeg) and PNG (.png)

Maximum size : 4,096x4,096 (Sub Sampling:4:4:4)  
5,120x5,120 (Sub Sampling4:2:2 or 4:2:0)  
Minimum size : 32x32  
Capacity : 12 MB Max.

### ⊖ Note

- Regardless of the file type, some files may be unplayable due to their incompatible file structure.

### Caution / Note for USB memory stick

### ⚠ Caution

- Do not try to open or modify the USB memory stick.
- Do not touch the terminal surface with your fingers or any metals.

### ⊖ Note

- This unit supports USB memory stick with FAT16 / FAT32 file system.
- This unit does not support NTFS file system.
- Please keep the USB memory sticks in their cases when you are not using them.
- Some USB memory sticks may not work with this unit.
- This unit can read SD memory cards using a USB card reader.
  - Readable cards:
    - SD memory card (8 MB - 2 GB)
    - SDHC memory card (4 GB - 32 GB)
    - miniSD memory card (16 MB - 2 GB)
    - miniSDHC memory card (4 GB - 8 GB)
    - microSD memory card (256 MB - 2 GB)
    - microSDHC memory card (4 GB - 16 GB)
  - Readable files:
    - AVCHD / JPEG / PNG / FLAC / WAV
- Depending on a USB card reader, connected card or device may not be recognized.

## ■ Unplayable media and files

The following discs will not be played back on this unit.

- CD-ROM
- DVD-RAM
- DVD-audio
- HD DVD
- SDXC memory card
- unfinalized disc
- BD-RE (ver. 2.1) (Recorded in BDAV format)
- BDXL™
- Blu-ray Disc™ / DVD / CD / USB memory stick / SD memory card containing DivX® files
- Blu-ray Disc™ / USB memory stick that contains AVCHD files
- Blu-ray Disc™ / DVD hybrid disc (played back as a BD-video only)
- DVD-RW/-R recorded in non compatible recording format
- Super Audio CD - Only the sound on the CD layer can be heard. The sound on the high-density Super Audio CD layer cannot be heard.
- Playability of dual discs is not guaranteed.
- This unit cannot play back the disc contents protected by Windows Media™ Digital Rights Management (DRM).
- CD-I (compact disc-interactive)
- VSD (video single disc)
- video CD
- SVCD
- microSDXC memory card
- BD-RE (ver. 1.0)
- BD-R (ver. 1.1 / 1.2 / 1.3) (Recorded in BDAV format)
- Ultra HD Blu-ray™, Blu-ray 3D™ Disc

## ■ Region codes

This unit has been designed to play back BD-video with region “A” and DVD-video with region “1” or “ALL”. You cannot play back BD-video or DVD-video that is labeled for other regions.

Look for the symbols on your BD-video or DVD-video. If these region symbols do not appear on your BD-video or DVD-video, you cannot play back the disc on this unit. The letter or number inside the globe refers to region of the world. BD-video or DVD-video discs labeled for a specific region can only be played back on players with the same region code.

BD-video

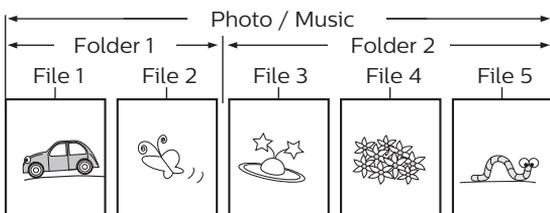
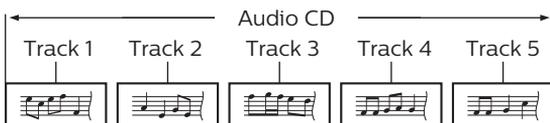
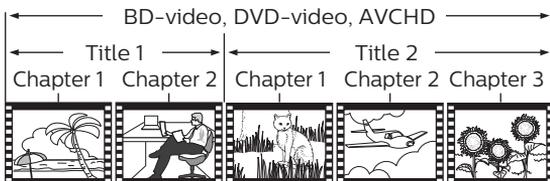


DVD-video



## ■ Hint for disc playback

The contents of a disc are generally divided into sections or folders (group of titles / files) as shown below.



## ■ Description for icons

 : group (folder) icon

 : music file icon

 : photo file icon

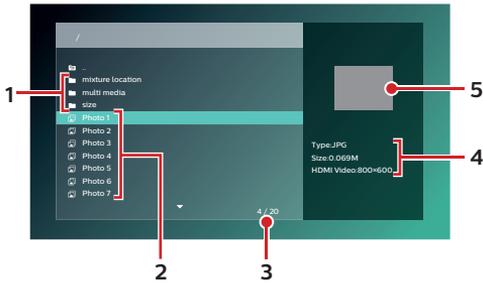
- “Folders” refers to the group of files.
- “Track” refers to the contents recorded on the audio CD.
- “Files” refers to the contents on a disc which are recorded in AVCHD or JPEG / PNG / FLAC / WAV file format.

## ⊖ Note

- Unrecognizable characters will not be displayed.

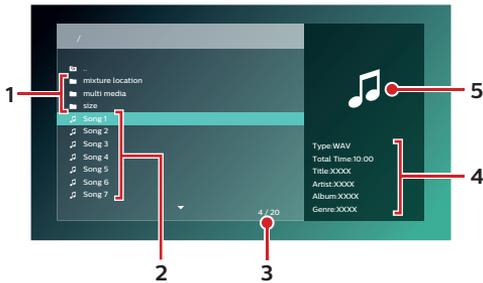
## 6.2. Guide to file list

### ■ Photo file list



1. Folder list
2. File list
3. Number of folders or files in this directory / total number of folders or files in this directory
4. File information
5. Thumbnail

### ■ Music file list



1. Folder list
2. File list
3. Number of folders or files in this directory / total number of folders or files in this directory
4. Track information
5. Icon

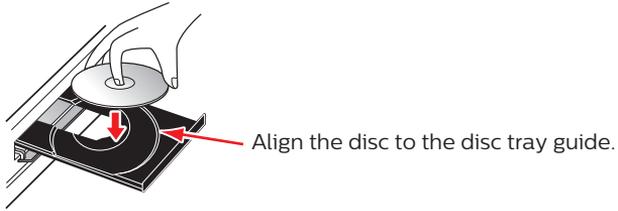
### ■ How to navigate through the file list

- Use [▲ / ▼] to move the highlighted text up and down. Press [◀] to go back to the previous hierarchy.
- If the list has multiple pages, you can switch pages using [◀ / ▶ (SKIP)].
- To access files in a folder, select the desired folder, then press [OK].
- Press [🏠 (HOME)] to exit.

---

### 6.3. How to insert a disc

1. Press [**▲** (OPEN/CLOSE)] to open the disc tray.
2. Place the disc on the disc tray with its label side facing up.
3. Press [**▲** (OPEN/CLOSE)] to close the disc tray.
  - It may take a while to load the disc.



