Thank you for buying this Pioneer product. Please read through these operating instructions so you will know how to operate your model properly. After you have finished reading the instructions, put them away in a safe place for future reference.

Safety Information

**WARNING**

TO PREVENT 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.

**CAUTION:**

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

**WARNING**

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

This equipment is not waterproof. To prevent a fire or shock hazard, do not place any container filled with liquid near this equipment (such as a vase or flower pot) or expose it to dripping, splashing, rain or moisture.

To prevent a fire hazard, do not place any naked flame sources (such as a lighted candle) on the equipment.

Store small parts out of the reach of children and infants. If accidentally swallowed, contact a doctor immediately.

Slots and openings in the cabinet are provided for ventilation to ensure reliable operation of the product, and to protect it from overheating. To prevent fire hazard, the openings should never be blocked or covered with items (such as newspapers, tablecloths, curtains) or by operating the equipment on thick carpet or a bed.

Do not use or store batteries in direct sunlight or other excessively hot place, such as inside a car or near a heater. This can cause batteries to leak, overheat, explode or catch fire. It can also reduce the life or performance of batteries.

Risk of explosion if battery is replaced by an incorrect type. Risk of explosion if disposal of a battery into fire or a hot oven, or mechanically crushing or cutting of a battery.

**Precautions**

**VENTILATION CAUTION**

When installing this unit, make sure to leave space around the unit for ventilation to improve heat radiation (at least 10 cm (4") at top, 10 cm (4") at rear, and 10 cm (4") at each side).

**Operating Environment**

Operating environment temperature and humidity: +5 °C to +35 °C (+41 °F to +95 °F); less than 85 %RH (cooling vents not blocked)

Do not install this unit in a poorly ventilated area, or in locations exposed to high humidity or direct sunlight (or strong artificial light).

**Important Notice**

The model number and serial number of this equipment are on the rear or bottom. Record these numbers on your enclosed warranty card and keep in a safe place for future reference.

**CAUTION**

The power switch on this unit will not completely shut off all power from the AC outlet. Since the power cord serves as the main disconnect device for the unit, you will need to unplug it from the AC outlet to shut down all power. Therefore, make sure the unit has been installed so that the power cord can be easily unplugged from the AC outlet in case of an accident. To avoid fire hazard, the power cord should also be unplugged from the AC outlet when left unused for a long period of time (for example, when on vacation).

This product is for general household purposes. Any failure due to use for other than household purposes (such as long-term use for business purposes in a restaurant or use in a car or ship) and which requires repair will be charged for even during the warranty period.

**Power-Cord Caution**

Handle the power cord by the plug. Do not pull out the plug by tugging the cord and never touch the power cord when your hands are wet as this could cause a short circuit or electric shock. Do not place the unit, a piece of furniture, etc., on the power cord, or pinch the cord. Never make a knot in the cord or tie it with other cords. The power cords should be routed such that they are not likely to be stepped on. A damaged power cord can cause a fire or give you an electrical shock.

Check the power cord once in a while. When you find it damaged, ask your nearest our authorized service center or your dealer for a replacement.

**CAUTION**

This product is a class 1 laser product classified under the Safety of laser products, IEC 60825-1:2007.

CLASS 1 LASER PRODUCT
Cautions on 3D Viewing

- If you should experience any fatigue or discomfort while viewing 3D images, stop viewing them.
- Children, particularly those under 6, may be more prone to sensitivity, so guardians should watch for any signs of fatigue or discomfort.
- When viewing 3D images, rest periodically.

Extended viewing of 3D images without rest periods could cause fatigue or discomfort.

For European models

Information for users on collection and disposal of old equipment and used batteries

These symbols on the products, packaging, and/or accompanying documents mean that used electrical and electronic products and batteries should not be mixed with general household waste. For proper treatment, recovery and recycling of old products and used batteries, please take them to applicable collection points in accordance with your national legislation. By disposing of these products and batteries correctly, you will help to save valuable resources and prevent any potential negative effects on human health and the environment which could otherwise arise from inappropriate waste handling. For more information about collection and recycling of old products and batteries, please contact your local municipality, your waste disposal service or the point of sale where you purchased the items.

These symbols are only valid in the European Union. For countries outside the European Union:
If you wish to discard these items, please contact your local authorities or dealer and ask for the correct method of disposal.

WEEE
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Chapter 1
Before you start

What’s in the box

• Remote control x 1
• AAA 700 size manganese batteries x 2
• Power cord
• Warranty card (North American, European models only)
• Operating instructions (this document)

Putting the batteries in the remote control

The batteries included with the player have been provided to allow you to check product operation and may not last long. We recommend using alkaline batteries that have a longer life.

**WARNING**

• Do not use or store batteries in direct sunlight or other excessively hot place, such as inside a car or near a heater. This can cause batteries to leak, overheat, explode or catch fire. It can also reduce the life or performance of batteries.

• Store small parts out of the reach of children and infants. If accidentally swallowed, contact a doctor immediately.

**Caution**

• The remote control setting may be restored to the default after the batteries are replaced. If this happens, reset it (page 24 and 47).

• Do not use a new battery together with an old one.

• When loading the batteries into the remote control, set them in the proper direction, as indicated by the polarity marks ( and ).

• When inserting the batteries, make sure not to damage the springs on the battery’s terminals. This can cause batteries to leak or overheat.

• Do not heat batteries, disassemble them, or throw them into flames or water.

• Batteries may have different voltages, even if they look similar. Do not use different kinds of batteries together.

• To prevent leakage of battery fluid, remove the batteries if you do not plan to use the remote control for a long period of time (1 month or more). If the fluid should leak, wipe it carefully off the inside of the case, then insert new batteries. If a battery should leak and the fluid should get on your skin, flush it off with large quantities of water.

• When disposing of used batteries, please comply with governmental regulations or environmental public institution’s rules that apply in your country/area.

1 Open the rear cover.

2 Insert (2 x AAA 700 size) batteries that are supplied.

Insert first from the side.

3 Close the rear cover.

Close securely (a click should be heard).
Software Update

Product information on this player is provided on the Pioneer website. Check this website for update and service information on your Blu-ray disc player.

In Europe:
http://www.pioneer-audiovisual.eu/

In the U.S.A.:
https://www.pioneerelectronics.com/PUSA/Home

In Canada:
http://www.pioneerelectronics.ca/POCEN/Home

In ASEAN:
http://intl.pioneer-audiovisual.com/

In Hong Kong:
http://hk.pioneer-audiovisual.com/

In Taiwan:
http://intl.pioneer-audiovisual.com/
### Types of discs/files that can be played

#### Playable discs

Discs with the logo marks below indicated on the disc label, package or jacket can be played.

**Caution**

- Only the discs that have been finalized can be played.

<table>
<thead>
<tr>
<th>Disc type</th>
<th>Logo</th>
<th>Application format</th>
</tr>
</thead>
<tbody>
<tr>
<td>BD-ROM</td>
<td><img src="image" alt="BD-ROM Logo" /></td>
<td>✓ ✓ X X X X x x</td>
</tr>
<tr>
<td>BD-R</td>
<td><img src="image" alt="BD-R Logo" /></td>
<td>✓ ✓ X X X x x ✓</td>
</tr>
<tr>
<td>BD²</td>
<td><img src="image" alt="BD-RE Logo" /></td>
<td>✓ ✓ X X X x x ✓</td>
</tr>
<tr>
<td>UHD-BD</td>
<td><img src="image" alt="UHD-BD Logo" /></td>
<td>✓ ✓ X X X x x x</td>
</tr>
<tr>
<td>DVD-ROM</td>
<td><img src="image" alt="DVD-ROM Logo" /></td>
<td>X X ✓ ✓ ✓ x x ✓</td>
</tr>
<tr>
<td>DVD</td>
<td><img src="image" alt="DVD Logo" /></td>
<td></td>
</tr>
<tr>
<td>DVD-R²,³,⁴</td>
<td><img src="image" alt="DVD-R Logo" /></td>
<td>✓ ✓ ✓ X ✓ ✓ x x</td>
</tr>
<tr>
<td>DVD-RW³,⁵,⁶</td>
<td><img src="image" alt="DVD-RW Logo" /></td>
<td>✓ x ✓ ✓ x x ✓</td>
</tr>
<tr>
<td>DVD+R²,³</td>
<td><img src="image" alt="DVD+R Logo" /></td>
<td>✓ ✓ ✓ ✓ X x x ✓</td>
</tr>
<tr>
<td>DVD+RW³</td>
<td><img src="image" alt="DVD+RW Logo" /></td>
<td>✓ ✓ ✓ ✓ x x x ✓</td>
</tr>
<tr>
<td>CD-DA</td>
<td><img src="image" alt="CD-DA Logo" /></td>
<td>X X X X x ✓ x</td>
</tr>
<tr>
<td>CD</td>
<td><img src="image" alt="CD Logo" /></td>
<td></td>
</tr>
<tr>
<td>CD-R³</td>
<td><img src="image" alt="CD-R Logo" /></td>
<td>X X X X x ✓ ✓</td>
</tr>
<tr>
<td>CD-RW³</td>
<td><img src="image" alt="CD-RW Logo" /></td>
<td>X X X X x ✓ ✓</td>
</tr>
<tr>
<td>CD-ROM</td>
<td><img src="image" alt="CD-ROM Logo" /></td>
<td>X X X x x ✓ ✓</td>
</tr>
</tbody>
</table>

1. Discs on which video, image or audio files are recorded.
2. Including dual-layered discs.
3. Finalize them before playing them on this player.
4. DVD-R for Authoring discs (3.95 GB and 4.7 GB) cannot be played.
5. Including the AVCHD format.
6. Version 1.0 DVD-RW discs cannot be played.
7. Including Video CDs.
Discs that cannot be played

- HD DVDs
- DVD-RAM discs

It is possible that some discs other than the ones listed above may not be playable either.

Note

- Some discs cannot be played, even if one of the logo marks on the previous page is indicated.
- To play 8 cm discs, set the disc in the 8 cm disc depression in the center of the disc tray. No adapter is necessary. 8 cm BD-ROMs cannot be played.

About playback of unauthorized copies

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.

About copyright protection

Copyright protection technology is used for some Blu-ray Discs™, DVDs and contents played over the Internet or other networks. Copyright protection technology restricts playback and analog output. Due to updates in copyright protection provisions, the restrictions may differ depending on the date this product was purchased. Furthermore, the restrictions may be updated when the software is updated after purchase.

About audio formats

The following audio formats are supported on this player:

- Dolby TrueHD
- Dolby Digital Plus
- Dolby Digital
- DSD
- DTS-HD Master Audio
- DTS-HD High Resolution Audio
- DTS Digital Surround
- MPEG audio (AAC)
- Linear PCM

To enjoy the surround sound of Dolby TrueHD, Dolby Digital Plus, DSD, DTS-HD Master Audio and DTS-HD High Resolution Audio, it is recommended to connect the player to an AV receiver or amplifier compatible with these audio formats using an HDMI cable. After loading a BD containing sound in one of these audio formats, select the audio format on the menu screen.

Playing BDs

- BDs (BDMV) compatible with the formats below can be played.
  - Blu-ray Disc Read-Only (ROM) Format Version 3
  - Blu-ray Disc Read-Only (ROM) Format Version 4
  - Blu-ray Disc Recordable (R) Format Version 2
  - Blu-ray Disc Rewritable (RE) Format Version 3

This player supports BD-ROM Profile 5 and Profile 6.

BONUSVIEW functions such as playback of secondary video (Picture-in-Picture) and secondary audio can be used. The data used with the BONUSVIEW functions (the secondary video (Picture-in-Picture) and secondary audio data) may be stored in the storage. For details on secondary video and secondary audio playback, refer to the disc’s instructions.

BD-LIVE functions such as downloading movie trailers or additional audio and subtitle languages and playing on-line games can be enjoyed over the Internet. The data downloaded with the BD-LIVE function (trailers, etc.) is stored in the storage. Refer to the disc’s instructions for details about BD-LIVE functions.
With BD-ROMs, it is possible to use BD-J (Java) applications to create highly interactive titles, for example including games.

- BDs (BDAV) compatible with the formats below can be played.
  - Blu-ray Disc Recordable (R) Format Version 1
  - Blu-ray Disc Rewritable (RE) Format Version 2
- To enjoy an UHD-BD disc with better quality, connect the unit to a TV or AV amplifier supporting 4K/HDR.

**Playing DVDs**

This label indicates playback compatibility with DVD-RW discs recorded in VR format (Video Recording format). However, for discs recorded with a record-only-once encrypted program, playback can only be achieved using a CPRM compatible device.

**About region numbers**

Blu-ray Disc Player and BD-ROM or DVD-Video discs are assigned region numbers according to the region in which they are sold. This player’s region numbers are:

- **BD-ROM:**
  - Europe models: B
  - Others: A
- **DVD-Video:**
  - Europe models: 2
  - North America models: 1
  - Others: 3

Discs not including these numbers cannot be played. Discs playable on this player are as shown below.

- **BDs:**
  - Europe models: B (including B) and ALL
  - Others: A (including A) and ALL
- **DVDs:**
  - Europe models: 2 (including 2) and ALL
  - North America models: 1 (including 1) and ALL
  - Others: 3 (including 3) and ALL

**Playing CDs**

Regarding copy protected CDs: This player is designed to conform to the specifications of the Audio CD format. This player does not support the playback or function of discs that do not conform to these specifications.

**DualDisc playback**

A DualDisc is a two-sided disc, one side of which contains DVD content — video, audio, etc. — while the other side contains non-DVD content such as digital audio material.

The DVD side of a DualDisc can be played on this player. The non-DVD, audio side of the disc is not compatible with this player.

It is possible that when loading or ejecting a DualDisc, the opposite side to that being played will be scratched. Scratched discs may not be playable.

For more detailed information on the DualDisc specification, please refer to the disc manufacturer or disc retailer.

**Playing discs created on computers or BD/DVD recorders**

- It may not be possible to play discs recorded using a computer due to the application settings or computer's environment settings. Record discs in a format playable on this player. For details, contact the dealer.
- It may not be possible to play discs recorded using a computer or a BD/DVD recorder, if burn quality is not good due to characteristics of the disc, scratches, dirt on the disc, dirt on the recorder’s lens, etc.
About video, audio, and image files and folders

Audio and image files can be played on this player when the folders on the disc or USB device are created as described below.

Example of folder structure:

* The number of folders and files within a single folder (including the root directory) is limited to a maximum of 256. Also, keep the number of folder layers to a maximum of 5.

**Note**

- The file and folder names displayed on this player may differ from those displayed on a computer.

Playable files

Video, image and audio files recorded on BDs, DVDs, CDs or USB devices can be played.
<table>
<thead>
<tr>
<th><strong>Playable files</strong> (Extensions)</th>
<th><strong>Playable media</strong></th>
<th><strong>File specifications</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>USB devices</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Network</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>MP3 (.mp3)</strong></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td><strong>WMA (.wma)</strong></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td><strong>AAC (.m4a)</strong></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td><strong>MPEG2 AAC (.aac)</strong></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td><strong>Vorbis OGG (.ogg)</strong></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td><strong>WAV (.wav)</strong></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td><strong>FLAC (.flac)</strong></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td><strong>DSD (.dff/.dsf)</strong></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td><strong>AIFF (.aiff)</strong></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td><strong>ALAC (.m4a)</strong></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td><strong>JPEG (.jpg/.jpeg)</strong></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td><strong>MPO (.mpo)</strong></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td><strong>PNG (.png)</strong></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td><strong>GIF (.gif)</strong></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td><strong>MP4 (.mp4)</strong></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td><strong>WMV (.wmv)</strong></td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>
### Note

- Depending on the file structure, the server capacity and the network environment, it may not be possible to play certain files, even for files indicated on the table of playable files above.
- Files protected by DRM (Digital Rights Management) cannot be played.
- AVCHD contents cannot be played via LAN.

