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The software of this player may be updated in the future. To download any available updates and the Operating Instructions with advanced features, please visit the following website:
http://www.sony.com/bluraysupport/
Owner’s Record
The model and serial numbers are located at the bottom of the unit. Record the serial number in the space provided below. Refer to them whenever you call upon your dealer regarding this product.

Model No.______________
Serial No.______________

For Customers in the USA
If this product is not working properly, please call 1-800-222-SONY(7669).

For Customers in Canada
If this product is not working properly, please contact our Customer Information Service Center at 1-877-899-7669 or write to us at: Customer Information Service, 115 Gordon Baker Road, Toronto, Ontario, M2H 3R6

WARNING
To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.
To avoid electrical shock, do not open the cabinet. Refer servicing to qualified personnel only.
Do not expose batteries or appliances with battery-installed to excessive heat, such as sunshine and fire.

CAUTION
The use of optical instruments with this product will increase eye hazard. As the laser beam used in this Blu-ray Disc/DVD player is harmful to eyes, do not attempt to disassemble the cabinet. Refer servicing to qualified personnel only.

Precautions
• The nameplate is located on the bottom of the unit.
• To prevent fire or shock hazard, do not place objects filled with liquids, such as vases, on the apparatus.
• Install this unit so that the AC adaptor can be unplugged from the wall socket immediately in the event of trouble.
• The player is not disconnected from the AC power source as long as it is connected to the wall outlet, even if the player itself has been turned off.
• To reduce the risk of fire, do not cover the ventilation opening of the appliance with newspapers, tablecloths, curtains, etc.
• Do not expose the appliance to naked flame sources (for example, lighted candles).
• Do not install this player in a confined space, such as a bookshelf or similar unit.
• If the player is brought directly from a cold to a warm location, or is placed in a very damp room, moisture may condense on the lenses inside the player. Should this occur, the player may not operate properly. In this case, remove the disc and leave the player turned on for about half an hour until the moisture evaporates.

On AC adaptor
• Use the supplied AC adaptor for this player, as other adaptors may cause a malfunction.
• Do not disassemble or reverse-engineer.
• Do not connect the AC adaptor to a traveler’s electric transformer, which may generate heat and cause a malfunction.
• Do not drop or apply shock.

IC Radiation Exposure Statement
This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment and meets RSS-102 of the IC radio frequency (RF) Exposure rules. This equipment should be installed and operated keeping the radiator at least 20cm or more away from person’s body (excluding extremities: hands, wrists, feet and ankles).
Contains IC : 2878D-J20H086

This symbol 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.

This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

On AC adaptor
• Use the supplied AC adaptor for this player, as other adaptors may cause a malfunction.
• Do not disassemble or reverse-engineer.
• Do not connect the AC adaptor to a traveler’s electric transformer, which may generate heat and cause a malfunction.
• Do not drop or apply shock.

IC Radiation Exposure Statement
This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment and meets RSS-102 of the IC radio frequency (RF) Exposure rules. This equipment should be installed and operated keeping the radiator at least 20cm or more away from person’s body (excluding extremities: hands, wrists, feet and ankles).
Contains IC : 2878D-J20H086
For Customers in Canada

This device complies with Industry Canada’s licence-exempt RSSs. Operation is subject to the following two conditions:

(1) This device may not cause interference; and
(2) This device must accept any interference, including interference that may cause undesired operation of the device.

- 5 150 - 5 250 MHz band is restricted to indoor operations only.
- High-power radars are allocated as primary users (i.e. priority users) of the bands 5 250 - 5 350 MHz and 5 650 - 5 850 MHz and that these radars could cause interference and/or damage to LE-LAN devices.

For United States customers. Not applicable in Canada, including in the province Of Quebec. Pour les consommateurs Aux États Unis. Non applicable au Canada, y compris la province de Québec.