## 7. Basic playback

### 7.1. Playing back a disc



1. Insert a disc (refer to “How to insert a disc” → (page 20)).
  - For Blu-ray Disc™ / DVD / AVCHD / audio CD or a disc containing only one type of file, playback will start automatically. If not, press **[▶ (PLAY)]**.
  - When photo / music files are contained on the disc, the file list will be displayed (see step 2). Even if the content type is of one type only, the file list screen will still be displayed.
  - Some discs may show a title or a disc menu. In this case, refer to “Using the title / disc / pop menu” → (page 22).
  - “BD-ROM Data(USB) Check” message may be displayed while loading a Blu-ray Disc™.
2. Select the type of the file you want to play back, then press **[OK]**.



- File list screen will appear.

To skip to the next title / chapter / track / file:

Press **[▶| (SKIP)]**.

To skip to the previous title / chapter / track / file:

Press **[◀ (SKIP)]**.

To pause playback:

Press **[|| (PAUSE)]**.

To return to normal playback:

Press **[▶ (PLAY)]**.

To stop playback:

Press **[■ (STOP)]**.

Playback will be in resume-on-stop mode.

#### ■ Resume-on-stop mode



While the disc icon is selected on the home screen, pressing **[OK]** or **[▶ (PLAY)]** will resume playback. Pressing **[OK]** while the message “To playback from the beginning, press **[OK]**” is displayed will start playback from the beginning of the currently selected title.



While the disc icon is selected on the home screen, pressing **[OK]** or **[▶ (PLAY)]** will resume playback. Pressing **[OK]** while the message “To playback from the beginning, press **[OK]**” is displayed will start playback from the beginning of the first track on the Audio CD.



When you press **[▶ (PLAY)]** or **[OK]** next time, the playback will start from the point where it has been stopped.

#### ⊖ Note

- Playback will also stop and the home menu will appear when you press **[⬆ (HOME)]**.
- For BD-Java application, the resume-on-stop may not be available.
- For BD / DVD / AVCHD / Audio CD, except for photo / music files, resume-on-stop mode remains in effect even after power is turned off. It will be canceled once the disc is ejected.
- Discs containing AVCHD and photo / music files will be played back as AVCHD.
- CDs/DVDs containing FLAC (.flac) or WAV (.wav) files with high frequency and large quantization bit rates may not play properly.
- With regard to the multi-border BD-RE/-R, additionally recorded sections cannot be recognized.
- With regard to the multi-border DVD-RW/-R, additionally recorded sections may not be recognized.

## ⊖ Note for photo playback

- Every press of [◀ / ▶] will turn the image by 90 degrees when an image is displayed.
- Some unplayable folders or files may be listed due to the recording status.
- High-resolution photo files take longer to be displayed.
- Progressive JPEG files (JPEG files saved in progressive format) cannot be played back on this unit.

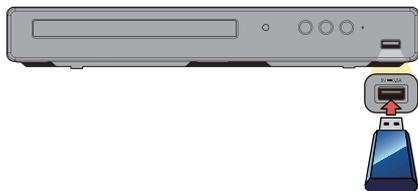
---

## 7.2. Playing back contents from a USB memory stick



You can play back JPEG / PNG / FLAC / WAV files stored on a USB memory stick. With the USB memory stick, you can also enjoy the following functions. For a list of supported file formats, refer to → (page 17).

- Special additional contents for BD-ROM.  
(For more information about the special additional contents, refer to the instruction book that came with the disc.)



1. Connect a USB memory stick.
2. Press [⬆️ (HOME)].
3. Use [▲ / ▼ / ◀ / ▶] to select “USB”, then press [OK].
4. Follow step 2 in “Playing back a disc” → (page 21).

### ⚠ Caution

- Do not disconnect the USB memory stick or switch the unit to standby mode while contents on the USB memory stick are being accessed. It may result in malfunction or loss of the stick's data.
- If you connect a USB memory stick or SD memory card via a USB card reader or USB hub, BD-ROM data will be written onto the first connected card or device. Connecting a USB memory stick directly to this unit is recommended.
- Occasionally, SD memory cards / Micro SD memory cards will not be recognized when using certain adapters. In such cases, try a different USB adapter.

## ⊖ Note

- The resume information will be cleared when;
  - the USB memory stick is disconnected.
  - the unit is switched to standby mode.
- If a folder / file name contains an unrecognizable character, the folder / file name will not be displayed.
- This unit can read JPEG / PNG / FLAC / WAV files and AVCHD on an SD memory card by using USB card reader.

---

## 7.3. Using the title / disc / pop menu



Some BD-videos, DVD-videos or AVCHD files may contain a title menu which describes the contents of the disc, or a disc menu which guides you through the available functions on the disc.

- With such discs, a title menu or a disc menu may appear automatically when you insert the disc. Otherwise, press [TOP MENU] or [POP MENU] to call up the menu. Refer to the disc's manual on how to navigate through the menu.

## ⊖ Note

- Menus vary among discs. Refer to the information accompanying the disc for details.
- [TOP MENU] or [POP MENU] may not work with some discs.

---

## 8. Special playback

---

### 8.1. Fast forward / fast reverse



1. During playback, press [▶▶ (FORWARD)] repeatedly for fast forward.  
During playback, press [◀◀ (REVERSE)] repeatedly for fast reverse.
2. Press [▶ (PLAY)] to return to normal playback.

#### ⊖ Note

- For Blu-ray Disc™, DVD, AVCHD, audio CD, and music files, speed changes at 5 different levels.
- For audio CD and music files, fast forward / fast reverse search between different tracks/files are not available.

---

### 8.2. Slow forward playback



1. During playback, press [▶ (PLAY)]. Then press [▶▶ (FORWARD)].  
Every time you press [▶▶ (FORWARD)], the playback speed changes at 4 different levels.
2. Press [▶ (PLAY)] to return to normal playback.

#### ⊖ Note

- Slow reverse is not available.

---

### 8.3. Step by step playback



1. In pause mode, press [▶| (SKIP)] repeatedly.  
Every time you press [▶| (SKIP)], playback will advance one step at a time.
2. Press [▶ (PLAY)] to return to normal playback.

#### ⊖ Note

- Step by step reverse is not available.

## 8.4. Repeat playback

Available repeat functions vary depending on the disc.

### ■ Using [REPEAT]

1. During playback, press [REPEAT].
2. Use [▲ / ▼] to select the desired repeat mode.
  - You can also change the repeat mode by pressing [REPEAT] repeatedly.

### ■ Using [OPTIONS]

1. During playback, press [OPTIONS] to display the play menu.
2. Use [▲ / ▼] to select “Repeat” then press [OK].
3. Use [▲ / ▼] to select the desired repeat mode.

REPEAT MODE	AVAILABLE MEDIA
<b>Chapter repeat</b> The current chapter will be played back repeatedly.	  
<b>Title repeat</b> The current title will be played back repeatedly.	  
<b>Track repeat</b> The current track or file will be played back repeatedly.	  
<b>All repeat</b> All tracks in the media will be played back repeatedly.	  

4. Press [OPTIONS] to exit.

### ⊖ Note

- The repeat setting will be cancelled when you stop playback.
- Repeat setting may be unavailable with some Blu-ray™ discs.

## 8.5. Shuffle / random playback

Available shuffle and random functions vary depending on the disc.

1. During playback, press [OPTIONS] to display the play menu.
2. Use [▲ / ▼] to select “Mode”, then press [OK].
3. Use [▲ / ▼] to select the desired playback mode, then press [OK].