---

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>FLV (.flv)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>Video: Sorenson H.263 (FLV1), VP6 (FLV4), H.264 Audio: MP3, AAC</td>
</tr>
</tbody>
</table>

¹. This unit supports FAT16 and FAT32 file systems.
2. WMA Pro, Lossless and Voice are not supported.
### Part Names and Functions

#### Remote Control

<table>
<thead>
<tr>
<th>Part Name</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>💪 STANDBY/ON</td>
</tr>
<tr>
<td>2</td>
<td>⚫ SUBTITLE</td>
</tr>
<tr>
<td>3</td>
<td>⚫ AUDIO</td>
</tr>
<tr>
<td>4</td>
<td>Number buttons</td>
</tr>
<tr>
<td>5</td>
<td>CLEAR</td>
</tr>
<tr>
<td>6</td>
<td>AUDIO P.</td>
</tr>
<tr>
<td>7</td>
<td>VIDEO P.</td>
</tr>
<tr>
<td>8</td>
<td>HDR</td>
</tr>
<tr>
<td>9</td>
<td>TOP MENU</td>
</tr>
<tr>
<td>10</td>
<td>⤵ HOME MENU</td>
</tr>
<tr>
<td>11</td>
<td>►/❚❚</td>
</tr>
<tr>
<td>12</td>
<td>◀</td>
</tr>
<tr>
<td>13</td>
<td>■</td>
</tr>
<tr>
<td>14</td>
<td>◀/▶/◀/▶</td>
</tr>
<tr>
<td>15</td>
<td>A-B</td>
</tr>
<tr>
<td>16</td>
<td>◀/▶ REPEAT</td>
</tr>
<tr>
<td>17</td>
<td>HDMI</td>
</tr>
<tr>
<td>18</td>
<td>DIRECT</td>
</tr>
<tr>
<td>19</td>
<td>⚫ DIMMER</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Front panel display</th>
<th>⚪ STANDBY/ON button</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal</td>
<td>Lights</td>
</tr>
<tr>
<td>Slightly dimmed</td>
<td>Lights</td>
</tr>
<tr>
<td>Dimmed</td>
<td>Lights</td>
</tr>
<tr>
<td>Off</td>
<td>Dimmed</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Part Name</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>Color buttons</td>
</tr>
<tr>
<td>21</td>
<td>TV CONTROL</td>
</tr>
<tr>
<td>22</td>
<td>▲ OPEN/CLOSE</td>
</tr>
<tr>
<td>23</td>
<td>⚪ DISPLAY</td>
</tr>
<tr>
<td>24</td>
<td>FUNCTION</td>
</tr>
<tr>
<td>25</td>
<td>CONTINUED</td>
</tr>
<tr>
<td>26</td>
<td>SOURCE</td>
</tr>
<tr>
<td>27</td>
<td>POPUP MENU/POPUP</td>
</tr>
</tbody>
</table>
28 \(\uparrow/\downarrow/\leftarrow/\rightarrow\) – Use to select items, change settings and move the cursor.

ENTER – Press to execute the selected item or enter a setting that has been changed, etc.

29 \(\leftrightarrow\) RETURN – Press to return to the previous screen.

30 \(\gg\) – (page 26)

31 \(\gg\gg/\gg\gg\gg\) – (page 27)

32 \(\leftrightarrow\) REPLAY – Press during playback to return to a position 10 seconds earlier. (page 27)

33 \(\bullet\bullet\) SHORT SKIP – Press during playback to forward to a position 30 seconds later. (page 27)

34 \(\uparrow/\downarrow\) RESOLUTION – Use these to switch the output video resolution from the HDMI OUT terminals. (page 25)

35 CD/SACD – For hybrid discs, press to switch between the CD and SACD layers. (page 29)

36 \(\bigcirc\) LIGHT – Turns on/off the button lights.

---

**Front Panel**

1 \(\bigcirc\) STANDBY/ON – Press to turn the power on and off.

2 USB port – (page 21)

3 Front panel display

4 Disc tray

5 DIRECT indicator – (page 29)

6 Remote control sensor – Point the remote control to this, then operate it within approximately 7 m (23 ft.). The player may have trouble capturing remote control signals if there is a fluorescent light nearby. If this happens, move the player away from the fluorescent light.

7 \(\triangle\) OPEN/CLOSE – Press to open and close the disc tray.

8 DIRECT – Press to switch on/off the DIRECT function (page 29).

9 ■ – Press to stop playback (page 26).

\(\leftarrow\) – (page 27)

\(\gg\) – (page 27)

10 \(\gg/\gg\) – Press to start/pause playback (page 26).
1 ANALOG AUDIO OUT terminals – (page 20)
2 RS-232C terminal – Connect a home control system equipped with an RS-232C port. For installing a home control system, contact a specialized stores.
3 NETWORK terminal – (page 22)
4 HDMI OUT MAIN terminal – Connect with an HDMI-compatible TV or/and AV receiver or amplifier. This is the terminal that is used mainly. (page 16)
5 HDMI OUT SUB (AUDIO ONLY) terminal – Connect with an HDMI compatible AV receiver or amplifier. This terminal is for the exclusive use of audio output. (page 16)
6 ZERO SIGNAL terminal – (page 21)
7 USB port – (page 21)
8 DIGITAL AUDIO OUT (COAXIAL) terminal – (page 20)
9 DIGITAL AUDIO OUT (OPTICAL) terminal – (page 20)
10 AC IN – (page 22)
Chapter 2
Connecting up

Be sure to turn off the power and unplug the power cord from the power outlet whenever making or changing connections.

After connecting, make the settings at the Setup Navigator or Initial Setup menu according to the type of cable connected (page 23).

Also refer to the operating instructions for the device being connected.

- We will not accept any responsibility for damage arising from the connection with equipment manufactured by other companies.

Connecting using an HDMI cable

The audio and video signals can be transferred to HDMI-compatible devices as digital signals with no loss of sound or video quality.

Note

- Make the HDMI Mode setting at the Initial Setup menu according to the connection of the devices to the player (pages 17 and 41).
- Make the settings at the Setup Navigator menu according to the connected HDMI-compatible device (page 23).
- 1080p and 4K video signals may not be output, depending on the HDMI cable being used. To watch 4K video or HDR video of ULTRA HD Blu-ray™, use an 18 Gbps-compatible Premium High Speed HDMI®/TM cable (optional).

About HDMI

This player incorporates the High-Definition Multimedia Interface (HDMI®) technology.

The player supports Deep Color.
The conventional players can transmit a video signal with 8 bit color depth in the YCbCr 4:4:4 or RGB format; the players supporting Deep Color can transmit a video signal with a color bit depth of greater than 8 bits per color component. Subtle color gradations can be reproduced when this player is connected to a TV that supports Deep Color.

This product is compatible with “x.v.Color” that have the capability to realize a wide-gamut color space based on the xvYCC specifications. Playing video signals conforming to “xvYCC” standards on this player when this player is connected to an “x.v.Color”-compatible TV, etc., expands color reproduction capabilities, allowing natural colors to be reproduced more faithfully than ever. “x.v.Color” is a promotion name given to the products that have the capability to realize a wide-gamut color space based on the international standard specifications defined as xvYCC.

Playable audio signals through the HDMI OUT terminal

- Dolby TrueHD
- Dolby Digital Plus
- Dolby Digital
- DTS-HD Master Audio
- DTS-HD High Resolution Audio
- DTS Digital Surround
- Linear PCM

Linear PCM audio signals meeting the following conditions can be output:
- Sampling frequency: 32 kHz to 192 kHz
- Number of channels: Up to 8 (up to 6 for a 192 kHz sampling frequency)
- DSD audio
- AAC

When connected to a DVI device

- It is not possible to connect DVI devices (computer displays, for example) that are not compatible with HDCP. HDCP is a specification to protect audiovisual content across the DVI/HDMI interface.
- No audio signals are output.
- This player is designed for connection with HDMI-compatible devices. When connected to a DVI device, it may not operate properly depending on the DVI device.
About Control Function with HDMI

The functions work when a control function with HDMI-compatible Pioneer TV or AV system (AV receiver or amplifier, etc.) is connected to the player using an HDMI cable.

Also refer to the operating instructions for the TV and AV system (AV receiver or amplifier, etc.).

❖ To use the control function with HDMI

• The control function with HDMI operates when control function with HDMI is set to On for all devices connected with HDMI cables.
• Once the connections and the settings of all the devices are finished, be sure to check that the player’s picture is output to the TV. (Also check after changing the connected devices and reconnecting HDMI cables.) The control function with HDMI may not operate properly if the player’s picture is not properly output to the TV.
• For some models, the control function with HDMI may be referred to as “KURO LINK” or “HDMI Control”.
• The control function with HDMI does not work with devices of other brands, even if this player is connected with an HDMI cable.

❖ What the control function with HDMI can do

• Operating the player with the TV’s remote control.
  Such player operations as starting and stopping playback and displaying the menus can be performed from the TV.
• The player’s playback picture is displayed on the TV’s screen. (Auto-select function)
  The input switches automatically on the TV and AV system (AV receiver or amplifier, etc.) when playback is started on the player or the HOME MENU is displayed. When the input is switched, the playback picture, the HOME MENU appears on the TV.
• The power of the TV and the player turns on and off automatically. (Simultaneous power function)
  When playback on the player is started or the HOME MENU is displayed, if the TV’s power was off, its power turns on automatically. When the TV’s power is turned off, the player’s power automatically turns off.

❖ Setting the HDMI Mode

The UDP-LX500 has two HDMI OUT (MAIN, SUB) terminals. See page 15 for the details on these terminals.

To make the setting, press HOME MENU to display the Home Menu, select Initial Setup → HDMI → HDMI Mode.

Pressing the HDMI button on the remote control will display the current HDMI Mode setting on the player’s front panel display. To switch the setting, press HDMI button again.

See the table below and set up the HDMI Mode according to your connection style.

<table>
<thead>
<tr>
<th>HDMI Mode</th>
<th>HDMI OUT MAIN</th>
<th>HDMI OUT SUB</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Video</td>
<td>Audio</td>
</tr>
<tr>
<td>Single</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Separate</td>
<td>✓</td>
<td>✗</td>
</tr>
<tr>
<td>Pure Audio</td>
<td>✗</td>
<td>✗</td>
</tr>
</tbody>
</table>
About the PQLS function

PQLS (Precision Quartz Lock System) is a digital audio transfer control technology using the HDMI control function. The player’s output signals are controlled from the AV receiver to achieve high sound quality playback using the receiver’s quartz oscillator. This eliminates the influence of the jitter generated during signal transfer which can adversely affect the sound quality.

- This player supports the functions below.
  - The “PQLS 2ch Audio” function that is activated when playing music CDs (CD-DAs)
  - The “PQLS Multi Surround” function that is activated when playing all discs (BDs, DVDs, etc.) with linear PCM audio output
  - The “PQLS Bitstream” function that is activated when playing with bitstream audio output
- The various PQLS functions are activated when a Pioneer AV receiver supporting the PQLS functions is connected directly to the HDMI OUT terminal with an HDMI cable and the player’s settings are set as shown below (page 41).

Control: On

- Also refer to the AV receiver’s operating instructions.
- See the Pioneer website for AV receivers supporting the PQLS function.

Caution

- Turn on the power of the AV receiver connected to the HDMI OUT terminal, then start playback of the disc.
- Connect the player directly to the Pioneer AV receiver compatible with PQLS function. Interrupting a direct connection with an amplifier or AV converter (such as an HDMI switch) can cause malfunction.

Connecting a TV

See Connecting an AV receiver or amplifier on page 19 to connect an AV receiver or amplifier using an HDMI cable.

Caution

- Hold the plug when connecting and disconnecting the cable.
- Placing a load on the plug could result in faulty contact and no video signals being output.

Connect a TV to the HDMI OUT (MAIN) terminal.

Caution

- Make sure to set HDMI Mode to Single (page 41).
Connecting an AV receiver or amplifier

Connect to an AV receiver or amplifier in order to enjoy the surround sound of Dolby TrueHD, Dolby Digital Plus, Dolby Digital, DTS-HD Master Audio, DTS-HD High Resolution Audio, DTS Digital Surround, LPCM, AAC or DSD. For instructions on connecting the TV and speakers to the AV receiver or amplifier, refer to the operating instructions for AV receiver or amplifier.

**Caution**

- Hold the plug when connecting and disconnecting the cable.
- Placing a load on the plug could result in faulty contact and no video signals being output.

Connect a TV to the AV receiver or amplifier, not to the HDMI OUT (SUB) terminal.

**Achieving better video and sound quality**

When connecting one TV (or projector) and AV amplifier to the player, connect in such a way that the video and audio signals are transferred separately in order to achieve higher quality video and sound.

**Caution**

- Make sure to set HDMI Mode to Separate (page 41).
Connecting audio cables

Connecting an AV receiver or amplifier using an coaxial digital audio cable

UDP-LX500’s rear panel

- Red
- White
- Audio cable (commercially available)

2-channel analog audio can also be connected.

Coaxial digital audio cable (commercially available)

To coaxial digital audio input terminal

Direction of signal flow

To audio input terminals

AV receiver or amplifier

UDP-LX500’s rear panel

- Red
- White
- Optical digital audio cable (commercially available)

2-channel analog audio can also be connected.

Direction of signal flow

To optical digital audio input terminal

To audio input terminals

AV receiver or amplifier

Note

- The volume of analog output audio may be low depending on the setting of this device and contents being played.
Input device is connected with the ZERO SIGNAL terminal.

The Zero Signal is the reference (GND) for video and audio signals. If you connect the ZERO SIGNAL terminal of the equipment to the audio input terminal of another device connected to this equipment, with a pin cord, the device becomes compatible to the audio standard of this equipment, and the signal integrity improves.

On the other hand, if you connect the video input terminal of the device, it will become compatible to the video standard of this equipment and the signal integrity will improve.

Connecting components to the USB port

About USB devices

The USB devices that can be connected to the player are as shown below.

- USB 2.0-compatible USB flash drive (capacity of 1 GB or greater, 2 GB or greater recommended) or HDD (capacity 2 TB or less)
- File system: FAT16 or FAT32

Note

- Devices formatted with a file system other than the above cannot be used.
- USB devices may not be recognized if they contain multiple partitions.
- Some USB devices may not operate with this player.
- Operation of USB devices is not guaranteed.