FCC WARNING

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

This transmitter must not be co-located or operated in conjunction with any other antenna or transmitter. The shielded Interface cable (LAN cable) must be used with the equipment in order to comply with the limits for a digital device pursuant to Subpart B of Part 15 of FCC Rules.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment and meets the FCC radio frequency (RF) Exposure Guidelines. This equipment should be installed and operated keeping the radiator at least 20cm or more away from person’s body (excluding extremities: hands, wrists, feet and ankles).

Contains FCC ID : MCLJ20H086

Compliance with FCC requirement 15.407©

Data transmission is always initiated by software, which is the passed down through the MAC, through the digital and analog baseband, and finally to the RF chip. Several special packets are initiated by MAC. These are the only ways the digital baseband portion will turn on the RF transmitter, which it then turns off at the end of the packet. Therefore, the transmitter will be on only while one of the aforementioned packets is being transmitted. In other words, this device automatically discontinues transmission in case of either absence of information to transmit or operational failure.

Frequency Tolerance : ± 20 ppm

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.
4 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.

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The source code for the software used in this product is subject to the GPL and LGPL, and is available on the Web. To download, please visit the following website: http://oss.sony.net/Products/Linux

Please note that Sony cannot respond to any inquiries regarding the content of this source code.

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Getting Started

Remote

The available functions of the remote are different depending on the disc or the situation.

1. **OPEN/CLOSE**
   - Opens or closes the door tray.

2. **TOP MENU**
   - Opens or closes the BD’s or DVD’s Top Menu.

3. **POP UP/MENU**
   - Opens or closes the BD-ROM’s Pop-up Menu, or the DVD’s menu.

4. **RETURN**
   - Returns to the previous display.

5. **M**
   - Moves the highlight to select a displayed item.

- **M**
  - as a shortcut key to launch track search window and input track number during music CD playback.
  - as a shortcut key to rotate photo clockwise/counterclockwise by 90 degrees.
  - as a shortcut key to perform search functions during DLNA video playback.

Center button (ENTER)
- Enters the selected item.

HOME
- Enters the player’s home screen.

BLUETOOTH (page 15)
- Scan device list will appear if this player has no paired Bluetooth device.
- Connect to the last connected device if this player has a paired Bluetooth device. If the connection fails, scan device list will appear.
- Disconnect the connected Bluetooth device.

The player automatically returns to standby mode
If any button on the player or remote is not pressed for more than 20 minutes, the player automatically returns to standby mode.
NETFLIX
Accesses the “NETFLIX” online service. For further NETFLIX online service details, visit the following website and check the FAQ: http://www.sony.com/bluraysupport/

4 ◄▶ ► (fast reverse/fast forward)
- Fast reverse/fast forward the disc when you press the button during playback. The search speed changes each time you press the button during video playback.
- Plays in slow motion, when pressed for more than one second in pause mode.
- Plays one frame at a time, when you press for a short time in pause mode.

▶ PLAY
Starts or re-starts playback.

►◄ PREV/NEXT ►
Skips to the previous/next chapter, track, or file.

II PAUSE
Pauses or re-starts playback.

■ STOP
Stops playback and remembers the stop point (resume point). The resume point for a title/track is the last point you played or the last photo for a photo folder.

SUBTITLE
Selects the subtitle language when multi-lingual subtitles are recorded on BD-ROMs/ DVD VIDEOS.

TV VOL +/-
Adjusts the TV volume.

AUDIO
Selects the language track when multi-lingual tracks are recorded on BD-ROMs/ DVD VIDEOS.
Selects the sound track on CDs.

MUTING
Turns off the sound temporarily.

DISPLAY
Displays the playback information on the screen.

To lock the disc tray (Child Lock)
You can lock the disc tray to avoid accidental opening of the tray.
While the player is turned on, press ■ STOP, HOME, and then TOP MENU button on the remote to lock or unlock the tray.

Code numbers of controllable TVs
Hold down -TV- ◄ and the TV manufacturer’s code using the remote buttons for 2 seconds.