SHUFFLE / RANDOM MODE	AVAILABLE MEDIA
<b>Shuffle playback</b> Plays all songs or photo / music files in the current folder one at a time in random order.	  
<b>Random playback</b> Plays all songs or photo / music files in the current folder repeatedly in random order.	  

4. Press [OPTIONS] to exit.

---

## 8.6. Slide show



1. Follow steps 1 and 2 in “Playing back a disc” → (page 21).
2. Open the folder which contains the desired photo files.
3. Use [▲ / ▼] to select a desired file to be played back, then press [▶ (PLAY)] or [OK].
  - An image will be played back from the selected file.
4. Press [■ (STOP)] to stop playback.

### ⊖ Note

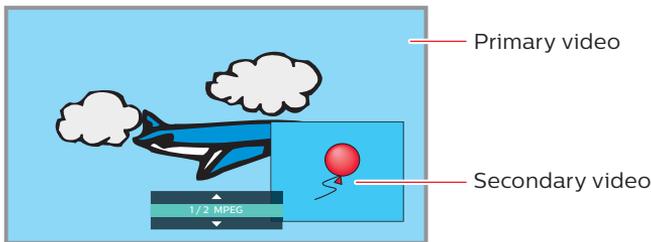
- Large-size photo files take time to load before being displayed on the screen.

---

## 8.7. PiP (BONUSVIEW™) setting



Some BD-videos have the PiP function which enables you to display the secondary video in the primary video.



1. During playback, press [OPTIONS] to display the play menu.
2. Use [▲ / ▼] to select “PiP” then press [OK].
  - PiP information will appear.
3. Use [▲ / ▼] to select the secondary video you want to show.
  - The secondary video will be displayed with secondary audio.
4. Press [OPTIONS] to exit.
  - To select the secondary audio output, refer to “Switching audio soundtrack” → (page 29).

### ⊖ Note

- Secondary video may not be displayed all the time, depending on the scene, it may or may not be available for display.

---

## 8.8. Title / chapter search



### ■ Using [I◀ (SKIP) / ▶I (SKIP)]

1. During playback, press [▶I (SKIP)] to skip the current title or chapter and move to the next. The title or chapter will move forward one at a time.
  - If there is no chapter in a title, the current title may be skipped.To go back to the beginning of the current title or chapter, press [I◀ (SKIP)]. Press [I◀ (SKIP)] repeatedly to go to the previous title or chapter. The title or chapter may move backward one at a time.

### ■ Using “Search”

1. During playback, press [OPTIONS] to display the play menu.
2. Use [▲ / ▼] to select “Search”, then press [OK].
3. Use [▲ / ▼] to select “Title” or “Chapter”, then press [OK].  
e.g.) Blu-ray Disc™



4. Use [▲ / ▼ / ◀ / ▶] to select the title / chapter number, then press [OK]. Playback will start from the beginning of the title / chapter.

### ⊖ Note

- As for BD-video, how it performs is strongly determined by the disc, and may not perform as described.
- For DVD, title search can be performed on the home menu by pressing [OPTIONS] while in stop mode or resume-on-stop mode.

---

## 8.9. Track / file search



### ■ Using [I◀ (SKIP) / ▶I (SKIP)]

1. During playback, press [▶I (SKIP)] to skip the current track or file and move to the next. The track / file will move forward one at a time. To go back to the beginning of the current track / file, press [I◀ (SKIP)]. Press it repeatedly to go to the previous track / file. The track / file will move backward one at a time.
  - For photo files, press [I◀ (SKIP)] once to go to the previous file.

### ■ Using “Search”

1. During playback, press [OPTIONS] to display the play menu.
2. Use [▲ / ▼] to select “Search”, then press [OK].
  - For photo files, skip to step 4.
3. Use [▲ / ▼] to select “Track”, then press [OK].
4. Use [▲ / ▼ / ◀ / ▶] to select the track number, then press [OK]. Playback will start from the beginning of the track.

---

## 8.10. Time search



1. During playback, press **[OPTIONS]** to display the play menu.
2. Use **[▲ / ▼]** to select “Search”, then press **[OK]**.
3. Use **[▲ / ▼]** to select time search, then press **[OK]**.
  - Blu-ray Disc™ / DVD-Video / AVCHD: “Title Time” or “Chapter Time”.
  - Audio CD: “Track Time” or “Disc Time”.e.g.) Blu-ray Disc™



4. Enter the time count you want to jump to.
  - Use **[▲ / ▼ / ◀ / ▶]** to enter the time count, then press **[OK]**.Playback will start from the desired time entered.

---

## 8.11. Number select search



Some BD-videos and DVD-videos or AVCHD files have button menus to jump to each button displayed scene. During playback the scenes which have the button menu, you can enter the button number by using the number select menu.

1. During playback, press **[OPTIONS]** to display the play menu.
2. Use **[▲ / ▼]** to select “Number Select”, then press **[OK]**.  
e.g.) Blu-ray Disc™



- For BD-Java, a single-digit number select menu is displayed.
  - For DVD, a double-digit number select menu is displayed.
  - For BD-videos and AVCHD files, the number select menu is displayed even if there is no button menu in the scene.
3. Use **[▲ / ▼]** to enter the number you want to jump to.
    - To move to the digit you wish to change, press **[◀ / ▶]**.
  4. After all digits are entered, press **[OK]**.  
Playback of the selected scene will start.

### Note

- As for the BD-video, how it performs is strongly determined by the disc, and may not perform as described.

## 8.12. Switching subtitles



Some video materials may have subtitles in one or more languages. For commercially available discs, the supported languages can be found on the disc case. Follow the steps below to switch the subtitle language during playback.

### ■ Using [SUBTITLE]

1. During playback, press [SUBTITLE].
  - Pressing [SUBTITLE] repeatedly switches the subtitles.
  - For Blu-ray™ discs, [SUBTITLE] is only available in primary subtitle.

### ■ Using [OPTIONS]

1. During playback, press [OPTIONS] to display the play menu.
2. Use [▲ / ▼] to select “Subtitle”, then press [OK].
3. Use [▲ / ▼] to select your desired subtitle, then press [OK].  
e.g.) Blu-ray Disc™



4. Press [OPTIONS] to exit.

### ■ Subtitle style

For Blu-ray™ discs, the text style can be changed if subtitle style is available.

1. During playback, press [OPTIONS] to display the play menu.
2. Use [▲ / ▼] to select “Subtitle Style”, then press [OK].
3. Use [▲ / ▼] to select your desired style, then press [OK].
4. Press [OPTIONS] to exit.

### ⊖ Note

- Some discs will only allow you to change the subtitles from the disc menu or pop menu. Press [TOP MENU] or [POP MENU] to display the disc menu or pop menu.
- If the disc has no subtitle language or subtitle style, “X” will appear if you press [▲ / ▼].
- During playback of the secondary video, the primary subtitle setting is not available except when there is no subtitle for the secondary video.

## 8.13. Switching audio soundtrack



When playing back video material recorded with two or more soundtracks (these are often in different audio languages or audio formats), you can switch between them during playback.