Connecting the USB device

Caution

- Be sure to turn the player’s power off before connecting or disconnecting USB devices.
- When using an external hard disk as the external storage device, be sure to turn on the hard disk’s power before turning on the player’s power.
- If the USB device is write-protected, be sure to disable the write-protection.
- When connecting the USB cable, hold onto the plug, set the plug in the proper direction for the port and insert it horizontally.
- Placing excessive loads on the plug may result in poor contact, making it impossible to write data on the USB device.
- When a USB device is connected and the player’s power is turned on, do not unplug the power cord.

Note

- Devices may not work if connected to the USB port via a memory card reader or USB hub.
- Use a USB cable with a length of 2 meters or less.
Connecting to the network through LAN interface

By connecting this player to the network via the LAN terminal, you can play image, audio and video files stored on the components on the network, including your computer, using Source inputs.

Turn on the DHCP server function of your router. In case your router does not have the built-in DHCP server function, it is necessary to set up the network manually. For details, see Setting the IP address on page 44.

Note

- Refer to the operation manual of the equipment you have as the connected equipment and connection method may differ depending on your Internet environment.
- When using a broadband Internet connection, a contract with an Internet service provider is required. For more details, contact your nearest Internet service provider.
- Please note that Pioneer will accept no responsibility whatsoever for communications errors or problems related to the user’s network connection environment or connected devices. Contact your provider or the manufacturer of your connected devices.

Connecting with a LAN cable (wired LAN)

Connect the LAN terminal on this receiver to the LAN terminal on your router (with or without the built-in DHCP server function) with a straight LAN cable (CAT 5 or higher).

LAN terminal specifications

LAN terminal: Ethernet jack (10BASE-T/100BASE-TX/1000BASE-T)

Connecting the power cord

Connect the power cord after all the connections between devices have been completed.
Chapter 3
Getting Started

Making settings using the Setup Navigator menu

Be sure to perform these settings when using the player in the following situations.
• When you use the player for the first time.
• After Initial Setup format.

⚠️ Caution
• Before turning on the power, check that the connections between the player and other devices are correct. Also, turn on the power of the devices connected to the player before turning on the player’s power.
• When using a TV or front projector compatible with the Control function, set Control to On on the connected device before turning on the player’s power.

1 Turn on the TV’s power and switch the input. See the TV’s operating instructions for the details of operating the TV.

2 Turn on the player’s power. Press STANDBY/ON
Check that the Setup Navigator menu is displayed.

❖ If the Setup Navigator menu is not displayed

► Press HOME MENU to display the Home Menu, select Initial Setup → Setup Navigator → Start, then press ENTER.

3 Start Setup Navigator. Press ENTER.
• Setup Navigator starts.

4 Select the OSD language. Use ↑/↓ to select, then press ENTER.

5 Select the appropriate output resolution for the connected TV. Use ↑/↓ to select, then press ENTER.

6 Select the appropriate aspect ratio for the connected TV. Use ↑/↓ to select, then press ENTER.

7 Close the Setup Navigator menu. Press ENTER.
• Setup Navigator finishes and the setting is stored.
• Press RETURN to go back to the previous screen.
Operating the TV with the player’s remote control

When the manufacturer code for your brand of TV is set on the player's remote control, the TV can be operated using the player’s remote control.

Caution
• The setting may be restored to the default after the batteries are replaced. If this happens, reset it.

1 Input the 2-digit manufacturer code.
Press the number buttons (0 to 9) to input the code while pressing TV CONTROL.

Note
• The factory default setting is 01 (PIONEER).
• If you make a mistake when inputting the code, release TV CONTROL and then start over from the beginning.
• When there are multiple codes for a manufacturer, try inputting them in the indicated order until the TV can be operated.

2 Check that the TV can be operated.
Operate the TV using TV CONTROL.
- Press to turn the TV’s power on and off.
- INPUT – Press to switch the TV’s input.
- VOL +/- – Press to adjust the volume.

TV Preset code list

Important
• We do not guarantee the operations of all the manufacturers and devices listed. Operation may not be possible even if a preset code is entered.

Manufacturer Code(s)

<table>
<thead>
<tr>
<th>Manufacturer</th>
<th>Code(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PIONEER</td>
<td>01</td>
</tr>
<tr>
<td>METZ</td>
<td>25</td>
</tr>
<tr>
<td>ALBA</td>
<td>07, 24, 27</td>
</tr>
<tr>
<td>MITSUBISHI</td>
<td>06</td>
</tr>
<tr>
<td>BUSH</td>
<td>07, 24, 27</td>
</tr>
<tr>
<td>NEC</td>
<td>25</td>
</tr>
<tr>
<td>CHANGHONG</td>
<td>05, 22</td>
</tr>
<tr>
<td>ORION</td>
<td>20</td>
</tr>
<tr>
<td>CONIA</td>
<td>28</td>
</tr>
<tr>
<td>PANASONIC</td>
<td>02</td>
</tr>
<tr>
<td>DSE</td>
<td>29</td>
</tr>
<tr>
<td>PHILIPS</td>
<td>07, 24, 27</td>
</tr>
<tr>
<td>FUNAI</td>
<td>14</td>
</tr>
<tr>
<td>SAMSUNG</td>
<td>09</td>
</tr>
<tr>
<td>GRUNDIG</td>
<td>16</td>
</tr>
<tr>
<td>SANYO</td>
<td>18</td>
</tr>
<tr>
<td>HAIER</td>
<td>15</td>
</tr>
<tr>
<td>SHARP</td>
<td>04, 26</td>
</tr>
<tr>
<td>HISENCE</td>
<td>12</td>
</tr>
<tr>
<td>SKYWORTH</td>
<td>11</td>
</tr>
<tr>
<td>HITACHI</td>
<td>19</td>
</tr>
<tr>
<td>SONY</td>
<td>03</td>
</tr>
<tr>
<td>JVC</td>
<td>17</td>
</tr>
<tr>
<td>TCL</td>
<td>13</td>
</tr>
<tr>
<td>KONKA</td>
<td>21</td>
</tr>
<tr>
<td>TOSHIBA</td>
<td>05</td>
</tr>
<tr>
<td>LG ELECTRIC</td>
<td>08, 10</td>
</tr>
<tr>
<td>VICTOR</td>
<td>17</td>
</tr>
<tr>
<td>LOEWE</td>
<td>07, 24, 27</td>
</tr>
<tr>
<td>VIZIO</td>
<td>08, 10</td>
</tr>
</tbody>
</table>
Switching the output video resolution

Use the procedure below to switch the output video resolution from the various video output terminals.

- Press RESOLUTION ▲/▼.

- The current output video resolution setting is displayed on the player’s front panel display. To switch the output video resolution, press RESOLUTION ▲/▼ again.

- The output video resolution setting can also be switched by selecting Resolution from the Initial Setup menu (page 39).

Caution

- On some devices (TV, AV receiver or amplifier, etc.), the video or audio may not be output properly when the resolution is switched. If this happens, use RESOLUTION to set a resolution at which the video and audio are properly output.

- When video signals are being output with a resolution of 4K/24p, 4K, 1080/50i, 1080/50p, 720/50p, 1080/24p, 1080/60i, 1080/60p or 720/60p from the HDMI OUT terminals, the picture may be output with an aspect ratio of 16:9, even if the TV Screen is set to 4:3 (Standard).

- The picture may not be displayed for a while when the resolution is switched.

- When the connected device supports 3D and if a 3D Disc is played back, the 3D output is prioritized for output, regardless of the resolution settings. Also, switching of resolution may not be possible while the 3D contents are playing.

- When Auto is selected, the picture is output at 60 frames/second if your TV is not compatible with 1080/24p signals.

- When 4K, 4K/24p, 1080/24p or Source Direct is selected, the signals are output as such, even if your TV is not compatible with 4K, 4K/24p or 1080/24p signals. If the picture is not displayed properly, use RESOLUTION ▲/▼ to set an output video resolution at which the video and audio signals are properly output.

- When the Resolution is set to Auto and if the television set in use supports 4K or 4K/24p output, then the output is made in 4K or 4K/24p. If the connected television set does not support 4K or 4K/24p, then the output is made with a recommended resolution other than 4K.

- When the Resolution is set to Auto, 1080p, 4K or 4K/24p and if the resolution of output from the HDMI is 1080p, 4K or 4K/24p, then output may not occur depending on the HDMI cable in use.

- There are resolutions that cannot be output depending on the television set in use.

- When the HDMI Mode is set to Pure Audio, the 1080p60, 4K/60p or 4K/24p output will not occur even if the resolution is set to Auto or 1080p, 4K or 4K/24p. The output will be delivered with a resolution of 1080/60i, 1080/24p or the like, depending on the resolution of the source and the connected television set.

- For Dolby Vision output, the optimal resolution is automatically set for video content.

- When playing an UHD-BD disc, if the connected HDMI device does not support HDCP 2.2, the video cannot be output in 4K or 4K24p resolution even if Auto, 4K24p, 4K or Source Direct is selected. Also, depending on the HDMI device, the HDMI or HDCP setting may be required. Check the operating instructions of the connected device.
Chapter 4
Playback

Playing discs or files

This section describes the player’s main operations.

For the types of discs and files that can be played, see page 7. Video, image and audio files recorded on discs are played with the Source function (page 34).

1 Press STANDBY/ON to turn on the power.
   Turn the TV’s power on and switch its input beforehand.

2 Press OPEN/CLOSE to open the disc tray and load the disc.

   Note
   - Load the disc with the printed side facing up.
   - Several dozen seconds are required to read the disc. Once reading is completed, the type of disc is displayed on the player’s front panel display.
   - When a BD with usage restrictions set by a BD recorder is loaded, the PIN code input screen appears. In this case, input your PIN code.

3 Press ▶/❚ to play the disc.
   - To pause, press ▶/❚ during playback.
   - To stop, press ■ during playback.

   Note
   - Some discs start playing automatically when the disc tray is closed.
   - BD-ROM/DVD-Video discs have parental lock features. Input the password registered in the player’s settings to unlock the parental lock. For details, see page 45.
   - Some BD-R/-RE discs have playback protection. To cancel the protection, input the password set for the disc.
   - If the picture and sound are not properly output, Troubleshooting on page 51.

   ❖ If the disc menu is displayed
   For some discs, the disc menu is displayed automatically when playback starts. The contents of the disc menu and the way to operate depend on the disc.

   ❖ Resuming playback from where it was stopped (resume playback function)
   - When ■ is pressed during playback, the point at which the disc stopped is stored in the memory. When ▶/❚ is pressed after that, playback resumes from that point.
   - To cancel the resume playback function, press ■ while playback is stopped.

   Note
   - The resume playback function is canceled automatically in the following cases:
     - When the disc tray is opened.
     - When the file list window is switched.
     - When the power is turned off. (For BDs and DVDs this does not cancel the resume playback function.)
   - When you want to continue playback from a position you specify to be played next time, see Continuing playback from a specified position (Continued Viewing Playback) on page 33.
   - The resume playback function cannot be used for some discs.

Forward and reverse scanning

❖ During playback, press ◀ or ▶.
   - The scanning speed switches each time the button is pressed. The speed steps depend on the disc or file (the speed is displayed on the TV screen).

❖ To resume normal playback
   ❖ Press ▶/❚.

Playing specific chapters, tracks or files

❖ During playback, input the number of the chapter/track/file you want to select.
   - Use the number buttons (0 to 9) to input the number, then press ENTER.
   - Press CLEAR to clear the values you have input.
**Skipping content**

- During playback, press [ or ].
  - When [ is pressed, the playback skips ahead to the beginning of the next chapter/track/file.
  - When [ is pressed while a video or audio file is playing, the playback skips back to the beginning of the currently playing chapter/track/file. Press twice to skip back to the beginning of the previous chapter/track/file.
  - When [ is pressed while an image file is playing, playback returns to the previous file.

**To return to a position a short while ago**

Press during playback to return to a position 10 seconds earlier.

- During playback, press [ or ].

**To advance to a position slightly ahead**

Press during playback to forward to a position 30 seconds later.

- During playback, press [ or ].

**Playing in slow motion**

- While playback is paused, press and hold [ or ].
  - The speed switches each time the button is pressed (the speed is displayed on the TV screen).
  - Keeping the [ button pressed initiates slow motion play back.
  - Keeping the [ button pressed initiates reverse slow motion play back.

- To resume normal playback
  - Press [ or ].

**Step forward/Step reverse**

- While playback is paused, press [ or ].
  - The picture moves a step forward or step reverse each time the button is pressed.
  - Each time the [ button is pressed, a frame is advanced.
  - Each time the [ button is pressed, a frame is reversed.

- To resume normal playback
  - Press [ or ].

**Playing a specific section within a title or track repeatedly (A-B Repeat)**

Use this procedure to play a specific section within a title or track repeatedly.

1. During playback, press A-B to select the starting point.
   - [A-] is displayed on the TV screen.

2. During playback, press A-B to select the ending point.
   - A-B Repeat playback starts.

- To cancel A-B Repeat play
  - Press A-B during the A-B Repeat play.

**Note**

- A-B Repeat play is canceled in the following cases:
  - When you search outside of the repeat range.
  - When you start other Repeat Play or Random Play.

**Playing repeatedly (Repeat Play)**

Use this procedure to play the currently playing disc, title, chapter, track or file repeatedly.

- During playback, press REPEAT.
  - Each time you press REPEAT the type of repeat modes changes as shown below.

  - **BD**
    - Current chapter ➞ Current title

  - **DVD**
    - Current chapter ➞ Current title ➞ All titles

  - **CD/Video file/Audio file/Image file**
    - Current track/file ➞ All tracks/All files in folder

- To cancel Repeat Play
  - Press REPEAT several times during Repeat Play.

**Note**

- Repeat Play is canceled in the following cases:
  - When you search outside the repeat range.
  - When you start other Repeat Play or Random Play.
Playing in the desired order (Programmed Play)

1. During playback, press PROGRAM.
   - The program screen is displayed.
2. Select the program number.
   - Use / to select, then press ENTER.
3. Select the track/title/chapter you want to play.
   - Use / / / to select, then press ENTER.
4. Press ■/II.
   - Playback starts.

❖ Editing the program
1. Select the program number you want to edit, then press ENTER.
2. Select title/chapter, then press ENTER.

❖ Deleting the program
1. Select the program number you want to delete, then press CLEAR.
2. To delete all the programs, press ➔ RETURN.

Note
- When you use audio CDs for Programmed Play, enter the track number in step 3.
- This function does not work with BDs.

Making bookmarks
You can make bookmarks on the video currently playing and play back the scene later.

► During playback, press BOOKMARK.
   - The bookmark is made.
   - Maximum number of bookmarks are 12.

❖ Playing the bookmarked scene
1. Press and hold BOOKMARK for a few seconds.
   - The list of bookmarks is displayed.
2. Select the bookmark you want to play.
   - Use / / / to select, then press ENTER.

❖ Deleting the bookmark
1. Select the bookmark you want to delete, then press CLEAR.
   - Bookmarks may not be allowed to make for some discs.
   - Bookmarks are canceled in the following cases:
     - When the player’s power turned off.
     - When the disc tray is opened.

Zoom

► During playback, press ZOOM.
   - Each time you press ZOOM, the zoom level changes as shown below.
   - [Zoom 2x] → [Zoom 3x] → [Zoom 4x] → [Zoom 1/2] → [Zoom 1/3] → [Zoom 1/4] → Normal (not displayed)

Note
- This function does not work with some discs.