<table>
<thead>
<tr>
<th>Manufacturer</th>
<th>Remote Button</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sony (Default)</td>
<td>Color button (YELLOW)</td>
</tr>
<tr>
<td>Hitachi</td>
<td>Color button (BLUE)</td>
</tr>
<tr>
<td>LG/Goldstar/NEC</td>
<td>Color button (RED)</td>
</tr>
<tr>
<td>Toshiba</td>
<td>Color button (GREEN)</td>
</tr>
<tr>
<td>RCA</td>
<td>TOP MENU</td>
</tr>
<tr>
<td>Mitsubishi/MGA</td>
<td></td>
</tr>
<tr>
<td>Pioneer</td>
<td>POP UP/MENU</td>
</tr>
<tr>
<td>Sharp</td>
<td>◄</td>
</tr>
<tr>
<td>Panasonic</td>
<td>ENTER</td>
</tr>
<tr>
<td>Samsung</td>
<td>◄</td>
</tr>
<tr>
<td>Philips</td>
<td>RETURN</td>
</tr>
</tbody>
</table>
Step 1: Connecting the Player

Do not connect the AC adaptor until you have made all the connections.

**Connecting to your TV**

Connect the player to your TV with a High Speed HDMI Cable.

![Diagram of connecting to TV](image)

* See “Supplied accessories” (page 20).

**Connecting to your AV amplifier (receiver)**

Select one of the following connection methods according to the input jacks on your AV amplifier (receiver).

A  ![Diagram of connecting to AV](image)

→ Set [BD Audio MIX Setting] in [Audio Settings].

B  ![Diagram of connecting to AV](image)

* See “Supplied accessories” (page 20).
Step 2: Preparing for Network Connection

**Wired Setup**

Use a LAN cable to connect to the LAN (100) terminal on the player.

> The use of a shielded and straight interface cable (LAN cable) is recommended.

**Wireless Setup**

Use the wireless LAN that is built into the player.

Step 3: Easy Setup

When turned on for the first time
Wait for a short while before the player turns on and starts [Easy Initial Settings].

1. Insert two Size AAA (R03) batteries by matching the positive and negative ends on the batteries to the markings inside the battery compartment of the remote.

2. Connect the supplied AC adaptor in the numeric order shown below. When removing them, do so in reverse order.

3. Press **1** to turn on the player.

   * Turns on the player, or sets to standby mode.

4. Turn on the TV and set the input selector on your TV by pressing INPUT button on the remote. This will show the signal from the player on your TV screen.
5 Perform [Easy Initial Settings].
Follow the on-screen instructions to make the basic settings using < / >/M/ and ENTER on the remote.

When [Easy Initial Settings] is complete, the player will automatically find the available network.

Home screen display
The home screen appears when you press HOME. Select an application using < / >/M/ and press ENTER.

[My Apps]: Manages favorite application. You may add shortcuts for application from [All Apps].
[Featured Apps]: Displays recommended application.
[All Apps]: Shows all available applications. You can add applications to [My Apps] by pressing OPTIONS, and select [Add to My Apps].
[Setup]: Adjusts the player’s settings.

Available options
Various settings and playback operations are available by pressing OPTIONS. The available items differ depending on the situation.
[Move Application]: Arranges applications in [My Apps].
[Remove Application]: Deletes applications in [My Apps].
[Data Contents]: Displays the contents of the mixed disc.
Playback

Playing a Disc

For “Playable discs”, see page 16.

1 Press \( \text{OPEN/CLOSE} \), and place a disc on the disc tray.

2 Press \( \text{OPEN/CLOSE} \) to close the disc tray. Playback starts.
If playback does not start automatically, select [Video], [Music], or [Photo] category in \( (\text{Disc}) \), and press ENTER.
(Mixed disc) contains data contents. Press OPTIONS on the remote and select [Data Contents] to display any available contents.