### ■ Using [AUDIO]

1. During playback, press [AUDIO].
  - Pressing [AUDIO] repeatedly switches the audio.
  - For Blu-ray™ discs, [AUDIO] is only available in primary audio.

### ■ Using [OPTIONS]

1. During playback, press [OPTIONS] to display the play menu.
2. Use [▲ / ▼] to select “Audio”, then press [OK].
3. Use [▲ / ▼] to select your desired audio, then press [OK].  
e.g.) Blu-ray Disc™



4. Press [OPTIONS] to exit.

### ■ Secondary audio

For Blu-ray™ discs, the audio in PiP can be switched. (Refer to “PiP (BONUSVIEW™) setting” → (page 25).)

1. During playback, press [OPTIONS] to display the play menu.
2. Use [▲ / ▼] to select “Secondary Audio”, then press [OK].
3. Use [▲ / ▼] to select your desired audio, then press [OK].
4. Press [OPTIONS] to exit.

### ⊖ Note

- Secondary audio will not be output when secondary video is not displayed or when the HDMI setting for audio output is set to “Bitstream”. (For some Blu-ray™ discs, secondary audio will be output even when secondary video is off.)
- Sound mode cannot be changed during playback of discs not recorded in multiple audio mode.
- Some discs allow changing the audio language setting from disc menu. (Operation varies depending on the discs. Refer to the manual accompanying the disc.)

---

## 8.14. Switching camera angles



Some BD-videos and DVD-videos contain scenes which have been shot simultaneously from various angles. You can change the camera angle when  appears on the TV screen.

1. During playback, press **[OPTIONS]** to display the play menu.
2. Use **[▲ / ▼]** to select “Angle”, then press **[OK]**.
3. Use **[▲ / ▼]** to select your desired angle.
4. Press **[OPTIONS]** to exit.

### Note

- If “Angle Icon” setting is set to “Off”,  will not appear on the TV screen.

---

## 8.15. Noise reduction



Reduces the noise of the playback picture.

1. Use **[▲ / ▼ / ◀ / ▶]** to select “Setup” in the home menu, then press **[OK]**.
2. Use **[▲ / ▼]** to select “Video”, then press **[OK]**.
3. Use **[▲ / ▼]** to select “Noise Reduction”, then press **[OK]**.
4. Use **[▲ / ▼]** to select your desired setting, then press **[OK]**.
5. Press **[🏠 (HOME)]** to exit.

### Note

- With regard to the setting value, the larger the value is, the more notably the effect appears. Value “0” turns off noise reduction.

---

## 8.16. Closed caption



Closed caption displays subtitles in synchronization with the video.

1. During playback, press **[OPTIONS]** to display the play menu.
2. Use **[▲ / ▼]** to select “CC Select”, then press **[OK]**.
3. Use **[▲ / ▼]** to select your desired stream, then press **[OK]**.
4. Press **[OPTIONS]** to exit.

### Note

- Configure the closed caption display settings (font color, size, style, etc.) in the setup in advance. Refer to page 33 - 34.

## 9. List of settings

In “Setup”, you can customize various kinds of settings as you prefer. Refer to the following instructions to navigate through the setup menu.

1. Press [**HOME**] to access the home menu.
2. Use [**▲** / **▼** / **◀** / **▶**] to select “Setup”, then press [**OK**].
3. Use [**▲** / **▼**] to select the desired category, then press [**OK**].
4. Use [**▲** / **▼**] to move up and down the list to select menus / options.
5. To make a selection or to access options of an item, select the desired item, then press [**OK**].
  - To go back to the previous screen, press [**BACK**].
6. Press [**HOME**] to exit.

Refer to the following table for the types of settings you can customize.

The item highlighted in gray is the default setting.

Category	Menus / Options			
Video	TV display	4:3 Normal		
		4:3 Crop		
		16:9 Widescreen		
		16:9 Squeeze		
	HDMI video	Auto		
		480p		
		720p		
		1080i		
		1080p		
	Noise reduction	1080p/24		
		Off		
		Low		
		Medium		
Audio	Night mode	High		
		Auto		
		On		
	HDMI audio	Off		
		Bitstream		
		LPCM		
Preference	Menu language	Re-encode		
		Auto		
		English		
		Français		
	Audio	Audio	Español	
			Bulgarian	Italian
			Chinese	Japanese
			Czech	Korean
			Danish	Norwegian
			Dutch	Polish
			English	Portuguese
			Finnish	Romanian
			French	Russian
			German	Slovak
			Greek	Spanish
			Hungarian	Swedish
			Icelandic	Turkish
			Irish	Other

Category	Menus / Options		
Preference	Subtitle	Off	
		Bulgarian	Italian
		Chinese	Japanese
		Czech	Korean
		Danish	Norwegian
		Dutch	Polish
		English	Portuguese
		Finnish	Romanian
		French	Russian
		German	Slovak
		Greek	Spanish
		Hungarian	Swedish
		Icelandic	Turkish
		Irish	Other
		Disc menu	Bulgarian
	Chinese		Japanese
	Czech		Korean
	Danish		Norwegian
	Dutch		Polish
	English		Portuguese
	Finnish		Romanian
	French		Russian
	German		Slovak
	Greek		Spanish
	Hungarian		Swedish
	Icelandic		Swedish
	Irish		Other
	Parental control	Off	
		8 [Adult]	4 [PG-13]
		7 [NC-17]	3 [PG]
		6 [R]	2 [G]
		5 [PGR]	1 [Kid Safe]
	Change password		
	Screen saver	On	
		Off	
	Angle icon	On	
		Off	
	EasyLink	On	
		Off	
	One Touch Play	On	
		Off	
	One Touch Standby	On	
		Off	
	Advanced	Software update	Disc
			USB
		Version info	
		Restore default settings	Reset AV settings
Erase unit BD-ROM data			
Erase USB BD-ROM data			
		Reset All settings	
OSS			

Category	Menus / Options	
Accessibility	Voice Guide	On
		Off
	Voice Guide Volume	Loud
		Medium
		Soft
	Voice Guide Speed	Fast
		Normal
		Slow
	Voice Guide Pitch	High
		Medium
		Low
	Voice Guide Verbosity	Detail
		Basic
	CC style	Auto
		Custom
	CC font color	Default
		White
		Black
		Red
		Green
		Blue
		Yellow
		Magenta
		Cyan
	CC font size	Default
		Standard
		Small
		Large
	CC font style	Default
		Monospaced with serifs
		Proportionally spaced with serifs
		Monospaced without serifs
		Proportionally spaced without serifs
		Casual
		Cursive
	Small capitals	
	CC font opacity	Solid
		Translucent
		Transparent
	CC font outline	Default
		None
		Raised
		Depressed
		Uniform
		Left drop shadowed
		Right drop shadowed
	CC font outline color	White
Black		
Red		
Green		
Blue		
Yellow		
Magenta		
Cyan		

Category	Menus / Options	
Accessibility	CC background color	Default
		White
		Black
		Red
		Green
		Blue
		Yellow
		Magenta
		Cyan
	CC background opacity	Solid
		Translucent
		Transparent
	CC window color	Default
		White
		Black
		Red
		Green
		Blue
		Yellow
		Magenta
		Cyan
CC window opacity	Solid	
	Translucent	
	Transparent	

 **Note**

- In order to enable the voice guide function, the OSD language needs to be set to English or Spanish. Voice guide is not available in French.
- There may be grayed-out (unselectable) items while the unit is in resume-on-stop mode. In order to configure these settings, exit resume-on-stop mode.