Playing photos as slideshows
This function plays the photos, switching them automatically.

► During playback, press INDEX.
   - Display the thumbnail of image files. The maximum number is 12 at once.
   - If you select one of the image and press ENTER, slideshow will start from the image you selected.

❖ Rotating/inverting photos
When a slideshow is playing or paused, the display switches as shown below when the / / / buttons are pressed.
   - ➤ button: Rotates 90° clockwise
   - ➤ button: Rotates 90° counterclockwise
   - ➤ button: Flips horizontally
   - ➤ button: Flips vertically

Switching the camera angles
For BD-ROM and DVD-Video discs on which multiple angles are recorded, the angles can be switched during playback.

1. During playback, press FUNCTION.
2. Select Angle from the FUNCTION menu.
   - The current angle and total number of recorded angles are displayed on the TV screen.
   - If the angles are not switched, switch them from the disc menu screen.

Note
- Some discs cannot switch angles.
Switching the subtitles

For discs or files on which multiple subtitles are recorded, the subtitles can be switched during playback.

Caution

- The subtitles cannot be switched for discs recorded by a DVD or BD recorder. Also refer to the operating instructions for the device used for recording.

During playback, press SUBTITLE.
- The current subtitle and total number of recorded subtitles are displayed on the TV screen. To switch the subtitle, press SUBTITLE again.
- The subtitles can also be switched by selecting Subtitle from the FUNCTION menu.
- If the subtitles are not switched when SUBTITLE is pressed, switch them from the disc menu screen.

Turning the subtitles off

Press SUBTITLE several times or select Subtitle from the FUNCTION menu to switch the setting to Off.

Moving subtitles

The position of the subtitles displayed while playing BD-ROMs or DVDs can be moved.

1. Play the BD-ROM or DVD video and display the subtitles on the TV screen.
2. Press and hold the SUBTITLE button for at least 2 seconds.
   - The Subtitle shift mode is set.
   - [Subtitle shift mode] is displayed on the TV screen.
3. Use the ↑/↓ buttons to move the position of the subtitles.
   - Use the ↑/↓ buttons to move the position of the subtitles.
   - Once the setting is complete, press ENTER.
4. Cancel the Subtitle shift mode.
   Press the ENTER button.

Using the DIRECT function

When the DIRECT function is turned on, the digital audio output and video output are blocked and analog audio is played back with high quality. This function is turned Off upon shipping.

Press DIRECT.
- The current setting (ON or OFF) is displayed on the player’s front panel display. To switch the setting, press DIRECT again.
- When the DIRECT function is turned on, the DIRECT indicator on the main unit turns on.

Note

- When you turn on the DIRECT function and play, the output volume may be low depending on the settings of this device and contents being played.
- Depending on disk or file, DIRECT function will not work in some cases if playback is not stopped (resume playback function is in cancelled state). To cancel the resume playback function, press ■ while playback is stopped.

Switching the audio

For discs or files on which multiple audio streams/channels are recorded, audio streams/channels can be switched during playback.

During playback, press AUDIO.
- The current audio and total number of recorded audio streams are displayed on the TV screen. To switch the audio, press AUDIO again.
- The audio can also be switched by selecting Audio from the FUNCTION menu.
- If the audio is not switched when AUDIO is pressed, switch it from the disc menu screen.

Switching the CD/SACD playback area

1. In the stop mode, press CD/SACD.
   - The current playback area setting is displayed on the player’s front panel display. To switch the playback area, press CD/SACD again.
   - [CD AREA] → [SACD 2CH] → [SACD MCH] → (back to beginning)
   - During playback, press ■ twice to cancel continuous play before selecting the playback area.
Displaying the disc information

- Press DISPLAY.
  - The disc information appears on the TV screen. To switch off the information display, press DISPLAY again.
  - The information display differs between during playback and when playback is stopped.
  - During audio CD playback, the track elapsed playing time appears on the TV screen. Each time you press DISPLAY, it changes shown as below.
    - Track remaining time → Disc elapsed time → Disc remaining time → No information → Track elapsed time
  - Pressing and holding DISPLAY for two seconds or more will display the detailed information of the disc on the TV screen. Pressing it again will close the display.
  - The page can be switched by pressing ↑/↓ while the detailed information of the disc is being displayed.

Enjoying BONUSVIEW or BD-LIVE

This player is compatible with BD-Video BONUSVIEW and BD-LIVE.

When using BD-Video discs compatible with BONUSVIEW, you can enjoy such functions as secondary video (picture in picture) (page 32) and secondary audio (page 32). With BD-Video discs supporting BD-LIVE, special video images and other data can be downloaded from the Internet.

Data recorded on BD video and downloaded from BD-LIVE is stored on the USB flash drive (external memory). To enjoy these functions, connect a USB flash drive (minimum 1 GB capacity, 2 GB or greater recommended) supporting USB 2.0 High Speed (480 Mbit/s) to the USB port.

- When you insert or remove a USB flash drive, be sure to turn the player’s power off.
- To recall data stored in the USB flash drive, first insert the disc media that was being used at the time the data was downloaded (if a different disc is loaded, the data stored on the USB flash drive cannot be played).
- If a USB flash drive containing other data (previously recorded) is used, the video and audio may not play back properly.
- Do not disconnect the USB flash drive while playback is in progress.
- Some time may be required for the data to load (read/write).

⚠️ Caution

- It may not be possible to use the BONUSVIEW and BD-LIVE functions if there is insufficient space on the USB flash drive. In this case, refer to Erasing data that has been added to BDs and application data on page 45 for erasing the Virtual Package data and the BD-LIVE data in the USB flash drive.

⚠️ Note

- Operation of USB flash drives is not guaranteed.
- Playback of BD-LIVE function data differs depending on the disc used. For details, consult the user instructions supplied with the disc.
- To enjoy the BD-LIVE function, a network connection and settings are required (pages 22 and 44).
- BD-LIVE is a function that provides for connection to the Internet. Discs supporting the BD-LIVE function may send ID codes identifying this player and the disc to the contents provider via the Internet.
Playback functions

The functions that can be used differ according to the type of disc and file. In some cases, some of the functions cannot be used. Check the usable functions on the table below.

<table>
<thead>
<tr>
<th>Function1</th>
<th>Disc/file type</th>
<th>BD-ROM</th>
<th>BD-R/RE</th>
<th>UHD-BD</th>
<th>DVD-Video</th>
<th>DVD-Audio</th>
<th>DVD-R/-RW (VR format)</th>
<th>AVCHD</th>
<th>Video file</th>
<th>Image file</th>
<th>Audio file</th>
<th>Audio CD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forward and reverse scanning</td>
<td>✓2</td>
<td>✓2</td>
<td>✓2</td>
<td>✓2</td>
<td>✓2</td>
<td>✓2</td>
<td>✗2</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>Sound is not produced during forward and reverse scanning.</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>Playing specific titles, chapters or tracks</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>Skipping content</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>Slow motion play4</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>No sound is output during slow motion playback.</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>Step forward and step reverse6</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>Reverse slow motion playback is not possible.</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>A-B Repeat play6</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>Repeat Play</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>Zoom</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>Angle8</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>Angle mark is displayed for scenes at which multiple angles are recorded if Angle Mark is set to On (page 42).</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>Subtitle9</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>Subtitle may switch or the switching screen provided on the disc may be displayed immediately, without the current subtitle or the total number of subtitles recorded on the disc being displayed.</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>Audio10</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>Audio streams depend on the disc and file.</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
</tr>
</tbody>
</table>

1. Some functions may not work for some discs or files, even if indicated [✓] on the table.
2. Sound is not produced during forward and reverse scanning.
3. Sound is produced during forward and reverse scanning.
4. No sound is output during slow motion playback.
5. Reverse slow motion playback is not possible.
6. If a chapter is switched, some discs will cause an automatic return to normal playback.
7. Reverse step playback is not possible.
8. Angle mark is displayed for scenes at which multiple angles are recorded if Angle Mark is set to On (page 42).
9. • The types of recorded subtitles depend on the disc and file.
   • In some cases, the subtitle may switch or the switching screen provided on the disc may be displayed immediately, without the current subtitle or the total number of subtitles recorded on the disc being displayed.
10. The types of recorded audio streams depend on the disc and file.
Using the FUNCTION menu

Various functions can be called out according to the player’s operating status.

1 Display the FUNCTION menu.
Press FUNCTION during playback.

2 Select and set the item.
Use ↑/↓ to select, then press ENTER.

Note
• Items that cannot be changed are displayed in gray. The items that can be selected depend on the player’s status.

❖ To change the setting of the selected item
Use ↑/↓ to change.

❖ To close the FUNCTION menu
Press FUNCTION.

❖ FUNCTION menu item list

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title (track)1</td>
<td>Display the title information for the currently playing disc and total number of titles on the disc. Also select the title you want to play.</td>
</tr>
<tr>
<td>Chapter</td>
<td>Display the information for the currently playing chapter (track/file) and total number of chapters in the disc. Also select the chapter (track/file) you want to play.</td>
</tr>
<tr>
<td>File</td>
<td>Display current file information. Select your favorite file.</td>
</tr>
<tr>
<td>Time</td>
<td>Display the elapsed or remaining time. Also enter the time from which you want to start playback.</td>
</tr>
<tr>
<td>Mode</td>
<td>Switch the play mode (page 33).</td>
</tr>
<tr>
<td>Audio</td>
<td>Switch the audio.</td>
</tr>
<tr>
<td>Angle</td>
<td>Switch the BD-ROM/DVD-Video disc’s camera angle.</td>
</tr>
<tr>
<td>Subtitle</td>
<td>Switch the subtitle language.</td>
</tr>
<tr>
<td>Subtitle Style</td>
<td>Switch the type of text used for subtitles.</td>
</tr>
<tr>
<td>Secondary Video2</td>
<td>Switch the BD-ROM’s secondary video (Picture-in-Picture).</td>
</tr>
<tr>
<td>Secondary Audio3</td>
<td>Switch the BD-ROM’s secondary audio.</td>
</tr>
<tr>
<td>Bitrate</td>
<td>Display the bitrate of the audio/video/secondary video/secondary audio.</td>
</tr>
<tr>
<td>Still off</td>
<td>Switch off the BD-ROM’s still picture.</td>
</tr>
</tbody>
</table>

1. One of these types of information is displayed, depending on the type of disc.
2. Secondary video mark is displayed for scenes at which secondary video is recorded if PIP Mark is set to On (page 42).
3. Secondary audio mark is displayed for scenes at which secondary audio is recorded if Secondary Audio Mark is set to On (page 42).

Note
• Selectable items depend on the type of disc.
• The types of recorded secondary audio streams depend on the disc and file.
• Some discs do not include secondary audio/secondary video.
• In some cases, the secondary audio/secondary video may switch or the switching screen provided on the disc may be displayed immediately, without the current secondary audio/secondary video or the total number of secondary audio/secondary video streams recorded on the disc being displayed.
Playing from a specific time (Time Search)

1. Select Time.
   Use ↑/↓ to select, then press ENTER.
2. Input the time.
   Use the number buttons (0 to 9) to input the time.
   • To play from 45 minutes, input 0, 0, 4, 5, 0 and 0, then press ENTER.
   • To play from 1 hour 20 minutes, input 0, 1, 2, 0, 0 and 0, then press ENTER.
   • Press CLEAR to clear the values you have input.
3. Starting playback from the specified time.
   Press ENTER.

Playing a specific title, chapter, track or file (Search)

1. Select Title or Chapter (track/file).
   Use ↑/↓ to select, then press ENTER.
2. Input the Title or Chapter (track/file) number.
   Use the number buttons (0 to 9) or ↑/↓ to input the number.
   • To search for title 32, input 3 and 2, then press ENTER.
   • Press CLEAR to clear the values you have input.
3. Starting playback from the specified title, chapter or track.
   Press ENTER.

Playing specified range of discs, titles or chapter (track/file) in random order

You can select from two types of random playback.

1. Select Mode.
   Use ↑/↓ to select, then press ENTER.
2. Select the playing mode.
   Use ↑/↓ to select, then press ENTER.

❖ Random play
The specified range of discs, titles or chapter (track/file) is played in random order. The same item may be played consecutively.

❖ Shuffle play
The specified range of discs, titles or chapter (track/file) is played in random order. Each item is played once.

Continuing playback from a specified position (Continued Viewing Playback)

This function allows you to continue playback from a position you specify to be played next time, even after turning the power off.

❖ Setting
  During playback, press CONTINUED at the position from which you want to start continued viewing playback.

❖ Playing
  1. Press ▶/◼ to play the title for which you have set continued viewing playback.
     The continued viewing playback confirmation screen appears.
     • In the cases below, the continued viewing playback confirmation screen is displayed.
     For BD videos
     The screen is displayed after the main featured has been played.
     For recorded discs
     The screen is displayed after the folder is selected and the title set for continued viewing playback has been played.
  2. Use ◄/► to select Yes, then press ENTER.
     Playback starts from the specified position.

❖ Note
  • The continued viewing playback setting is canceled when ▲ OPEN/CLOSE is pressed.
  • Continued viewing playback may not work properly with some discs.
About Source function

This player's Source function allows you to display a list of input sources and start playback. This chapter describes setup and playback procedures required to enjoy these features. When you play the files stored on your computer or the components on the network, it is advisory that you also refer to the operation manual supplied with your network component.

The input sources that can be played from Source function are as shown below.

- BD-R/RE (BDAV format) discs
- DVD-R/RW (VR format) discs
- Audio CDs (CD-DA, SACD and DTS CDs)
- DVD/CDs on which only data files of video, image or audio files, etc. are recorded.
- USB device
- Files on the network servers (on the PCs or components connected to the player via LAN interface.)

**Note**

- The Source function allows you to play files on media servers connected on an identical Local Area Network (LAN) as the receiver.
- The following files are allowed to be played from Source function:
  - PCs running Microsoft Windows 10 with Windows Media Player 12 installed
  - DLNA-compatible digital media servers (on PCs or other components)

Files stored in a PC or DMS (Digital Media Server) as described above can be played via command from an external Digital Media Controller (DMC). Devices controlled by this DMC to play files are called DMRs (Digital Media Renderers). This player supports this DMR function. When in the DMR mode, such operations as playing and stopping files can be performed from the external controller.

- To play back audio files stored on components on the network, you must turn on the DHCP server function of your router. In case your router does not have the built-in DHCP server function, it is necessary to set up the network manually. Otherwise, you cannot play back files stored on components on the network. See Setting the IP address on page 44.

About network playback

The network playback function of this unit uses the following technologies:

- **Windows Media Player**
  See Windows Media Player 12 above for more on this.

- **Content playable over a network**
  - Even when encoded in a compatible format, some files may not play correctly.
  - Some functions may not be supported depending on the server type or version used.
  - Supported file formats vary by server. As such, files not supported by your server are not displayed on this unit. For more information check with the manufacturer of your server.

- **Disclaimer for Third Party Content**
  Access to content provided by third parties requires a high speed Internet connection and may also require account registration and a paid subscription.

Third party content services may be changed, suspended, interrupted, or discontinued at any time without notice, and Pioneer disclaims any liability in connection with such occurrences.