Enjoying BONUSVIEW/BD-LIVE

1 Connect a USB memory to the USB jack on the player.
Use a 1 GB or larger USB memory as your local storage.

2 Prepare for BD-LIVE (BD-LIVE only).
- Connect the player to a network (page 10).
- Set [BD Internet Connection] in [BD/DVD Viewing Settings] to [Allow].

3 Insert a BD-ROM with BONUSVIEW/BD-LIVE.
The operation method differs depending on the disc. Refer to the instruction manual supplied with the disc.

To delete data in the USB memory, select [Delete BD Data] in [BD/DVD Viewing Settings], and press ENTER. All data stored in the buda folder will be erased.

Enjoying Blu-ray 3D

1 Prepare for Blu-ray 3D Disc playback.
- Connect the player to your 3D-compatible devices using a High Speed HDMI Cable.
- Set [3D Output Setting] and [TV Screen Size Setting for 3D] in [Screen Settings].

2 Insert a Blu-ray 3D Disc.
The operation method differs depending on the disc. Refer to the instruction manual supplied with the disc.

Refer also to the instruction manuals supplied with your TV and the connected device.
Playing from a USB Device

For “Playable types of files”, see page 17.

1 Connect the USB device to the USB jack on the player.
2 Select [USB device] using ←↑↓→, and press ENTER.
3 Select [Video], [Music], or [Photo] category using ↑↓, and press ENTER.

Playing via a Network

Using “Video & TV SideView”

“Video & TV SideView” is a free mobile application for remote devices (such as smartphone, etc.). By using “Video & TV SideView” with this player, you can easily enjoy the player by using the operation on your remote device. You can launch a service or application directly from the remote device and view the disc information during disc playback. “Video & TV SideView” also can be used as a remote control and software keyboard.

Before you use the “Video & TV SideView” device with this player for the first time, be sure to register the “Video & TV SideView” device. Follow the on-screen instructions on the “Video & TV SideView” device for registration.

The registration can only be performed on the home screen.

Using SongPal Link/SongPal

SongPal is a dedicated app for operating SongPal-compatible audio devices (e.g. wireless speaker) that are manufactured by Sony. You can listen to music stored on your audio CD (CD-DA) and USB device with this player from multiple places under the same network. For more information, please visit http://sony.net/nasite/. You are required to use your mobile device (smartphone or tablet) and wireless router to use this app. Search for SongPal on Google Play™ or the App Store and download using your mobile device.

To use the SongPal feature, the player must be updated with software version M32.R.0300 or greater. This version is scheduled to release in May 2016 (subject to change). For [Software Update] instructions, see page 16.

Connecting to a mobile device

1 Connect the player to a network (page 10).
3 Connect your mobile device to the same SSID (network) by Wi-Fi.
4 Launch and follow the instructions on SongPal app.

For further SongPal apps details, visit http://songpal.sony.net/
For SongPal Link/SongPal Help, visit http://info.songpal.sony.net/help/
“Screen mirroring” is a function to display the screen of a mobile device on the TV by Miracast technology. The player can be connected directly with a Screen mirroring compatible device (e.g. smartphone, tablet). You can enjoy the display screen of the device on your large TV screen. No wireless router (or access point) is required to use this feature.

- When using Screen mirroring, the quality of picture and sound may sometimes be deteriorated due to interference from other network. You may improve by adjusting [Screen mirroring RF Setting].
- Some network functions may not be available during Screen mirroring.
- Make sure that the device is compatible with Miracast. Connectivity with all Miracast compatible devices is not guaranteed.

1. Select [Screen mirroring] from home screen using </>/, and press ENTER.

2. Follow the on-screen instructions.
Listening to Audio from a Bluetooth Device

To listen to an audio source from a Bluetooth device (e.g. headphone) via this player, you need to pair the Bluetooth device with this player.

**Pairing with a Bluetooth device**

Pairing is an operation where the Bluetooth devices are registered to each other before connection. Set [Bluetooth Mode] in [Bluetooth Settings] to [On] before pairing a Bluetooth device with this player.