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# 10. Setups

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## 10.1. EasyLink (HDMI CEC)

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🏠(HOME) → “Setup” → “Preference” → “EasyLink”

EasyLink(HDMI CEC) allows integrated system control over HDMI and is part of the HDMI standard. This function may not work properly depending on the device connected to the unit. When “EasyLink” setting is set to “On” the functions listed below will be available.

### ■ One touch play

When the buttons below are pressed then operations are performed on this unit, the TV will automatically be turned on and switched to the appropriate video source input.

#### Buttons for one touch play:

- [▲ (OPEN/CLOSE)], [▶ (PLAY)], [⏮ (SKIP)], [⏭ (SKIP)], [🏠 (HOME)] (on the remote control)
- [TOP MENU], [POP MENU] (on the remote control when the a disc is inserted in the unit)

### ■ One touch standby

When you press and hold [⏻ (POWER)] for 2 seconds, it turns off the TV first and then turns off the power on this unit. When the connected HDMI CEC compatible display device is turned off first, then it turns off the power to this unit.

### ■ System information

#### Get & set menu language

The unit recognizes the OSD language set on the TV and automatically sets the same language as the player menu language (OSD menu language) for this unit. Go to “Menu Language” under “Preference” → (page 31) to see available languages.

- Feature is available only when “Auto” is selected in the setup menu “Menu Language” section in “Setup” while connected via an HDMI cable.

## 10.2. HDMI video resolution

 (HOME) → “Setup” → “Video” → “HDMI Video”

Set the resolution of the video signal being output from the HDMI OUT jack.

You can select the desired video resolution among the settings listed below: “Auto”, “480p”, “720p”, “1080i”, “1080p”, “1080p/24”.

Actual output resolution:

Setting in the “HDMI Video”	Source					
	480i/60	480p/60	720p/60	1080i/60	1080p/60	1080p/24
Auto	The highest resolution supported by your display device will automatically be in effect.					
480p	480p/60					
720p	720p/60					
1080i	1080i/60					
1080p	1080p/60					
1080p/24	1080p/60					1080p/24

- For AVCHD, outputting the video in 24 frames per second (1080p/24) is not available.

### Note

- The selected resolution must also be supported by your display device.
- If your TV and the unit are connected by a DVI cable and if “Auto” is selected, “480p” will be automatically in effect.
- Refer also to your TV’s manual.
- When connected to an HDCP incompatible display device, the picture will not be displayed properly.
- The audio signals from the HDMI OUT jack (including the sampling frequency, the number of channels and bit length) may be limited by the connected device.
- Among the display devices that support HDMI, some do not support audio output (for example, projectors). While connected to a device such as a projector, audio will not be output from the HDMI OUT jack.
- When this unit’s HDMI OUT jack is connected to a DVI-D compatible display device(s) (HDCP compatible) with an HDMI-DVI converter cable, the signals are output in digital RGB.
- HDMI video resolution does not work during playback of a BD-video.

### Copyright protection system

To play back the digital video images of a BD-video or DVD-video via an HDMI connection, it is necessary that both the player and the display device (or an AV receiver / amplifier) support a copyright protection system called HDCP (high-bandwidth digital content protection system). HDCP is copy protection technology which prevents copying or playback of encrypted content when connected to a non-HDCP compliant AV device. This unit supports HDCP. Please read the operating instructions of your display device (or an AV receiver / amplifier) for more information.

## 10.3. Parental control

Some BD-videos or DVD-videos feature parental lock levels. Playback will stop if the ratings of the content exceed the levels you set on the player, it will require you to enter a password before the disc will play back. This feature prevents your children from viewing inappropriate material.

### ■ Change password

🏠(HOME) → “Setup” → “Preference” → “Change Password”

1. Use [▲ / ▼] to select “Setup” in the home menu, then press [OK].
2. Use [▲ / ▼] to select “Preference”, then press [OK].
3. Use [▲ / ▼] to select “Change Password”, then press [OK].
4. Enter your 4-digit password.
  - The default value is “0000”.
  - Use [▲ / ▼] to enter the first digit of your password, then press [▶].
  - When 4-digit numbers are entered, press [OK].
5. Set a new password.
  - Use [▲ / ▼] to enter numbers, then use [◀ / ▶] to move the input field. When 4-digit numbers are entered, press [OK].
  - Record your new password, in case you forget it.
6. Re-enter the same new 4-digit password in the same way as step 4.
7. Press [🏠 (HOME)] to exit.

### To temporarily disable parental lock:

Some discs allow you to temporarily disable parental lock. When you try to play them back, the password entry screen will be displayed.

Follow the instruction which appears on the TV screen to disable parental lock.

### ■ Rating level

🏠(HOME) → “Setup” → “Preference” → “Parental Control”

1. Use [▲ / ▼] to select “Setup” in the home menu, then press [OK].
2. Use [▲ / ▼] to select “Preference”, then press [OK].
3. Use [▲ / ▼] to select “Parental Control”, then press [OK].
4. Enter your 4-digit password.
  - Use [▲ / ▼] to enter the first digit of your password, then press [▶].
  - When 4-digit numbers are entered, press [OK].
5. Use [▲ / ▼] to select your desired level, then press [OK].
6. Press [🏠 (HOME)] to exit.

	RATING EXPLANATIONS
Off	Parental control is inactive; all discs can be played back.
8 [Adult]	BD / DVD software of any grades (adult / general / children) can be played back.
7 [NC-17]	No one under 18.
6 [R]	Restricted; under 18.
5 [PGR]	Parental guidance recommended.
4 [PG-13]	Unsuitable for children under 13.
3 [PG]	Parental guidance suggested.
2 [G]	General audience.
1 [Kid Safe]	Suitable for children.

---

## 10.4. Software update

 (HOME) → “Setup” → “Advanced” → “Software Update”

This unit lets you update the software yourself using a software update disc or USB memory stick.

The available discs are below:

- BD-RE/-R
- DVD-RW/-R
- CD-RW/-R

### ■ Disc / USB memory stick update

You can update the software by using a disc or USB memory stick.

Prepare a blank disc or USB memory stick for software update:

Navigate to [www.philips.com/support](http://www.philips.com/support), and download the latest version software to a blank disc or USB memory stick using a PC by following the directions described on the website.

- Use a blank disc or USB memory stick, download one software per disc or USB memory stick. Write the software in the root directory of the disc or USB memory stick.
  - For more details on how to download the software, please refer to the website.
1. **Insert the disc or connect the USB memory stick for software update.**
    - If a disc is inserted, the file list screen will appear. Press [ (HOME)].
    - After connecting a USB memory stick, wait 10–20 seconds, then move on to step 2.
  2. Use [ /  /  / ] to select “Setup” in the home menu, then press [OK].
  3. Use [ / ] to select “Advanced”, then press [OK].
  4. Use [ / ] to select “Software Update”, then press [OK].
  5. Use [ / ] to select “Disc” or “USB”, then press [OK].
    - This unit now starts loading the update file, then installs it. Update will take a while. Leave the unit until it automatically restarts.
  6. After updating finishes, this unit will restart automatically. Remove the disc or USB memory stick from this unit.