Pioneer does not represent or warrant that content services will continue to be provided or available for a particular period of time, and any such warranty, express or implied, is disclaimed.
About playback behavior over a network

- Playback may stall when the PC is switched off or any media files stored on it are deleted while playing content.
- If there are problems within the network environment (heavy network traffic, etc.) content may not be displayed or played properly (playback may be interrupted or stalled). For best performance, a 10BASE-T/100BASE-TX/1000BASE-T connection between the player and the PC is recommended.
- If several clients are playing simultaneously, as the case may be, playback is interrupted or stalled.
- Depending on the security software installed on a connected PC and the setting of such software, network connection may be blocked. Pioneer is not responsible for any malfunction of the player and/or the Source function features due to communication errors/malfunctions associated with your network connection and/or your PC, or other connected equipment. Please contact your PC manufacturer or Internet service provider.

Playback file on the network

1. Press SOURCE to display the Source function. The Source function can also be displayed by selecting Source from Home Menu, then pressing ENTER.
2. Select the server which contains the file you want to play.
3. Select the file you want to play. Use ‹/› to select, then press ENTER.

To end Source function

Press SOURCE.

Disc/USB playback

1. Press SOURCE to display the Source function. The Source function can also be displayed by selecting Source from Home Menu, then pressing ENTER.
2. Select Disc or USB. Use ‹/› to select, then press ENTER.
3. Select Photo/Music/Video/AVCHD. Use ‹/› to select, then press ENTER.
   - This step is not for the discs that have been recorded with BDAV/VR format.
   - To play files in AVCHD format on a USB device, create a folder named “AVCHD” on the USB device, then copy the “BDMV” folder containing which the files to be played into the “AVCHD” folder.
4. Select the title/track or file you want to play. Use ‹/› to select, then press ENTER. Playback starts from the selected title/track or file.
   - If the file you want to play is in the folder, select the folder that contains the file first.
Playing back image files

❖ About Slideshow
A display of the files in the folder switches automatically.

Note
• Some BD-R/-RE discs have playback protection. To cancel the protection, input the password set for the disc.
• It may take a few seconds before playback starts. This is normal.
• It may not be possible to play some files properly.
• The number of views may be restricted.
• Depending on the connected devices and conditions, some time may be required for playback to start and for the image to switch.

Playing in the desired order (Playlist)
The discs that can add tracks and files to the Playlist are as shown below.
• DVDs/CDs/USB devices on which audio files are recorded

Adding tracks/files
Use this procedure to add tracks and files, and create the Playlist.
1 Press SOURCE to display the Source function.
The Source function can also be displayed by selecting Source from Home Menu, then pressing ENTER.
2 Select Disc or USB.
Load the disc beforehand.
Use ↑/↓ to select, then press ENTER.
3 Select the track/file to be added.
Use → to select.
4 Press POP UP MENU to display the POP UP MENU menu.
5 Select Add to Playlist to add to Playlist.
Use ↑/↓ to select, then press ENTER.
The track or file selected in step 3 is added to the Playlist.
• To add more tracks or files, repeat steps 3 to 5.

Playing the Playlist
1 Press SOURCE to display the Source function.
The Source function can also be displayed by selecting Source from Home Menu, then pressing ENTER.
2 Select Playlist.
Use ↑/↓ to select, then press ENTER.
3 Select the track/file to be played.
Use ↑/↓ to select, then press ENTER.
Playback starts from the selected track/file and continues until the end of the list is reached. Use ◀/▶ to play the previous or next track/file. The Now Playing screen is displayed.

Deleting tracks/files from the Playlist
1 Use ← to select the track/file to be deleted, then press POP UP MENU to display the POP UP MENU menu.
2 Use ↑/↓ to select Remove from Playlist, then press ENTER.

Note
• In the following cases, all information in the playlist will be deleted.
  - When you open the disc tray.
  - When you turn off the power.
Chapter 6
Setting the Audio/Video options

Changing the Audio options

There are a number of additional sound settings you can make using the Audio Parameter menu.

Operating the Audio Parameter screen

1. Press AUDIO P. to display the Audio Parameter screen.
2. Use ↑/↓ to select the setting you want to adjust.
3. Use ←/→ to set as necessary.

❖ Closing the Audio Parameter screen
Press AUDIO P. or RETURN.

Note
• It is not possible to open the Audio Parameter screen when any of the Home Menu (Source, Initial Setup), Video Parameter, Function Menu, or Disc Menu is being displayed.
• It is not possible to open the Audio Parameter screen while 3D contents are being played back.
• When DIRECT function is On, the Audio Parameter setting will not work.
• In Options, the factory default settings are indicated in bold.

<table>
<thead>
<tr>
<th>Setting</th>
<th>Options</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Digital Filter1, 2</td>
<td>Sharp</td>
<td>Switches the AUDIO DAC (Digital Analog Converter) digital filter type.</td>
</tr>
<tr>
<td></td>
<td>Short</td>
<td>One of the following three settings can be selected: Sharp (solid sound),</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Short (smooth startup sound) and Slow (soft sound).</td>
</tr>
<tr>
<td>Audio Delay</td>
<td>0 to 200 (ms)</td>
<td>Some monitors have a slight delay when showing video, so the soundtrack will be slightly out of sync with the picture. By adding a bit of delay, you can adjust the sound to match the presentation of the video.</td>
</tr>
</tbody>
</table>

1 This is effective only on audio output from ANALOG AUDIO OUT terminals.
2 This function does not work when the sampling frequency is 32 kHz.
Changing the Video options

There are a number of additional picture settings you can make using the Video Parameter menu.

Operating the Video Parameter screen

1. Press VIDEO P. to display the Video Parameter screen.
2. Use ↑/↓ to select the setting you want to adjust, then press ENTER.
3. Use ←/→ to set as necessary, then press ENTER.

❖ Closing the Video Parameter screen

Press VIDEO P. or RETURN.

Note

- It is not possible to open the Video Parameter screen when any of the Home Menu (Source, Initial Setup), Audio Parameter, Function Menu, or Disc Menu is being displayed.
- Video Parameter settings have no effect during Dolby Vision output.
- The Video Parameter option is not effective when the HDMI Mode is set to Pure Audio.
- During playback of 4K content, no effect is produced by the DNR setting.
- In Options, the factory default settings are indicated in bold.

<table>
<thead>
<tr>
<th>Setting</th>
<th>Options</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Memory</td>
<td>Memory 1</td>
<td>Your preferred settings can be stored in Memory1, Memory2 or Memory3 to use the settings of the Video Parameter function according to the disc or type of connected video device.</td>
</tr>
<tr>
<td></td>
<td>Memory 2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Memory 3</td>
<td></td>
</tr>
<tr>
<td>TV Types</td>
<td>Reference</td>
<td>Images are output with the screen quality appropriate for the selected type of video device.</td>
</tr>
<tr>
<td></td>
<td>LCD TV</td>
<td>Reference is a setting to suppress video signal processing. Select this when viewing video with the original material unchanged.</td>
</tr>
<tr>
<td></td>
<td>OLED TV</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Projector</td>
<td></td>
</tr>
<tr>
<td>Brightness</td>
<td>-10 - 0 - 10</td>
<td>Select this to adjust the TV screen brightness.</td>
</tr>
<tr>
<td>Contrast</td>
<td>-10 - 0 - 10</td>
<td>Select this to adjust the TV screen contrast.</td>
</tr>
<tr>
<td>Hue</td>
<td>-10 - 0 - 10</td>
<td>Select this to adjust the color (green and red) balance of the TV screen.</td>
</tr>
<tr>
<td>Chroma Level</td>
<td>-10 - 0 - 10</td>
<td>Adjusts the density of the colors.</td>
</tr>
<tr>
<td>Sharpness</td>
<td>0 - 16</td>
<td>Adjusts the sharpness of the images.</td>
</tr>
<tr>
<td>DNR</td>
<td>0 - 3</td>
<td>Reduces the noise.</td>
</tr>
<tr>
<td>HDR-SDR Adj.</td>
<td>100 - 300 - 700</td>
<td>Use this item to perform the HDR-SDR conversion according to the connected video device. This adjusts the connected video device to the maximum brightness value.</td>
</tr>
</tbody>
</table>
Chapter 7
Advanced settings
Changing the settings

Operating the Initial Setup screen

1 When playback is stopped, display the Home Menu screen.
   Press HOME MENU.

2 Select and set Initial Setup.
   Use ↑/↓ to select, then press ENTER.

3 Select the item and change the setting.
   Use ↑/↓/←/→ to select, then press ENTER.

Closing the Initial Setup screen
   Press HOME MENU or RETURN.

Note
- The items that can be selected depend on the player’s status.
- In Options, the factory default settings are indicated in bold.

<table>
<thead>
<tr>
<th>Setting</th>
<th>Options</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Display Setting</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TV Screen</td>
<td>16:9 Full</td>
<td>Select this when connecting to a wide (16:9) TV.</td>
</tr>
<tr>
<td></td>
<td>16:9 Normal</td>
<td>Select this when connected to a wide (16:9) TV. 4:3 pictures are displayed with vertical black bars along the sides.</td>
</tr>
<tr>
<td></td>
<td>4:3 Pan&amp;Scan</td>
<td>Select this when connecting to a 4:3 screen TV and playing a 16:9 video. The video will be played with the left and right sides of the image cut off to display on the 4:3 screen. (This function works if the disc is labeled for 4:3PS.)</td>
</tr>
<tr>
<td></td>
<td>4:3 Letterbox</td>
<td>Select this when connecting to a 4:3 screen TV and playing a 16:9 video. The video will be played with black bands at the top and bottom.</td>
</tr>
<tr>
<td>Resolution</td>
<td>Auto</td>
<td>Select this to choose the resolution of the video signals output from the HDMI OUT terminal automatically.</td>
</tr>
<tr>
<td></td>
<td>480p/576p</td>
<td>Output the video signals from the HDMI OUT terminal with the selected resolution.</td>
</tr>
<tr>
<td></td>
<td>720p</td>
<td>The resolution can be changed by pressing RESOLUTION ▲/▼.</td>
</tr>
<tr>
<td></td>
<td>1080i</td>
<td>The resolution switches each time RESOLUTION ▲/▼ is pressed.</td>
</tr>
<tr>
<td></td>
<td>1080p</td>
<td>• For North American models and Taiwan models, 480p can be selected instead of 480p/576p.</td>
</tr>
<tr>
<td></td>
<td>1080/24p</td>
<td>Source Direct</td>
</tr>
<tr>
<td></td>
<td>4K</td>
<td>Output is made with the resolution that matches the resolution of the contents.</td>
</tr>
<tr>
<td></td>
<td>4K/24p</td>
<td></td>
</tr>
</tbody>
</table>

- When 1080/24p or 4K/24p is selected, the movement may be unnatural or the picture unclear, depending on the contents being played back. In such cases, set the resolution to something other than 1080/24p or 4K/24p.

HDR
- Auto
- HDR signal is output when both the disc to play and the connected video device support HDR. In other cases, SDR signal is output.

- On
- When the disc to play supports HDR, HDR signal is forcibly output regardless of the type of video device.

- Off
- SDR signal is always output.

- The HDR setting can also be changed by pressing the HDR button on the remote control.
- When Dolby Vision is set to Auto, the Dolby Vision setting is prioritized.

Dolby Vision
- Auto
- Dolby Vision signal is output when both the disc to play and the connected video device support Dolby Vision.
- For Dolby Vision signal output, the optimal Resolution, Color Space and HDMI Deep Color are automatically selected for video content.

- Off
- According to the HDR setting, HDR or SDR video signal is output.
### Audio Output

#### Digital Output

<table>
<thead>
<tr>
<th>Setting</th>
<th>Options</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bitstream</td>
<td>Select this to output digital audio signals directly.</td>
<td></td>
</tr>
<tr>
<td>PCM</td>
<td>Select this to output digital audio signals converted to 2-channel audio signals.</td>
<td></td>
</tr>
<tr>
<td>Reencode</td>
<td>When a BD containing secondary audio and interactive audio is played, the two audio signals are mixed and converted to Dolby Digital audio or DTS audio for output.</td>
<td></td>
</tr>
<tr>
<td>Off</td>
<td>Select this to output audio signals other than digital audio signals.</td>
<td></td>
</tr>
</tbody>
</table>

#### Downmix

<table>
<thead>
<tr>
<th>Setting</th>
<th>Options</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stereo</td>
<td>Surround audio signals converted to linear PCM audio signals are converted into 2-channel (stereo) signals for output.</td>
<td></td>
</tr>
<tr>
<td>Lt/Rt</td>
<td>Surround for output (when the connected AV receiver or amplifier, etc., is compatible with Dolby Pro Logic, the AV receiver or amplifier outputs the linear PCM audio signals as surround audio signals).</td>
<td></td>
</tr>
</tbody>
</table>

#### Max Sampling Frequency

<table>
<thead>
<tr>
<th>Setting</th>
<th>Options</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>48kHz</td>
<td>Outputs audio signals that are limited to a sampling frequency below the set sampling frequency from the DIGITAL OUT terminal. Select according to the performance of the connected device.</td>
<td></td>
</tr>
<tr>
<td>96kHz</td>
<td></td>
<td></td>
</tr>
<tr>
<td>192kHz</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- When playing back a sampling frequency file or a disk having a lower than or equal setting compared to the present setting, you can output it at the unchanged sampling frequency.
- Sources with sampling frequencies of over 192 kHz cannot be played.
- When playing copyright-protected discs or files, the signals are output with the sampling frequency limited to 48 kHz or below, regardless of this setting.

#### DRC (Dynamic Range Control)

<table>
<thead>
<tr>
<th>Setting</th>
<th>Options</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Off</td>
<td>Select this to output audio signals without using the DRC function.</td>
<td></td>
</tr>
<tr>
<td>On</td>
<td>Select this to adjust the range between the loudest and softest sounds (dynamic range) for playback at average volume. Use this when it is hard to hear dialog or when watching movies at midnight.</td>
<td></td>
</tr>
<tr>
<td>Auto</td>
<td>Select to switch the DRC setting On/Off automatically according to the input audio signal from the disc. This only affects Dolby TrueHD signals.</td>
<td></td>
</tr>
</tbody>
</table>

- This affects such audio signals as Dolby Digital, Dolby TrueHD, and Dolby Digital Plus.
- DRC affects audio signals output from the following audio output terminals:
  - Analog audio signals output from the AUDIO OUT terminals
  - Linear PCM audio signals output from the DIGITAL OUT or HDMI OUT terminals
- Depending on the disc, the effect may be weak.
- The effect may differ depending on the speakers, the AV amplifier settings, etc.
### HDMI Mode

<table>
<thead>
<tr>
<th>Option</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single</td>
<td>This is selected when connecting a device for use with the <strong>HDMI OUT (MAIN)</strong> terminal only.</td>
</tr>
<tr>
<td>Separate</td>
<td>Select this when you want to output the video and audio separately, the video from the <strong>HDMI OUT (MAIN)</strong> terminal, the audio from the <strong>HDMI OUT (SUB)</strong> terminal.</td>
</tr>
<tr>
<td>Pure Audio</td>
<td>Select this to enjoy music only with a better sound quality when devices are connected to both HDMI output terminals. With this setting, music is output from the <strong>HDMI OUT (SUB)</strong> terminal only, and video signals are only output from the <strong>HDMI OUT (MAIN)</strong> terminal when <strong>DISPLAY</strong> is pressed.</td>
</tr>
</tbody>
</table>

Also refer to **Setting the HDMI Mode** on page 17.