1. **Place the Bluetooth device within 1 meter from the player.**
2. Perform any of the following steps:
   - When connecting to a device for the first time, press BLUETOOTH button on the remote.
   - Select [Bluetooth Device] option on the playback screen.
   - Select [Device List] in [Bluetooth Settings].
3. Set the Bluetooth device in pairing mode. For details on setting the Bluetooth device in pairing mode, refer to the instruction manual supplied with the device.
4. Press ↑/↓ repeatedly to select the device you want, and press ENTER. When the Bluetooth connection is established, the device name will appear on the TV screen.
5. Start playback content.
6. Adjust the volume.
   - Adjust the volume of the Bluetooth device first. If the volume level is still low, adjust the volume level by pressing OPTIONS on the remote during playback screen and select [Bluetooth Volume]. Then, press ↑/↓ to adjust the volume.

To disconnect the Bluetooth device

Perform any of the following steps:
- Press BLUETOOTH button on the remote (page 7).
- Disable the Bluetooth function on the Bluetooth device.
- Turn off the player or the Bluetooth device.

⚠️ Before you turn off your Bluetooth device, turn down the volume level of your TV to avoid sudden high volume outbursts.

Some Bluetooth device does not support volume control.
Additional Information

Software Update

1 Select [Setup] on the home screen using ←/↑/↓/→.

2 Select [Software Update] using ↑/↓, and press ENTER.

[Update via Internet]
Updates the player’s software using available network. Make sure that the network is connected to the Internet. For details, see “Step 2: Preparing for Network Connection” (page 10).

[Update via USB Memory]
Updates the player’s software using USB memory. Make sure that the Software Update Folder is correctly named as “UPDATE” and all the update files must be stored in this folder. The player can recognise up to 500 files/folders in a single layer including the update files/folders.

• We recommend performing the software update every 2 months or so.
• If your network condition is poor, visit http://www.sony.com/bluraysupport/ to download the latest software version and update via USB memory. You can also get information about update functions from the website.

Playable discs

<table>
<thead>
<tr>
<th>Blu-ray Disc*1</th>
<th>BD-ROM, BD-R<em>2/BD-RE</em>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>DVD*3</td>
<td>DVD-ROM, DVD-R/ DVD-RW, DVD+R/ DVD+RW</td>
</tr>
<tr>
<td>CD*3</td>
<td>CD-DA (Music CD), CD-ROM, CD-R/CD-RW Super Audio CD</td>
</tr>
</tbody>
</table>

*1 Since the Blu-ray Disc specifications are new and evolving, some discs may not be playable depending on the disc type and the version. The audio output differs depending on the source, connected output jack, and selected audio settings.
*2 BD-RE: Ver.2.1, BD-R: Ver.1.1, 1.2, 1.3 including organic pigment type BD-R (LTH type). The BD-Rs recorded on a PC cannot be played if postscripts are recordable.
*3 A CD or DVD disc will not play if it has not been correctly finalized. For more information, refer to the instruction manual supplied with the recording device.

Region code (BD-ROM/DVD VIDEO only)
Your player has a region code printed on the bottom of the unit and will only play BD-ROMs/DVD VIDEOSs labeled with identical region codes or ALL.
**Playable types of files**