### ⚠ Caution

- Please do not unplug the AC power cord, eject the disc or disconnect the USB memory stick or press [ (POWER)] to turn the unit to standby mode while performing a “Disc / USB Update”.

### 📌 Note

- Software update will not change any of the current settings.

---

## 10.5. Voice guide

 (HOME) → “Setup” → “Accessibility”

Menus to configure various settings for the voice guide function.

1. Use [**▲** / **▼** / **◀** / **▶**] to select “Setup” in the home menu, then press [**OK**].
2. Use [**▲** / **▼**] to select “Accessibility”, then press [**OK**].
3. Use [**▲** / **▼**] to select the desired setting, then press [**OK**].

**“Voice Guide”:**

Turns on/off the voice guide function.

**“Voice Guide Volume”:**

Configures the volume of the voice.

**“Voice Guide Speed”:**

Configures the speech rate.

**“Voice Guide Pitch”:**

Configures the voice pitch.

**“Voice Guide Verbosity”:**

Configures whether to read detailed information on the current item/operation.

4. Use [**▲** / **▼**] to select the desired setting, then press [**OK**].
5. Press [**⬆** (HOME)] to exit.

 **Note**

- In order to enable the voice guide function, the OSD language needs to be set to English or Spanish. Voice guide is not available in French.
- When voice guide is set to on, the HDMI audio setting is fixed to LPCM. Changing the HDMI audio setting is only possible when voice guide is set to off.
- While the voice guide function is enabled, operations may slow down.
- When this unit is in resume-on-stop mode, the “Voice Guide” setting item is grayed-out and is not configurable. In order to configure “Voice Guide”, remove the disc to exit resume-on-stop mode.

---

## 10.6. Restore default settings

 (HOME) → “Setup” → “Advanced” → “Restore default settings”

Menus to reset player settings.

1. Use [**▲** / **▼** / **◀** / **▶**] to select “Setup” in the home menu, then press [**OK**].
2. Use [**▲** / **▼**] to select “Advanced”, then press [**OK**].
3. Use [**▲** / **▼**] to select “Restore default settings”, then press [**OK**].
4. Use [**▲** / **▼**] to select the desired setting, then press [**OK**].

**“Reset AV settings”:**

All the settings except for “Parental Control” settings will be reset to default.

**“Erase unit BD-ROM data”:**

Clears the data saved for the BD-ROM contents, such as BD-ROM game scores, on this player.

**“Erase USB BD-ROM data” (Only available when a USB memory stick is connected):**

Clears supplemental data for BD-ROM playback, such as subtitle data, from the USB memory stick.

**“Reset All settings”:**

Resets this unit to its factory default settings.

5. Use [**◀** / **▶**] to select “OK”, then press [**OK**].
6. Confirmation message will appear. Press [**OK**] to complete the setting.

 **Caution**

- Do not remove the USB memory stick while executing “Erase USB BD-ROM data”. It will damage the USB memory stick.

 **Note**

- “Restore default settings” cannot be performed while a BD-V / DVD-V / AVCHD / audio CD disc is inserted in this unit, and this unit is in resume-on-stop mode.
- Reset AV settings does not clear the password or the parental settings installation settings.

# 11. Troubleshooting

Problem	Tip
No power.	Check the AC power cord, if it is properly connected.
	Try another power outlet.
	Unplug the AC power cord, and wait for about 5-10 seconds. Plug it back in and attempt to power on the unit.
No sound or picture.	Make sure both the TV and Blu-ray Disc™ player are turned on.
	Confirm the connections to the TV are made properly as shown in the “Connections” → (page 13).
	Check to see whether the connected TV or another device supports HDCP. (This unit will not output a video signal unless the other device supports HDCP.)
No reaction to the remote control.	Reduce the distance to infrared sensor window.
	Confirm that the player's AC power cord is plugged into a power outlet.
	Check the batteries in the remote control and make sure they are inserted properly by + or - symbols.
	Please check IR signal. Refer to “IR signal check” → (page 45).
No audio / video signal on the display device via HDMI cable.	If the unit is connected to a non-certified HDMI device, the audio / video signal will not output to that device.
	Make sure the display device is on the correct input / video source.
	Perform an HDMI hotplug: Disconnecting the HDMI cable from the display device, turn on both devices, and replug the HDMI cable back in.
	Check with the TV manufacturer, if there are any software updates available for the TV.
	Check to see if the HDMI cable is a certified version.
No high-definition video signal on the TV screen.	Does the disc contain high-definition video? High-definition video is only available when the disc contains it.
	Does the TV support high-definition video? High-definition video is only available when the TV supports it.
Distorted picture.	Sometimes a small amount of picture distortion may appear. This is not a malfunction.
Completely distorted picture or black / white picture with Blu-ray Disc™ / DVD.	Make sure the disc is compatible with this unit.
No sound or distorted sound.	Adjust the volume.
	Check to see if the speakers are connected correctly.
	Check the HDMI connection.
	Make sure the HDMI cable is not plugged into an HDMI-DVI adapter or projector which does not handle digital sound.
	Check the settings in the “Audio” menu.
Picture freezes momentarily during disc playback.	Check the disc for fingerprints / scratches and clean with a soft cloth wiping from the center to the outer edge.
Cannot play back a disc.	Make sure that the disc is playable on this unit.
	Check the region code of the disc. This unit supports the following region codes. - Blu-ray Disc™: “A” - DVD: “ALL” or “1”
	For DVD-RW/-R, make sure that the disc is finalized.
	Clean the disc.
	Is the disc a newer title? This problem may be solved by software update. Refer to “Software update” → (page 38).