### Color Space

<table>
<thead>
<tr>
<th>Option</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>RGB</td>
<td>Select this to output the video signals as RGB signals. Choose this if the colors seem too faint and the black seems too bright.</td>
</tr>
<tr>
<td>YCbCr4:4:4</td>
<td>Select this to output the video signals as YCbCr 4:4:4 signals.</td>
</tr>
<tr>
<td>YCbCr4:2:2</td>
<td>Select this to output the video signals as YCbCr 4:2:2 signals.</td>
</tr>
<tr>
<td>YCbCr4:2:0</td>
<td>Select this to output the video signals as YCbCr 4:2:0 signals.</td>
</tr>
<tr>
<td>Full RGB</td>
<td>Select this to output the video signals as RGB signals. Choose this if the colors seem too dense and all the dark colors are displayed in a uniform black.</td>
</tr>
</tbody>
</table>

When the connected HDMI device does not support YCbCr4:2:0, or an output resolution incompatible with YCbCr4:2:0 is set, YCbCr4:2:0 signal may not be output even if YCbCr4:2:0 is set.

### HDMI Deep Color

<table>
<thead>
<tr>
<th>Option</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auto</td>
<td>Select this to automatically output the optimal bit color.</td>
</tr>
<tr>
<td>10 bit</td>
<td>Select this when outputting the video signals with 10-bit color.</td>
</tr>
<tr>
<td>12 bit</td>
<td>Select this when outputting the video signals with 12-bit color.</td>
</tr>
<tr>
<td>Off</td>
<td>Select this when outputting the video signals with normal 8-bit color.</td>
</tr>
</tbody>
</table>

### HDMI Audio Out

<table>
<thead>
<tr>
<th>Option</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bitstream</td>
<td>Select this to output HDMI audio signals directly.</td>
</tr>
<tr>
<td>PCM</td>
<td>Select this to output HDMI audio signals converted to PCM audio signals.</td>
</tr>
<tr>
<td>Reencode</td>
<td>When a BD containing secondary audio and interactive audio is played, the two audio signals are mixed and converted to Dolby Digital audio or DTS audio for output.</td>
</tr>
</tbody>
</table>

### Control

<table>
<thead>
<tr>
<th>Option</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>On</td>
<td>Select this to control the player with the remote control of the connected AV device using an HDMI cable. Also refer to page 17.</td>
</tr>
<tr>
<td>Off</td>
<td>Select this when you do not want to control the player with the remote control of the connected AV device using an HDMI cable.</td>
</tr>
</tbody>
</table>

To use PQLS function (page 18), Control must be set to **On**.

### 3D Notice

<table>
<thead>
<tr>
<th>Option</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>This sets whether or not to display the 3D notice when playing 3D images.</td>
</tr>
<tr>
<td>No</td>
<td>3D images are not played.</td>
</tr>
</tbody>
</table>

### Network

<table>
<thead>
<tr>
<th>Setting</th>
<th>Options</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>IP Address Setting</td>
<td>Select this to set the IP address of the player and DNS server (page 44).</td>
<td></td>
</tr>
<tr>
<td>Proxy Server</td>
<td>Only set the proxy server if so instructed by your Internet service provider (page 44).</td>
<td></td>
</tr>
<tr>
<td>Information</td>
<td>Displays the values of the MAC address, IP address, subnet mask, default gateway, DNS server (primary) and DNS server (secondary).</td>
<td></td>
</tr>
<tr>
<td>Connection Test</td>
<td>Select this to test the network connection (page 44).</td>
<td></td>
</tr>
<tr>
<td>BD-Live Connection</td>
<td>Permitted</td>
<td>All discs are allowed to connect to BD-LIVE.</td>
</tr>
<tr>
<td></td>
<td>Partial Permitted</td>
<td>Only discs whose safety has been confirmed are allowed to connect to BD-LIVE.</td>
</tr>
<tr>
<td></td>
<td>Prohibited</td>
<td>No disc is allowed to connect to BD-LIVE.</td>
</tr>
<tr>
<td>Setting</td>
<td>Options</td>
<td>Explanation</td>
</tr>
<tr>
<td>-------------------------</td>
<td>-----------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Language</strong></td>
<td>available languages</td>
<td>Choose a language for the on-screen displays from the listed languages.</td>
</tr>
<tr>
<td><strong>Audio</strong></td>
<td>available languages</td>
<td>Choose a language from the listed languages to set the default audio language for BD-ROM and DVD-Video playback.</td>
</tr>
<tr>
<td>* For some discs, it may not be possible to change to the selected language.</td>
<td><strong>Subtitle</strong></td>
<td>available languages</td>
</tr>
<tr>
<td>* For some discs, it may not be possible to change to the selected language.</td>
<td><strong>Menu</strong></td>
<td>available languages</td>
</tr>
<tr>
<td>* For some discs, it may not be possible to change to the selected language.</td>
<td><strong>Playback Angle Mark</strong></td>
<td><strong>On</strong> Select this to display the angle mark on the TV screen (page 28).</td>
</tr>
<tr>
<td><strong>PIP Mark</strong></td>
<td><strong>On</strong> Select this to display the PIP mark on the TV screen.</td>
<td><strong>Off</strong> Select this if you do not want to display the PIP mark on the TV screen.</td>
</tr>
<tr>
<td><strong>Secondary Audio Mark</strong></td>
<td><strong>On</strong> Select this to display the secondary audio mark on the TV screen (page 32).</td>
<td><strong>Off</strong> Select this if you do not want to display the secondary audio mark on the TV screen.</td>
</tr>
<tr>
<td><strong>DVD Playback</strong></td>
<td><strong>DVD Audio</strong> Select this to play only the audio part on the DVD-Audio disc.</td>
<td><strong>DVD Video</strong> Select this to play only the video part on the DVD-Audio disc.</td>
</tr>
<tr>
<td>* This setting is for DVD-Audio disc playback.</td>
<td><strong>Disc Auto Playback</strong></td>
<td><strong>On</strong> Discs are played automatically after they are loaded.</td>
</tr>
<tr>
<td><strong>Last Memory</strong></td>
<td><strong>On</strong> Select this to save the point at which you last stopped playback, even after the disc tray is opened or you switch to the standby mode.</td>
<td><strong>Off</strong> Select this when you want to use only Continue Viewing Play (page 33).</td>
</tr>
<tr>
<td><strong>Use of a disk that does not support the function is not possible.</strong></td>
<td><strong>PBC (Play Back Control)</strong></td>
<td><strong>On</strong> Select this to play Video-CDs (version 2.0) compatible with PBC using the disc menu.</td>
</tr>
<tr>
<td><strong>Closed Caption</strong></td>
<td><strong>Off</strong> Closed Caption is not displayed.</td>
<td><strong>Default</strong> Closed Caption is displayed.</td>
</tr>
<tr>
<td>(North American models only)</td>
<td><strong>Custom</strong> You can use Closed Caption with your favorite settings (Font Color, Font Size, Font Style, Font Opacity, Font Edge, Background Color, Background Opacity, Window Color, Window Opacity).</td>
<td></td>
</tr>
<tr>
<td>Setting</td>
<td>Options</td>
<td>Explanation</td>
</tr>
<tr>
<td>-------------------------</td>
<td>--------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Setup Navigator</strong></td>
<td>Start making the</td>
<td>Using the Setup Navigator menu. For details, see page 23.</td>
</tr>
<tr>
<td><strong>Security</strong></td>
<td>Register (change)</td>
<td>The password for parental lock settings or for unlocking to play DVD-</td>
</tr>
<tr>
<td></td>
<td>the password</td>
<td>Videos with the parental lock feature (page 45). The default password is</td>
</tr>
<tr>
<td></td>
<td>for parental lock</td>
<td>&quot;0000&quot;.</td>
</tr>
<tr>
<td></td>
<td>Change Password</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Parental Control</td>
<td>Change the player’s parental lock level (page 45).</td>
</tr>
<tr>
<td></td>
<td>Country Code</td>
<td>Change the Country/Area code (page 45).</td>
</tr>
<tr>
<td><strong>Options</strong></td>
<td>Normal</td>
<td>Select the brightness of the main unit display window.</td>
</tr>
<tr>
<td></td>
<td>Slightly dimmed</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dimmed</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Off</td>
<td></td>
</tr>
<tr>
<td><strong>Screen Saver</strong></td>
<td>Off</td>
<td>The screen saver is not activated.</td>
</tr>
<tr>
<td></td>
<td>1 min</td>
<td>• The screen saver will be activated if no operation has been performed for</td>
</tr>
<tr>
<td></td>
<td></td>
<td>more than one minute/two minutes/three minutes.</td>
</tr>
<tr>
<td></td>
<td>2 min</td>
<td>• During operation of the screen saver, [SCREENSAVER] is displayed on the</td>
</tr>
<tr>
<td></td>
<td></td>
<td>front panel display.</td>
</tr>
<tr>
<td></td>
<td>3 min</td>
<td>• Operating the remote control can deactivate the screen saver.</td>
</tr>
<tr>
<td><strong>Auto Power Off</strong></td>
<td>Off</td>
<td>Select this if you do not want the power to turn off automatically.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>This is the default setting for models other than European models.</td>
</tr>
<tr>
<td></td>
<td>15 min</td>
<td>The power will be automatically turned off if no operation has been</td>
</tr>
<tr>
<td></td>
<td></td>
<td>performed for more than 15 minutes or 30 minutes. The default setting for</td>
</tr>
<tr>
<td></td>
<td></td>
<td>European models is 15 minutes.</td>
</tr>
<tr>
<td></td>
<td>30 min</td>
<td></td>
</tr>
<tr>
<td><strong>Network Standby</strong></td>
<td>On</td>
<td>Select this when the power needs to be turned on using a network command.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(for installation technician)</td>
</tr>
<tr>
<td></td>
<td>Off</td>
<td>Select this if you do not want to use the Network Standby function</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(described above).</td>
</tr>
<tr>
<td><strong>Update</strong></td>
<td>USB Storage</td>
<td>Select the method of software updating (page 46).</td>
</tr>
<tr>
<td></td>
<td>Network</td>
<td></td>
</tr>
<tr>
<td><strong>Load Default</strong></td>
<td>Restore the</td>
<td>Restore the settings to the factory default.</td>
</tr>
<tr>
<td></td>
<td>settings to the</td>
<td></td>
</tr>
<tr>
<td></td>
<td>factory default.</td>
<td></td>
</tr>
<tr>
<td><strong>System Information</strong></td>
<td>Check the system</td>
<td>Check the system version number.</td>
</tr>
<tr>
<td></td>
<td>version number.</td>
<td>Selecting License will display the license statement of the software used</td>
</tr>
<tr>
<td></td>
<td>Selecting License</td>
<td>for the unit.</td>
</tr>
<tr>
<td></td>
<td>will display the</td>
<td></td>
</tr>
<tr>
<td></td>
<td>license statement</td>
<td>of the software used for the unit.</td>
</tr>
<tr>
<td></td>
<td>of the software</td>
<td></td>
</tr>
<tr>
<td></td>
<td>used for the unit.</td>
<td></td>
</tr>
<tr>
<td><strong>BUDA</strong></td>
<td>BUDA Information</td>
<td>Display and set up the BUDA data on the connected USB device (page 45).</td>
</tr>
<tr>
<td></td>
<td>BUDA Setup</td>
<td></td>
</tr>
<tr>
<td><strong>Text to Speech</strong></td>
<td>Off</td>
<td>Text to Speech is not used.</td>
</tr>
<tr>
<td>(North American models</td>
<td></td>
<td></td>
</tr>
<tr>
<td>only)</td>
<td>Default</td>
<td>Text to Speech is used.</td>
</tr>
<tr>
<td></td>
<td>Custom</td>
<td>You can use Text to Speech with your favorite settings (Language, Volume,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pitch, Speed).</td>
</tr>
</tbody>
</table>
Setting the IP address

1. Select and set Network → IP Address Setting → Next Screen.
   Use ↑/↓ to select, then press ENTER.

2. Set IP address.
   Use ↑/↓/←/→ to set the IP address of the player or DNS server, then press ENTER.

   • Auto Set IP Address
     On – The player's IP address is obtained automatically. Select this when using a broadband router or broadband modem that has a DHCP (Dynamic Host Configuration Protocol) server function. This player's IP address will automatically be allocated from the DHCP server.
     Off – The player's IP address must be set manually. Use the number buttons (0 to 9) to input the IP address, subnet mask and default gateway.

   Caution
   • Some time is required for the IP address setting.

   Note
   • Once the IP address is set, select [Connection Test] to check that the unit is properly connected.
   • For information on the DHCP server function, refer to the operating instructions for the network device.
   • You may need to contact your Internet service provider or network administrator when inputting the IP address manually.

Setting the proxy server

Only set the proxy server if so instructed by your Internet service provider.

1. Select and set Network → Proxy Server → Next Screen.
   Use ↑/↓ to select, then press ENTER.

2. Select and set Use or Not use at Proxy Server.
   Use ←/→ to change, then press .
   • Use – Select this when using a proxy server.
   • Not use – Select this when not using a proxy server.

If you have selected Use, proceed to step 3.

3. Select and set Server Select Method.
   Use ←/→ to change, then press ↓.
   • IP Address – Input the IP address.
   • Server Name – Input the server name.

Input IP Address or Server Name.
Use the number buttons (0 to 9) to input the number if you select IP address in step 3. Use ←/→ to move the cursor.

When Server Name is selected in step 3, use the number buttons (0 to 9) to launch the software keyboard. Now use ↑/↓/←/→ to select characters and items, then press ENTER to input.

4. Input Port Number.
   Press ↓, then use the number buttons (0 to 9) to input the number.

5. Press ENTER to set.

Displaying the network settings

Select and set Network → Information → Next Screen.
Use ↑/↓ to select, then press ENTER.
The MAC address, IP address, subnet mask, default gateway and DNS server (primary and secondary) settings are displayed.

When Auto Set IP Address is set to On, the values obtained automatically are displayed.

Testing the network connection

Select and set Network → Connection Test → Start.
Use ↑/↓ to select, then press ENTER.
“Network is OK.” is displayed once the test is completed. If any other message is displayed, check the connections and/or settings (page 22 and page 44).

Changing to other language at language setting

Select and set Language.
Use ↑/↓ to select, then press ENTER.

Select and set OSD, Audio, Subtitle or Menu.
Use ↑/↓ to select, then press ENTER.

Select and set the desired language.
Use ↑/↓ to select, then press ENTER.

Note
• If a language not recorded on the BD/DVD is set, one of the recorded languages is automatically selected and played.
Erasing data that has been added to BDs and application data

Use this procedure to erase data that has been added to BDs (data downloaded with the BD-LIVE function and data used with the BONUSVIEW function) and application data.

Caution

- Some time is required to erase the data.
- Do not unplug the power cord while data is being erased.

1 Select and set Options → BUDA → BUDA Setup. Press ENTER.
2 Select and set Format. Press ENTER.

Registering or Changing the password

Use this procedure to register or change the code number required for the Parental Lock settings.