### Video

<table>
<thead>
<tr>
<th>Codec</th>
<th>Container</th>
<th>Extension</th>
<th>With Audio</th>
</tr>
</thead>
<tbody>
<tr>
<td>MPEG-1 Video&lt;sup&gt;1&lt;/sup&gt;</td>
<td>PS</td>
<td>.mpg, .mpeg</td>
<td>Dolby Digital, DTS, LPCM, MPEG</td>
</tr>
<tr>
<td></td>
<td>MKV</td>
<td>.mkv</td>
<td>Dolby Digital, LPCM, AAC, MP3, Vorbis</td>
</tr>
<tr>
<td>MPEG-2 Video&lt;sup&gt;2&lt;/sup&gt;</td>
<td>PS&lt;sup&gt;3&lt;/sup&gt;</td>
<td>.mpg, .mpeg</td>
<td>Dolby Digital, DTS, LPCM, MPEG</td>
</tr>
<tr>
<td></td>
<td>TS&lt;sup&gt;4&lt;/sup&gt;</td>
<td>.m2ts, .mts</td>
<td>Dolby Digital, DTS, LPCM, MPEG, AAC</td>
</tr>
<tr>
<td></td>
<td>MKV&lt;sup&gt;5&lt;/sup&gt;</td>
<td>.mkv</td>
<td>Dolby Digital, LPCM, AAC, MP3, Vorbis</td>
</tr>
<tr>
<td>Xvid</td>
<td>AVI</td>
<td>.avi</td>
<td>Dolby Digital, LPCM, WMA9, MP3</td>
</tr>
<tr>
<td></td>
<td>MKV</td>
<td>.mkv</td>
<td>Dolby Digital, LPCM, AAC, MP3, Vorbis</td>
</tr>
<tr>
<td>MPEG4/AVC&lt;sup&gt;7&lt;/sup&gt;</td>
<td>MKV&lt;sup&gt;8&lt;/sup&gt;</td>
<td>.mkv</td>
<td>Dolby Digital, LPCM, AAC, MP3, Vorbis</td>
</tr>
<tr>
<td></td>
<td>MP4&lt;sup&gt;9&lt;/sup&gt;</td>
<td>.mp4, .m4v</td>
<td>AAC</td>
</tr>
<tr>
<td></td>
<td>TS&lt;sup&gt;10&lt;/sup&gt;</td>
<td>.m2ts, .mts</td>
<td>Dolby Digital, DTS, LPCM, MPEG, AAC</td>
</tr>
<tr>
<td>Quick Time&lt;sup&gt;11&lt;/sup&gt;</td>
<td>.mov</td>
<td></td>
<td>Dolby Digital, LPCM, AAC, MP3</td>
</tr>
<tr>
<td>FLV&lt;sup&gt;12&lt;/sup&gt;</td>
<td>.flv, .f4v</td>
<td></td>
<td>LPCM, AAC, MP3</td>
</tr>
<tr>
<td>3gpp/3gpp2&lt;sup&gt;13&lt;/sup&gt;</td>
<td>.3gp, .3g2, .3gpp, .3gpp2</td>
<td></td>
<td>AAC</td>
</tr>
<tr>
<td>VC1&lt;sup&gt;14&lt;/sup&gt;</td>
<td>TS</td>
<td>.m2ts, .mts</td>
<td>Dolby Digital, DTS, LPCM, MPEG, AAC</td>
</tr>
<tr>
<td></td>
<td>MKV</td>
<td>.mkv</td>
<td>Dolby Digital, LPCM, AAC, MP3, Vorbis</td>
</tr>
<tr>
<td>WMV9&lt;sup&gt;15&lt;/sup&gt;</td>
<td>ASF</td>
<td>.wmv, .asf</td>
<td>WMA9, WMA 10 Pro</td>
</tr>
<tr>
<td>Motion JPEG&lt;sup&gt;16&lt;/sup&gt;</td>
<td>Quick Time</td>
<td>.mov</td>
<td>Dolby Digital, LPCM, AAC, MP3</td>
</tr>
<tr>
<td></td>
<td>AVI</td>
<td>.avi</td>
<td>Dolby Digital, LPCM, AAC, MP3</td>
</tr>
</tbody>
</table>