continued on next page

Problem	Tip
“BD-ROM Data(USB) Check” message appears when attempting to play a Blu-ray Disc™.	Connect a USB memory stick first, then insert the Blu-ray Disc™. - Upon loading a Blu-ray Disc™, this unit will check the USB Memory Stick used to save necessary information for playback of some BD-ROM discs.
A music / photo file does not play.	Confirm that the file type is supported. Refer to → (page 17) for the compatible file extensions. The file may be corrupted. Check to see if it is playable on a PC or other devices.
No return to start-up screen when disc is removed.	Soft reset this unit by turning it off for 30 seconds, then on again. To completely reset the unit, press and hold [⏻ (POWER)] on the front panel for 10 seconds to shut down the unit or unplug the AC power cord from the AC outlet for 5-10 seconds.
✖ will appear on the TV screen.	The operation is not possible.
Buttons do not work or the unit stops responding.	To soft reset the unit, press and hold [⏻ (POWER)] on the front panel for 10 seconds to shut down the unit or to hard reset the unit by unplugging the AC power cord from the AC outlet for 5-10 seconds.
The unit does not respond to some operating commands during playback.	The operations may be prohibited by the disc. Refer to the instructions for the disc.
The unit cannot read Blu-ray Disc™ / DVD / CD.	Condensation? (Let the unit sit and dry for 1 or 2 hours) Check to see if the disc is compatible with this unit. (Refer to → (page 16).) Wipe dirt off the disc from the center to the outside or replace the disc. Refer to “Cleaning discs” → (page 45).
Scene shooting angle does not switch.	Angles cannot be switched for Blu-ray Disc™ / DVD which do not contain multiple angles. In some cases multiple angles are only recorded for specific scenes.
Playback does not start when a title is selected.	Check the settings in “Parental Control” menu.
Error message appears when I select “Auto” in the “Menu Language”.	Make sure that the unit is connected to a TV that is compatible with HDMI CEC and the “EasyLink” is set to “On”. This error message may appear when your TV’s OSD language is not supported by this unit.
Cannot play back AVCHD file.	This unit cannot play back stand-alone AVCHD files (*.m2ts, *.mts or *.m2t) written to a DVD. The DVD containing AVCHD files must have a proper file and folder structure meeting AVCHD format specifications. Please use AVCHD compliant device / software to burn or copy AVCHD files to DVD. (Please refer to user manuals of the device / software for more information.)
The capacity of the USB memory stick decreased.	Data may be written on the USB memory stick when a BD-video uses the virtual package feature while a USB memory stick is connected to the unit.
Cannot play back a MPEG-2 video and audio from the USB memory stick.	MPEG-2 is not compatible with this unit.
Cannot read the contents on the USB memory stick.	The USB memory stick is not compatible with this unit or the contents may be damaged. Try and turn off the unit, then turn it back on. To soft reset the unit, press and hold [⏻ (POWER)] on the front panel for 10 seconds to shut down the unit or to hard reset the unit by unplugging the AC power cord from the AC outlet for 5-10 seconds.
Cannot play back BD-Video.	Connect a USB memory stick (256MB or more of available memory) which is formatted on this unit. Some discs require memory when playing back content. Do not disconnect the USB memory stick during playback.
Cannot play back 3D.	3D Blu-ray™ discs are not supported by this unit.

Problem	Tip
Cannot load a Blu-ray Disc™ (stuck in “Loading...” mode) and cannot open the disc tray to eject the disc.	Unplug unit from AC outlet for 20 seconds. Plug unit back in and press the <b>[▲ (OPEN/CLOSE)]</b> on the unit to eject the disc.
Cannot read a USB memory stick.	The format of the USB memory stick is not compatible with this unit. If the USB memory stick has been formatted on a PC or another device, the file system may be incompatible with this unit. This unit supports the FAT16 / FAT32 file systems.
Cannot play back photo files from a disc.	Make sure that the disc was recorded in the UDF, ISO9660 or JOLIET format.
Cannot find a photo file.	Make sure that the file extension is .jpg / .JPG / .jpeg / .JPEG. / .png / or .PNG.
Cannot play back music files from a disc.	Make sure that the disc was recorded in the UDF, ISO9660 or JOLIET format. Confirm that the bitrate and sampling frequency are compatible with this unit. (Refer to → (page 17))
Cannot find a music file.	Make sure that the file extension is FLAC or WAV for music files.
Music files play choppy.	CDs / DVDs containing FLAC (.flac) / WAV (.wav) files with high frequency and large quantization bit rates may not play properly. In such cases, copy the music files to a Blu-ray Disc™ or USB memory stick, then try playing.
No audio signal from surround system of the audio system.	Make sure the audio system is turned on.
	Check the input mode on the audio system if it is on the correct channel.
	Check if the surround system is compatible with either Bitstream or LPCM. If not sure, please check the user manual or contact the surround manufacturer. Once confirmed, check the setting in the “Setup” of this unit.
	Increase the volume level of the surround system.

#### Note

- Do not attempt to repair the Blu-ray Disc™ player yourself. This may cause severe injury, irreparable damage to your Blu-ray Disc™ player and void your warranty.
- Please have your Blu-ray Disc™ player model and serial number available before contacting us. These numbers are available on the cabinet, as well as on the packaging.

## 12. Specifications

### General

Signal system	NTSC Color
Power requirements	120 V AC, 60 Hz
Power consumption	15 W (standby: 0.5 W)
Dimensions (width x height x depth)	11.1 x 1.7 x 7.9 inches (280.0 x 41.0 x 198.5 mm)
Weight	1.0 kg (2.21 lbs.)
Operating temperature	41°F (5°C) to 104°F (40°C)
Operating humidity	Less than 80 % (no condensation)

### Terminals

#### USB input

TYPE A

#### HDMI output

HDMI jack x 1

Digital Video: 480p, 720p, 1080i, 1080p, 1080p/24

Digital Audio

#### Note

- The specifications and design of this product are subject to change without notice.

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## 13. Maintenance

### ■ Servicing

- Please refer to relevant topics in “Troubleshooting” → (page 41) before returning the product.
- If this unit becomes inoperative, do not try to correct the problem by yourself. There are no user-serviceable parts inside. Eject the disc (if possible), disconnect the USB memory stick (if connected to the unit), place the unit into standby mode, unplug the AC power plug, and please contact: 1-866-202-5960 or visit :  
[www.philips.com/support](http://www.philips.com/support)

### ■ Cleaning the cabinet

- Wipe the front panel and other exterior surfaces of the unit with a soft cloth.
- Never use a solvent, thinner, benzene or alcohol to clean the unit. Do not spray insecticide liquid near the unit. Such chemicals may discolor the surface or damage the unit.

### ■ Cleaning discs

- When a disc becomes dirty, clean it with a cleaning cloth. Wipe the disc from the center to outside. Do not wipe in a circular motion.
- Do not use solvents such as benzine, thinner, commercially available cleaners, detergent, abrasive cleaning agents or antistatic spray intended for analog records.

### ■ Cleaning the disc lens

- If this unit still does not perform properly although you referred to relevant sections and “Troubleshooting” → (page 41) in this user manual, the laser optical pickup unit may be dirty. Consult your dealer or an authorized service center for inspection and cleaning of the laser optical pickup unit.

### ■ Disc handling

- Handle the discs so that fingerprints and dust do not adhere to the surfaces of the discs.
- Always store the disc in its protective case when it is not used.
- Note that discs with special shapes (heart-shaped discs, octagonal discs, etc.) cannot be played back on this unit. Do not attempt to play such discs, as they may damage the unit.

### ■ IR signal check

If the remote control does not work properly, you can test IR signal using a digital camera (including a cellphone with a built-in camera) to see if the remote control sends out the infrared signal.

1. Turn on the digital camera.
2. Direct a digital camera to the remote control, then press and hold any button on the remote control.
  - If infrared light appears on the digital camera display, the remote control is working.



### ⊖ Note

- Some cameras have an IR filter and will not display the IR signal.

## 14. Trademark information



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## 15. Glossary

### AACS

Advanced Access Content System (AACS) is the content protection scheme used with Blu-ray™ discs.

### Analog audio

An electrical signal that directly represents sound.

Compare this to digital audio which can be an electrical signal, but is an indirect representation of sound. See also “**Digital audio**”.

### Aspect ratio

The width of a TV screen relative to its height.