About default password of this unit

The default password is “0000”.
- This unit might ask you to enter a password when you change the password.
- If you reset this unit, your password is simultaneously changed to the default setting.

1 Select and set Security → Change Password → Next Screen. Use ↑/↓ to select, then press ENTER.
2 Input the password.
Use the number buttons (0 to 9) to input the number, then press ENTER to set.
Use ←/→ to move the cursor.
3 Re-input the password.
Use the number buttons (0 to 9) to input the number, then press ENTER to set.
Use ←/→ to move the cursor.
- To change the password, input the previously registered password, then input the new password.

Note

- We recommend making a note of the password.
- If you have forgotten the password, reset the player to the factory default setting, then register the password again (page 46).

Changing the Parental Lock level for viewing DVDs/BD-ROMs

Some discs containing scenes of violence, for example, have Parental Lock levels (check the indications on the disc’s jacket or elsewhere). To restrict viewing these discs, set the player’s level to the level lower than the discs.

1 Select and set Security → Parental Control → Next Screen. Use ↑/↓ to select, then press ENTER.
2 Input the password.
Use the number buttons (0 to 9) to input the number, then press ENTER to set.
Use ←/→ to move the cursor.
3 Change the level.
Use ←/→ to change, then press ENTER to set.

Note

- The level can be set to Off or between Level 1 and Level 8. When set to Off, viewing is not restricted.

Changing the Country/Area code

1 Select and set Security → Country Code → Next Screen. Use ↑/↓ to select, then press ENTER.
2 Input the password.
Use the number buttons (0 to 9) to input the number, then press ENTER to set.
Use ←/→ to move the cursor.
3 Change the country/area code.
Use ←/→ to change, then press ENTER to set.
Software updating

The player’s software can be updated using one of the methods shown below.

• Connecting to the Internet.
• Using a USB flash drive.

Product information on this player is provided on the Pioneer website. Check the website shown on page 6 for update and service information on your Blu-ray disc player.

Caution

• Do not perform the actions below while the software is being updated. Doing so will interrupt updating and could lead to malfunction.
  - Disconnecting a USB memory device
  - Unplugging the power cord
  - Pressing the standby/on button.

• There are two processes for software updating, downloading and updating. Both processes may take a certain period of time.

• Other operations are defeated during software updating. Furthermore, updating process cannot be canceled.

 Updating connecting to the Internet

1 Connect to the Internet.

2 When playback is stopped, display the Home Menu screen.

Press HOME MENU.

3 Select and set Initial Setup.

Use ▲/▼ to select, then press ENTER.

4 Select and set Options → Update → Network → Start.

Use ▲/▼ to select, then press ENTER.

5 Updating starts.

Press ENTER.

• Software updating may take a certain period of time.

• When updating is completed, the unit restarts automatically.

 Updating using a USB flash drive

Note

• When an update file is provided on the Pioneer website, use your computer to download it onto a USB flash drive. Carefully read the instructions on downloading update files provided on the Pioneer website.

• Store the update file in the root directory of the USB flash drive. Do not store it within a folder.

• Do not put any files other than the update file on the USB flash drive.

• This unit supports USB flash drives formatted in FAT16 or FAT32. When formatting a USB flash drive on your computer, do so with the settings below.
  - File system: FAT32
  - Allocation unit size: Default allocation size

• Only store the most recent update file on the USB flash drive.

• Do not use a USB extension cable to connect a USB flash drive to the player. Using a USB extension cable may prevent the player from performing correctly.

1 Plug in the USB flash drive on which the update file is stored.

2 When playback is stopped, display the Home Menu screen.

Press HOME MENU.

3 Select and set Initial Setup.

Use ▲/▼ to select, then press ENTER.

4 Select and set Options → Update → USB Storage → Start.

Use ▲/▼ to select, then press ENTER.

5 Updating starts.

Press ENTER.

• Software updating may take a certain period of time.

• When updating is completed, the unit restarts automatically.

Restoring all the settings to the factory default settings

1 Check that the player’s power is turned on.

2 When playback is stopped, display the Home Menu screen.

Press HOME MENU.

3 Select and set Initial Setup.

Use ▲/▼ to select, then press ENTER.

4 Select and set Options → Load Default → Next Screen.

Use ▲/▼ to select, then press ENTER.

5 Select and set OK.

Use ▲/▼ to select, then press ENTER.

Note

• After restoring all the settings to the factory default settings, use Setup Navigator to reset the player (page 23).
• When disposing of the product, we recommend you reset it to the factory default setting to delete the data.

**Setting the backlight mode**

• Default setting : 01 (normal mode)
The backlight lighting pattern can be selected from among four modes, in consideration of convenience and battery service life.

⚠️ **Caution**

• The setting may be restored to the default after the batteries are replaced. If this happens, reset it.

► **Input the 2-digit code you want to set.**
Press the number buttons (0 to 9) to input the code while pressing 🔃 **LIGHT**.

• 01 (normal mode) : The backlight is turned on and off with the light button. After it lights, it turns off automatically if no operation is performed for 10 seconds.

• 02 (frequent lighting mode) : The backlight turns on when any button on the remote control is pressed. It is turned off with the light button. After it lights, it turns off automatically if no operation is performed for 10 seconds.

• 03 (eco mode) : The backlight is turned on and off with the light button. After it lights, it turns off automatically if no operation is performed for 5 seconds.

• 04 (off mode) : The backlight does not turn on even when the light button is pressed.

If the backlight LED lights for three seconds and continues to flash, the setting has been successfully completed.

If the backlight LED flashes, the setting has failed.
About how digital audio formats are output

<table>
<thead>
<tr>
<th>Setting</th>
<th>Bitstream</th>
<th>PCM</th>
<th>Reencode</th>
</tr>
</thead>
<tbody>
<tr>
<td>Method of conversion</td>
<td>Only the primary audio (the main sound for movies, etc.) is output. The secondary audio and interactive audio are not output.</td>
<td>The primary audio, secondary audio and interactive audio are converted into PCM audio and output simultaneously.</td>
<td>The primary audio, secondary audio and interactive audio are converted into PCM audio and output simultaneously.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Audio type</th>
<th>Output terminal(s)</th>
<th>HDMI OUT terminal</th>
<th>DIGITAL OUT terminal</th>
<th>HDMI OUT terminal</th>
<th>DIGITAL OUT terminal</th>
<th>AUDIO OUTPUT terminal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dolby Digital</td>
<td>Dolby Digital</td>
<td>Dolby Digital</td>
<td>PCM 5.1ch</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dolby Digital Plus</td>
<td>Dolby Digital Plus</td>
<td>Dolby Digital</td>
<td>PCM 7.1ch</td>
<td>Dolby Digital</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dolby TrueHD</td>
<td>Dolby TrueHD</td>
<td>Dolby Digital</td>
<td>PCM 7.1ch</td>
<td>Dolby Digital</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DTS Digital Surround</td>
<td>DTS Digital</td>
<td>DTS Digital</td>
<td>PCM 5.1ch</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DTS-HD High Resolution Audio</td>
<td>DTS-HD High Resolution Audio</td>
<td>DTS Digital Surround</td>
<td>PCM 7.1ch</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DTS-HD Master Audio</td>
<td>DTS-HD Master Audio</td>
<td>DTS Digital Surround</td>
<td>PCM 7.1ch</td>
<td>DTS Digital Surround</td>
<td>DTS Digital Surround</td>
<td></td>
</tr>
<tr>
<td>PCM</td>
<td>PCM 7.1ch</td>
<td>PCM 2 ch</td>
<td>PCM 7.1ch</td>
<td>Dolby Digital</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AAC</td>
<td>AAC2</td>
<td>AAC2</td>
<td>PCM 2 ch</td>
<td></td>
<td>AAC2</td>
<td></td>
</tr>
<tr>
<td>SACD (DSD)</td>
<td>DSD</td>
<td>PCM 2 ch</td>
<td>PCM 5.1ch</td>
<td>PCM 2 ch</td>
<td>PCM 2 ch</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

1. If there is no secondary audio or interactive audio, depending on the disc the signals may be output without being re-encoded.
2. For multi-channel audio, the sound is converted into PCM 2-channel audio for output.
3. When Resolution is set to 480p, or when it is set to Auto and the connected device supports only 480i/480p, the DSD multi-channel audio of SACDs is output in PCM multi-channel even if HDMI Audio Out is set to Bitstream (page 39).
4. When HDMI Audio Out is set to Bitstream or Reencode, sound does not produced (page 41).
5. Depending on the settings, for DSD multi-channel audio, 2 channels are output on the front left and right.

**Note**

- Depending on the disc, the number of channels may differ.
- Depending on the connected HDMI device, the HDMI output audio and number of channels may differ.
- The HDMI output audio and number of channels may differ when Resolution is set to 480p, as well as when set to Auto if the connected device only supports 480i/480p.
- Three types of audio are recorded on BD video discs.
  - Primary audio: The main sound.
  - Secondary audio: Additional sound added supplementarily, such as comments by directors, actors, etc.
  - Interactive audio: Sounds such as clicks heard when operations are performed. The interactive audio differs from disc to disc.
**Chapter 8**

**Additional information**

**Cautions on use**

**Moving the player**

If you need to move this unit, first remove the disc if there’s one loaded, and close the disc tray. Next, press \( ^\text{STANDBY/ON} \) to switch the power to standby, checking that the \( \text{POWER OFF} \) indication on the front panel display goes off. Wait at least 10 seconds. Lastly, disconnect the power cord.

Never lift or move the unit during playback — discs rotate at a high speed and may be damaged.

**Place of installation**

Select a stable place near the TV and AV system to which the unit is connected.

Do not place the player on top of a TV or color monitor. Keep it away from cassette decks or other components easily affected by magnetism.

Avoid the following types of places:

- Places exposed to direct sunlight
- Humid or poorly ventilated places
- Extremely hot or cold places
- Places subject to vibration
- Places in which there is much dust or cigarette smoke
- Places exposed to soot, steam or heat (in kitchens, etc.)

⚠️ **Do not place objects on top**

Do not place objects on top of the player.

⚠️ **Do not obstruct the ventilation holes**

Do not use the player on a shaggy rug, bed, or sofa, and do not cover the player with a cloth, etc. Doing so will prevent heat dissipation and could lead to damage.

⚠️ **Keep away from heat**

Do not place the player on top of an amplifier or other device generating heat. When installing in a rack, to avoid the heat generated by the amplifier and other devices, place it on a shelf below the amplifier whenever possible.

**Turn the power off when not using the player**

Depending on the conditions of the TV broadcast signals, striped patterns may appear on the screen when the TV is turned on while the player’s power is turned on. This is not a malfunction with the player or TV. If this happens, turn the player’s power off. In the same way, noise may be heard in the sound of a radio.

**Condensation**

If the player is moved suddenly from a cold place into a warm room (in winter, for example) or if the temperature in the room in which the player is installed rises suddenly due to a heater, etc., water droplets (condensation) may form inside (on operating parts and the lens). When condensation is present, the player will not operate properly and playback is not possible. Let the player stand at room temperature for 1 or 2 hours with the power turned on (the time depends on the extent of condensation). The water droplets will dissipate and playback will become possible.

Condensation can also occur in the summer if the player is exposed to the direct wind from an air-conditioner. If this happens, move the player to a different place.

**Cleaning the player**

Normally, wipe the player with a soft cloth. For tough dirt, apply some neutral detergent diluted in 5 to 6 parts water to a soft cloth, wring out thoroughly, wipe off the dirt, then wipe again with a dry cloth.

Note that getting alcohol, thinner, benzene or insecticide on the player could cause the print and coating to peel off. Also, avoid leaving rubber or vinyl products in contact with the player for long periods of time, as this could damage the cabinet.

When using chemical-impregnated wipes, etc., read the wipe’s cautions carefully.

Unplug the power cord from the power outlet when cleaning the player.

**Caution for when the unit is installed in a rack with a glass door**

Do not press the \( \Delta \text{OPEN/CLOSE} \) on the remote control to open the disc tray while the glass door is closed. The door will hamper the movement of the disc tray, and the unit could be damaged.
**Cleaning the pickup lens**

The player’s lens should not become dirty in normal use, but if for some reason it should malfunction due to dust or dirt, consult your nearest Pioneer authorized service center. Although lens cleaners for players are commercially available, we advise against using them since some may damage the lens.

**Handling discs**

Do not use damaged (cracked or warped) discs.

Do not scratch the disc’s signal surface or let it get dirty.

Do not load more than one disc into the player at a time.

Do not glue paper or put stickers onto the disc, or use a pencil, ball-point pen or other sharp-tipped writing instrument. These could all damage the disc.

❖ **Storing discs**

Always store discs in their cases, and place the cases vertically, avoiding places exposed to high temperatures or humidity, direct sunlight or extremely low temperatures.

Be sure to read the cautions included with the disc.

❖ **Cleaning discs**

It may not be possible to play the disc if there are fingerprints or dust on it. In this case, using a cleaning cloth, etc., to wipe the disc gently from the center toward the outer edge. Do not use a dirty cleaning cloth.

Do not use benzene, thinner or other volatile chemicals. Also do not use record spray or antistatic agents.

For tough dirt, apply some water to a soft cloth, wring out thoroughly, wipe off the dirt, then wipe off the moisture with a dry cloth.

❖ **Specially shaped discs**

Specially shaped discs (heart-shaped, hexagonal, etc.) cannot be used on this player. Never use such discs, as they will damage the player.

❖ **Condensation on discs**

If the disc is moved suddenly from a cold place into a warm room (in winter, for example), water droplets (condensation) may form on the disc surface. Discs will not play properly if there is condensation on them. Carefully wipe off the water droplets from the disc surface before using the disc.
Troubleshooting

Incorrect operation is often mistaken for trouble or malfunction. If you think that there is something wrong with this component, check the points below. Sometimes the trouble may lie in another component. Inspect the other components and electrical appliances being used. If the trouble cannot be rectified even after checking the points below, ask your nearest Pioneer authorized service center or your dealer to carry out repair work.