### Format

**AVCHD (Ver.2.0)**

### Music

<table>
<thead>
<tr>
<th>Codec</th>
<th>Extension</th>
</tr>
</thead>
<tbody>
<tr>
<td>MP3 (MPEG-1 Audio Layer III)&lt;sup&gt;11&lt;/sup&gt;</td>
<td>.mp3</td>
</tr>
<tr>
<td>AAC/HE-AAC&lt;sup&gt;11&lt;/sup&gt;</td>
<td>.m4a, .aac&lt;sup&gt;6&lt;/sup&gt;</td>
</tr>
<tr>
<td>WMA9 Standard&lt;sup&gt;1&lt;/sup&gt;</td>
<td>.wma</td>
</tr>
<tr>
<td>WMA 10 Pro&lt;sup&gt;12&lt;/sup&gt;</td>
<td>.wma</td>
</tr>
<tr>
<td>LPCM&lt;sup&gt;11&lt;/sup&gt;</td>
<td>.wav</td>
</tr>
<tr>
<td>FLAC&lt;sup&gt;1&lt;/sup&gt;</td>
<td>.flac, .flac</td>
</tr>
<tr>
<td>Dolby Digital&lt;sup&gt;1&lt;/sup&gt;</td>
<td>.ac3</td>
</tr>
<tr>
<td>DSF&lt;sup&gt;1&lt;/sup&gt;</td>
<td>.dsf</td>
</tr>
<tr>
<td>DSDIFF&lt;sup&gt;1&lt;/sup&gt;</td>
<td>.dff</td>
</tr>
</tbody>
</table>

### Photo

<table>
<thead>
<tr>
<th>Format</th>
<th>Extension</th>
</tr>
</thead>
<tbody>
<tr>
<td>JPEG</td>
<td>.jpeg, .jpg, .jpe</td>
</tr>
<tr>
<td>PNG</td>
<td>.png&lt;sup&gt;14&lt;/sup&gt;</td>
</tr>
<tr>
<td>GIF</td>
<td>.gif&lt;sup&gt;14&lt;/sup&gt;</td>
</tr>
<tr>
<td>MPO</td>
<td>.mpo&lt;sup&gt;15&lt;/sup&gt;</td>
</tr>
<tr>
<td>BMP</td>
<td>.bmp&lt;sup&gt;16&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

---

**Additional Information**
*1 The player may not play this file format on a DLNA server.
*2 The player can only play standard definition video on a DLNA server.
*3 The player does not play DTS format files on a DLNA server.
*4 The player can only play Dolby Digital format files on a DLNA server.
*5 The player can support AVC up to Level 4.1.
*6 The player does not play this file format on a DLNA server.
*7 The player can support WMV9 up to Advance Profile.
*8 The player can support frame rate up to 60 fps.
*9 The player plays AVCHD format files that are recorded on a digital video camera, etc. The AVCHD format disc will not play if it has not been correctly finalized.
*10 The player can play AVCHD 3D format.
*11 The player can play "mka" files.
*12 The player does not play coded file such as Lossless.
*13 The player does not play DST encoded files.
*14 The player does not play animated PNG or animated GIF files.
*15 For MPO files other than 3D, the key image or the first image is displayed.
*16 The player does not support 16bit BMP files.

- Some files may not play depending on the file format, file encoding, recording condition, or DLNA server condition.
- Some files edited on a PC may not play.
- Some files may not be able to perform fast forward or fast reverse function.
- The player does not play coded files such as DRM.
- The player can recognize the following files or folders in BDs, DVDs, CDs and USB devices:
  - up to folders in the 9th layer, including the root folder
  - up to 500 files/folders in a single layer
- The player can recognize the following files or folders stored in the DLNA server:
  - up to folders in the 19th layer
  - up to 999 files/folders in a single layer
- The player can support frame rate:
  - up to 60 fps for AVCHD (MPEG4/AVC) only.
  - up to 30 fps for other video codecs.
- The player can support video bit rate up to 40 Mbps.
- Some USB devices may not work with this player.
- The player can recognize Mass Storage Class (MSC) devices (such as flash memory or an HDD), Still Image Capture Device (SICD) class devices and 101 keyboard.
- To avoid data corruption or damage to the USB memory or devices, turn off the player when connecting or removing the USB memory or devices.
- The player may not play high bit rate video files on DATA CDs smoothly. It is recommended to play such files using DATA DVDs or DATA BDs.
## Specifications

Specifications and design are subject to change without notice.