Conventional TVs are 4:3 (in other words, the TV screen is almost square); widescreen models are 16:9 (the TV screen is almost twice as wide as its height).

### AVCHD

AVCHD is a new format for high definition video camcorders which can record and play high-resolution HD images.

### Blu-ray Disc™

Blu-ray Disc™ is a next generation optical video disc which is capable of storing much more data than a conventional DVD. The large capacity makes it possible to benefit from the features such as high-definition videos, multi-channel surround sounds, interactive menus and so on.

### Chapter

Just as a book is split up into several chapters, a title on a BD-video or DVD-video is usually divided into chapters. See also “**Title**”.

### Cinavia™

Cinavia Notice

This product uses Cinavia technology to limit the use of unauthorized copies of some commercially-produced film and videos and their soundtracks. When a prohibited use of an unauthorized copy is detected, a message will be displayed and playback or copying will be interrupted.

More information about Cinavia technology is provided at the Cinavia Online Consumer Information Center at

<http://www.cinavia.com>

To request additional information about Cinavia by mail, send a postcard with your mailing address to: Cinavia Consumer Information Center, P.O. Box 86851, San Diego, CA, 92138, USA.

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### Digital audio

An indirect representation of sound by numbers. During recording, the sound is measured at discrete intervals (44,100 times a second for CD audio) by an analog-to-digital converter, generating a stream of numbers. On playback, a digital-to-analog converter generates an analog signal based on these numbers. See also “**Sampling frequency**” and “**Analog audio**”.

### Dolby Digital

The system to compress digital sound developed by Dolby Laboratories. It offers you sound of stereo (2ch) or multi-channel audio.

### Dolby Digital Plus

Dolby Digital Plus is the next generation digital audio compression technology developed as an extension to Dolby Digital. Blu-ray Disc™ supports 7.1 multi-channel surround sound output.

### Dolby TrueHD

Dolby TrueHD is a lossless coding technology developed for next generation optical discs. Blu-ray Disc™ supports 7.1 multi-channel surround sound output.

### DTS® (Digital Theater System)

DTS® is a multi-channel surround sound system. You can enjoy movie dynamic and realistic sound like movie theater. DTS surround sound technologies were developed by DTS, Inc.

### DTS-HD®

DTS-HD® is a lossless coding technology developed as an extension of the original DTS Coherent Acoustics format. Blu-ray Disc™ supports 7.1 multi-channel surround sound output.

### HDMI (High-Definition Multimedia Interface)

A digital interface between an audio and video Source. It can transmit component video, audio, and control signal with one cable connection.

### JPEG (Joint Photographic Experts Group)

JPEG is a method of compressing still picture files. You can copy JPEG files on BD-RE/-R, DVD-RW/-R, CD-RW/-R, or USB memory stick from a computer and play back the files on this unit.

### Local storage

A storage area of sub contents for playing virtual packages on BD-video.

## **PCM (Pulse Code Modulation)**

The most common system of encoding digital audio, found on CD and DAT. Excellent quality, but requires a lot of data compared to formats such as Dolby Digital and MPEG audio. For compatibility with digital audio recorders (CD, MD and DAT) and AV amplifiers with digital Inputs, this unit can convert Dolby Digital, DTS, and MPEG audio to PCM. See also “**Digital audio**”.

## **Region code**

Regions associate discs and players with particular areas of the world. This unit will only play back discs that have compatible region codes. You can find the region code of your unit by looking on the rear panel. Some discs are compatible with more than one region (or all regions).

## **Sampling frequency**

The rate which sound is measured by a specified interval to turn into digital audio data. The numbers of sampling in one second defines as sampling frequency. The higher the rate, the better the sound quality.

## **Title**

A collection of chapters on BD-video or DVD-video. See also “**Chapter**”.

## **Track**

Audio CD uses Tracks to divide up the content of a disc. The BD-video or DVD-video equivalent is called a chapter.

See also “**Chapter**”.

## 16. Limited warranty

# Ninety (90) days limited warranty

### Warranty coverage:

This warranty obligation is limited to the terms as set forth below.

### Who is covered:

This product warranty is issued to the original purchaser or the person receiving the product as a gift against defects in materials and workmanship as based on the date of original purchase ("Warranty Period") from an Authorized Dealer. The original sales receipt showing the product name and the purchase date from an authorized retailer is considered such proof.

### What is covered:

This warranty covers new products if a defect in material or workmanship occurs and a valid claim is received within the Warranty Period. At its option, the company will either (1) repair the product at no charge, using new or refurbished replacement parts, or (2) exchange the product with a product that is new or which has been manufactured from new, or serviceable used parts and is at least functionally equivalent or most comparable to the original product in current inventory, or (3) refund the original purchase price of the product. Replacement products or parts provided under this warranty are covered against defects in materials and workmanship from the date of the replacement or repair for ninety (90) days or for the remaining portion of the original product's warranty, whichever provides longer coverage for you. When a product or part is exchanged, any replacement item becomes your property and the replaced item becomes company property. When a refund is given, your product becomes company property.

**Note: Any product sold and identified as refurbished or renewed carries a ninety (90) day limited warranty. Replacement product can only be sent if all warranty requirements are met. Failure to follow all requirements can result in delay.**

### What is not covered - Exclusions and limitations:

This Limited Warranty applies only to new company manufactured products that can be identified by the trademark, trade name, or logo affixed to it. This Limited Warranty does not apply to any hardware product or any software, even if packaged or sold with the product, as manufacturers, suppliers, or publishers may provide a separate warranty for their own products packaged with the bundled product.

The company is not liable for any damage to or loss of any programs, data, or other information stored on any media contained within the product, or other additional product or part not covered by this warranty. Recovery or reinstallation of programs, data or other information is not covered under this Limited Warranty.

This warranty does not apply (a) to damage caused by accident, abuse, misuse, neglect, misapplication, or non-supplied product, (b) to damage caused by service performed by anyone other than company approved Authorized Service Location, (c) to a product or a part that has been modified without written company permission, or (d) if any serial number has been removed or defaced, or (e) product, accessories or consumables sold "AS IS" without warranty of any kind by including refurbished product sold "AS IS" by some retailers.

### This Limited Warranty does not cover:

- Shipping charges to return defective product.
- Labor charges for installation or setup of the product, adjustment of customer controls on the product, and installation or repair of antenna/signal source systems outside of the product.
- Product repair and/or part replacement because of improper installation or maintenance, connections to improper voltage supply, power line surge, lightning damage, retained images or screen markings resulting from viewing fixed stationary content for extended periods, product cosmetic appearance items due to normal wear and tear, unauthorized repair or other cause not within the control of the company.
- Damage or claims for products not being available for use, or for lost data or lost software.
- Damage from mishandled shipments or transit accidents when returning product.
- A product that requires modification or adaptation to enable it to operate in any country other than the country for which it was designed, manufactured, approved and/or authorized, or repair of products damaged by these modifications.
- A product used for commercial or institutional purposes (including but not limited to rental purposes).
- Product lost in shipment and no signature verification receipt can be provided.
- Failure to operate per user manual.

### To obtain assistance...

Contact the Customer Care Center at:  
1-866 -202- 5960

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