### System

| Laser            | Semiconductor laser |

### Inputs and Outputs

<table>
<thead>
<tr>
<th>DIGITAL OUT (COAXIAL) (Jack name)</th>
<th>Phono jack /0.5 Vp-p/75 ohms (Jack type/Output level/Load impedance)</th>
</tr>
</thead>
<tbody>
<tr>
<td>HDMI OUT</td>
<td>HDMI 19-pin standard connector</td>
</tr>
<tr>
<td>LAN (100)</td>
<td>100BASE-TX Terminal</td>
</tr>
<tr>
<td>USB</td>
<td>USB jack Type A (For connecting a USB memory, memory card reader, digital still camera, and digital video camera)*</td>
</tr>
<tr>
<td></td>
<td>* Do not use for power charging purposes.</td>
</tr>
<tr>
<td>DC IN</td>
<td>12 V DC, 850 mA</td>
</tr>
</tbody>
</table>

### Wireless

<table>
<thead>
<tr>
<th>Wireless LAN standard</th>
<th>Protocol IEEE802.11 a/b/g/n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency range</td>
<td>2.4 GHz, 5 GHz band</td>
</tr>
<tr>
<td>Modulation</td>
<td>DSSS and OFDM</td>
</tr>
<tr>
<td>Bluetooth Version</td>
<td>Bluetooth Version 4.1</td>
</tr>
</tbody>
</table>

### Bluetooth

<table>
<thead>
<tr>
<th>Communication system</th>
<th>Bluetooth Specification v4.1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Output</td>
<td>Bluetooth Specification Power Class 1</td>
</tr>
<tr>
<td>Maximum communication range</td>
<td>Line of sight approx. 30 m</td>
</tr>
<tr>
<td>Frequency band</td>
<td>2.4 GHz</td>
</tr>
<tr>
<td>Modulation method</td>
<td>FHSS</td>
</tr>
<tr>
<td>Compatible Bluetooth Profiles</td>
<td>A2DP v1.2, AVRCP v1.3</td>
</tr>
<tr>
<td>Supported Codecs</td>
<td>SBC, AAC, LDAC</td>
</tr>
<tr>
<td>Transmission range (A2DP)</td>
<td>• 20 Hz - 40,000 Hz (LDAC in sampling 96 kHz and transmit by 990 kbps)</td>
</tr>
<tr>
<td></td>
<td>• 20 Hz - 20,000 Hz (in sampling 44.1 kHz)</td>
</tr>
</tbody>
</table>
### General

<table>
<thead>
<tr>
<th>Description</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power requirements</td>
<td>12 V DC with AC adaptor&lt;br&gt;Rating: Input 120 V AC, 60 Hz</td>
</tr>
<tr>
<td>Power consumption (when using AC adaptor)</td>
<td>12 W</td>
</tr>
<tr>
<td>Dimensions (approx.)</td>
<td>255 mm × 192 mm × 39 mm (10 5/8 in. × 7 5/8 in. × 1 9/16 in.)&lt;br&gt;(width × depth × height) incl. projecting parts</td>
</tr>
<tr>
<td>Mass (approx.)</td>
<td>0.9 kg (2 lb)</td>
</tr>
<tr>
<td>Operating temperature</td>
<td>5 ºC to 35 ºC (41 ºF to 95 ºF)</td>
</tr>
<tr>
<td>Operating humidity</td>
<td>25 % to 80 %</td>
</tr>
</tbody>
</table>

### Supplied accessories

- High Speed HDMI Cable (1)*
- AC adaptor (AC-M1210UC) (1)
- Remote commander (remote) (1)
- Size AAA (R03) batteries (2)

* Supplied for BDP-BX670