Playback

<table>
<thead>
<tr>
<th>Problem</th>
<th>Check</th>
<th>Remedy</th>
</tr>
</thead>
</table>
| • Disc does not play.  
  • Disc tray opens automatically. | Is the disc one that is playable on this player?  
  Is the file one that is playable on this player? | • Check whether the disc is one that can be played on this player (page 7).  
  • Check whether the file is one that can be played on this player (page 10).  
  • Check whether or not the file is damaged. |
| | Is the disc scratched? | It may not be possible to play scratched discs. |
| | Is the disc dirty? | Clean the disc (page 50). |
| | Is there a piece of paper or sticker attached to the disc? | The disc may be warped and unplayable. |
| | Is the disc properly set in the disc tray? | • Set the disc with the printed side facing up.  
  • Set the disc properly in the depression in the disc tray. |
| | Is the region number correct? | See page 9 for the region numbers of discs that can be played on this player.  
  • Eliminate any condensation inside the unit (page 49).  
  • Depending on how the disc was recorded, the status of the pickup and compatibility between the disc being used and this unit, it may not be possible to play the disc properly.  
  • If the recorded time is short, it may not be possible to play the disc properly.  
  • BD-RE/-R discs recorded in formats other than BDMV or BDAV cannot be played. |
<table>
<thead>
<tr>
<th>Problem</th>
<th>Check</th>
<th>Remedy</th>
</tr>
</thead>
</table>
| No picture is displayed or the picture is not displayed properly. | Is the HDMI cable properly connected? | • Connect the cable properly according to the connected devices (page 16).  
• Disconnect the cable, then reinsert it firmly and all the way in.  
• TV or any other device which outputs video signals must be connected to the HDMI OUT (MAIN) terminal (page 16). |
| | Is the HDMI cable damaged? | If the cable is damaged, replace it with a new one. |
| | Is the input setting on the connected TV or AV receiver or amplifier right? | Read the operating instructions for the connected components and switch to the proper input. |
| | Is the output video resolution properly set? | Switch the resolution at which the video and audio are output by pressing RESOLUTION ▲/▼. |
| | Depending on the HDMI cable being used, high resolution images of 4K video and HDR video of ULTRA HD Blu-ray™ may not be output. | To watch 4K video or HDR video of ULTRA HD Blu-ray™, use an 18 Gbps-compatible Premium High Speed HDMI®/™ cable (optional). |
| | Is a DVI device connected? | The picture may not be displayed properly if a DVI device is connected. |
| | Is Color Space properly set? | Change the Color Space setting (page 41). |
| | Is the HDMI Mode set appropriately? | Set the HDMI Mode to something other than Pure Audio (page 41). |
| | Is the DIRECT function set to On? | Video output does not occur if the DIRECT function is set to On. Turn the DIRECT function off to display video (page 29). |
| Playback stops. | | • Playback may stop if the unit is subject to shocks or set in an unstable place.  
• Playback may stop when a USB device is connected or disconnected during playback. Do not connect or disconnect USB devices during playback. |
| Picture freezes and the front panel and remote control buttons stop working. | | • Press ■ STOP to stop playback, then restart playback.  
• If the playback cannot be stopped, press □ STANDBY/ON on the player’s front panel to turn off the power, then turn the power back on.  
• If the power cannot be turned off (to standby), reset the unit. Press and hold the □ STANDBY/ON button for approx. five seconds. When the button indicator turns off, release your finger. The unit restarts and can now be operated.  
• It may not be possible to play scratched discs. |
| • Picture is stretched.  
• Picture is cropped.  
• Aspect ratio cannot be switched. | Is the TV’s aspect ratio properly set? | Read the operating instructions for the TV and set the TV’s aspect ratio properly. |
| | Is TV Screen properly set? | Set TV Screen properly (page 39).  
When video signals with a resolution of 4K60p, 4K50p, 4K24p, 1080/50i, 1080/50p, 720/50p, 1080/24p, 1080/60i, 1080/60p or 720/60p are being output from the HDMI OUT terminal, they may be output with an aspect ratio of 16:9 even if TV Screen is set to 4:3 Pan&Scan (page 39). |
<p>| Picture is interrupted. | | The picture may be interrupted when the resolution of the recorded video signal switches. Set Resolution to something other than Auto (page 39). |
| There is square noise (pixelation) on the screen. | | Due to the characteristics of digital image compression technology, block-shaped images may stand out, for example in scenes where there is fast movement. |
| The subtitles cannot be switched. | | The subtitles cannot be switched for discs recorded on a DVD or BD recorder. |</p>
<table>
<thead>
<tr>
<th>Problem</th>
<th>Check</th>
<th>Remedy</th>
</tr>
</thead>
</table>
| • No sound is output.  
• Sound is not output properly.                                                   | Is the volume set to the minimum?  
Is the disc played back in slow motion?  
Is the disc played back in fast forward or fast reverse?  
Are the audio cables properly connected?  
Is the audio cable damaged?  
Is Audio Output properly set?  
Are the connected components (AV receiver or amplifier, etc.) properly set?  
Is HDMI Audio Out properly set?  
Is the output video resolution properly set?  
Is a DVI device connected?  
Is the HDMI Mode set appropriately?  
Is the DIRECT function set to ON?  
Is a file with high transfer rate played?  
Left/right audio channels are inverted or only one side is produced.  
Multi-channel sound is not output.  
Noise can be heard when outputting DTS Digital Audio signals from the DIGITAL OUT terminal.  
192 kHz or 96 kHz digital audio signals cannot be output from the DIGITAL OUT terminal. | If the volume of the TV or AV amplifier is set to the minimum, raise it.  
No sound is output during slow motion play and forward and reverse scanning.  
• Connect the cable properly according to the connected devices (page 16).  
• Insert the cable firmly and all the way in.  
• If the connection plug or terminal is dirty, wipe it clean.  
Set Audio Output properly, according to the connected device (page 40).  
Read the operating instructions for the connected components and check the volume, input, speaker settings, etc.  
Set HDMI Audio Out to Reencode or PCM (page 41).  
Switch the resolution at which the video and audio are output by pressing RESOLUTION ▲▼.  
The sound will not be output from the HDMI OUT terminal if a DVI device is connected. Connect the device to a DIGITAL OUT terminal or the AUDIO OUT terminals (page 20).  
• For some BDs, audio signals are only output from DIGITAL OUT terminal or the HDMI OUT terminal.  
• The sound may not be output for discs containing sound other than audio signals or non-standard sound.  
• When copy-protected discs are played, the picture or sound may not be properly output. This is not a malfunction.  
Set the HDMI Mode properly, according to the connected device (page 41).  
Audio output does not occur from the HDMI or DIGITAL AUDIO OUT terminals if the DIRECT function is set to On. Turn the DIRECT function off to output audio from the HDMI or DIGITAL AUDIO OUT terminals (page 29).  
Use DVD or BD to play a file with high transfer rate, such as WAV, FLAC or DSD on the disc. Depending on the disc, files with high transfer rate may not be played. In such a case, those files may be correctly played via a USB device or network.  
Check whether the audio cables for the left and right channels are inverted or whether the cable for one side is disconnected (page 20).  
Read the operating instructions for the connected AV receiver or amplifier and check the audio output settings of the AV receiver or amplifier.  
Use the menu screen or AUDIO to switch the disc’s sound to multi-channel.  
If an AV receiver or amplifier that is not compatible with DTS Digital Surround is connected to the DIGITAL OUT terminal, set Digital Output to PCM (page 40).  
• Copyright-protected audio is converted to 48 kHz or less before output.  
• Set Max Sampling Frequency to 96kHz or 192kHz (page 40). |
## Control function

<table>
<thead>
<tr>
<th>Problem</th>
<th>Check</th>
<th>Remedy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control function does not work.</td>
<td>Is the HDMI cable properly connected?</td>
<td>To use the Control function, connect the TV and AV system (AV receiver or amplifier, etc.) to the HDMI OUT terminal (page 16). Depending on the HDMI cable being used, the control function with HDMI may not operate properly. Use an 18 Gbps-compatible Premium High Speed HDMI®/TM cable (optional).</td>
</tr>
<tr>
<td></td>
<td>Is this player connected to the TV using an HDMI cable to watch the picture?</td>
<td>If video signals are being output from a terminal other than the HDMI OUT terminal, the Control function does not work. Connect to the TV using an HDMI cable (page 16).</td>
</tr>
<tr>
<td></td>
<td>Is the HDMI Mode set appropriately?</td>
<td>• When connecting a device supporting the control function to the HDMI OUT (MAIN) terminal, set the HDMI Mode to Single. • When connecting a device supporting the control function to the HDMI OUT (SUB) terminal, set the HDMI Mode to Separate or Pure Audio (page 41).</td>
</tr>
<tr>
<td></td>
<td>Is Control set to On on the player?</td>
<td>Set Control to On on the player (page 41).</td>
</tr>
<tr>
<td></td>
<td>Does the connected device support the Control function?</td>
<td>• The Control function will not work with devices of other brands that do not support the Control function, even when connected using an HDMI cable. • The Control function will not work if devices that do not support the Control function are connected between the Control-compatible device and the player. See page 17. • Even when connected to a Pioneer product compatible with the Control function, some of the functions may not work. Also refer to the operating instructions for the connected device.</td>
</tr>
<tr>
<td></td>
<td>Is Control set to On on the connected device?</td>
<td>Set Control to On on the connected device. The Control function operates when Control is set to On for all devices connected to the HDMI OUT terminal. Once connections and settings of all the devices are finished, be sure to check that the player’s picture is output to the TV. (Also, check after changing the connected devices and connecting and/or disconnecting HDMI cables.) If the player’s picture is not being output to the TV, the Control function may not work properly. For details, refer to the operating instructions of the connected device.</td>
</tr>
<tr>
<td></td>
<td>Are multiple players connected?</td>
<td>The Control function may not work if 4 or more players, including this player, are connected by an HDMI cable. Depending on the connected device, the function may not work.</td>
</tr>
</tbody>
</table>
## Network

<table>
<thead>
<tr>
<th>Problem</th>
<th>Check</th>
<th>Remedy</th>
</tr>
</thead>
</table>
| Cannot connect to network. | • Insert the LAN cable securely as far as it goes (page 22).  
• Do not connect using a modular cable. Use a LAN cable for the NETWORK terminal.  
• Check that the power of the Ethernet hub (router with hub function) or the modem is turned on.  
• Check that the Ethernet hub (router with hub function) or the modem is properly connected.  
• Check the network settings. | |
| BD-LIVE function (connection to the Internet) cannot be used. | • Check the network connections and settings.  
• Connect a USB memory device.  
• Delete data from the USB memory device.  
• Check that the BD-ROM supports the BD-LIVE function.  
• Test the connections (page 44). If “Network is OK” is displayed, check the proxy server settings at [Initial Setup] -> [Network] -> [Proxy Server] -> [Next Screen] (page 41). There may also be a problem with the Internet connection. Contact your provider. | |
| Software updating is slow. | | Depending on the Internet connection and other conditions, some time may be required to update the software. |
| A message other than “Networks is OK.” is displayed when Connection Test is performed. | Is “Network is FAILED.” displayed? | • Check that this player and the Ethernet hub (or router with a hub functionality) are properly connected.  
• If the IP address is obtained using the DHCP server function, check the setting is correct at the Information (page 41). For details on the DHCP server function, see the operating instructions for the Ethernet hub (or router with a hub functionality).  
• Set the IP address manually.  
• Check the operation and settings of the DHCP server function of the Ethernet hub (or router with hub functionality). For details, see the operating instructions for the Ethernet hub (or router with a hub functionality).  
• If this player has been set manually, reset the IP address of this player or other components. |
| Is the Ethernet hub (or router with a hub functionality) operating properly? | | • Check the settings and operation the Ethernet hub (or router with a hub functionality). For details, see the operating instructions for the Ethernet hub.  
• Reboot the Ethernet hub (or router with a hub functionality). |
<table>
<thead>
<tr>
<th>Problem</th>
<th>Check</th>
<th>Remedy</th>
</tr>
</thead>
<tbody>
<tr>
<td>The audio files stored on components on the network, such as a computer, cannot be played back.</td>
<td>There are cases where a component with Internet security software installed cannot be accessed.</td>
<td>Switch on the audio component on the network before switching on this unit.</td>
</tr>
<tr>
<td>The audio component on the network which has been switched off is switched on.</td>
<td>If the client is automatically authorized, you need to enter the corresponding information again. Check whether the connection status is set to “Do not authorize”.</td>
<td>Check the audio files stored on the component connected to the network.</td>
</tr>
<tr>
<td>Install Windows Media Player 12 on your computer.</td>
<td>Play back audio files recorded in MP3, WAV (LPCM only), MPEG-4 AAC, or WMA. Note that some audio files recorded in these formats may not be played back on this unit.</td>
<td>Audio files recorded in MPEG-4 AAC cannot be played back on Windows Media Player 12. Try using another server. Refer to the operation manual supplied with your server.</td>
</tr>
<tr>
<td>Audio files recorded in MPEG-4 AAC are being played back on Windows Media Player 12.</td>
<td>Check whether the component is affected by special circumstances or is in the sleep mode. Try rebooting the component if necessary.</td>
<td>Try changing the settings for the component connected to the network.</td>
</tr>
<tr>
<td>The folder stored on the component connected to the network has been deleted or damaged.</td>
<td>Check the folder stored on the component connected to the network.</td>
<td></td>
</tr>
<tr>
<td>Check the computer’s network settings, security settings, etc.</td>
<td>Check the computer’s network settings, security settings, etc.</td>
<td>Check the computer’s network settings, security settings, etc.</td>
</tr>
<tr>
<td>Playback does not start. The component is currently disconnected from this unit or the power supply.</td>
<td>Check whether the component is properly connected to this unit or the power supply.</td>
<td>Check whether the component is properly connected to this unit or the power supply.</td>
</tr>
<tr>
<td>The computer is not properly operated.</td>
<td>Switch on the built-in DHCP server function of your router, or set up the network manually according to your network environment.</td>
<td>The automatic configuration process takes time. Please wait.</td>
</tr>
<tr>
<td>Cannot access Windows Media Player 12.</td>
<td>Instead of logging onto the domain, log onto the local machine.</td>
<td>Instead of logging onto the domain, log onto the local machine.</td>
</tr>
<tr>
<td>Video and audio playback are undesirably stopped or disturbed.</td>
<td>Check whether the audio file was recorded in a format supported by this unit. Even audio files listed as playable on this unit may sometimes not be played back or displayed.</td>
<td>Check whether the folder has been damaged or corrupted.</td>
</tr>
<tr>
<td>The LAN cable is currently disconnected.</td>
<td>Connect the LAN cable properly.</td>
<td>Connect the LAN cable properly.</td>
</tr>
<tr>
<td>There is heavy traffic on the network with the Internet being accessed on the same network.</td>
<td>Use 100BASE-TX/1000BASE-T to access the components on the network.</td>
<td>Use 100BASE-TX/1000BASE-T to access the components on the network.</td>
</tr>
</tbody>
</table>
### Others

<table>
<thead>
<tr>
<th>Problem</th>
<th>Check</th>
<th>Remedy</th>
</tr>
</thead>
</table>
| Power does not turn on. | Is the power cord properly connected? | • Plug the power cord securely into the power outlet (page 22).  
• Unplug the power cord, wait several seconds, then plug the power cord back in. |
| The player’s power turns off automatically. | If Auto Power Off is set to 15 min or 30 min? | The player’s power may turn off together with the power of the TV connected to the HDMI OUT terminal. If you do not want the player’s power to turn off when the TV’s power is turned off, set Control to Off (page 41).  
| | Is Control set to On? | The player’s power may turn off together with the power of the TV connected to the HDMI OUT terminal. If you do not want the player’s power to turn on when the TV’s power is turned on, set Control to Off (page 41).  
| | This unit cannot be operated. | • Use within the specified usage temperature range (page 61).  
• If the power cannot be turned off (to standby), reset the unit. Press and hold the \(\uparrow\) STANDBY/ON button for approx. five seconds. When the button indicator turns off, release your finger. The unit restarts and can now be operated.  
| | The player cannot be operated with the remote control. | Are you operating the remote control from a point too far away from the player? | Operate from within 7 m (23 ft.) of the remote control sensor.  
| | Are the batteries dead? | Replace the batteries (page 5). |
| Unit heats up during use. | Depending on the usage environment, the temperature of the unit’s cabinet may increase somewhat during use, but this is not a malfunction and there is no need to worry. |
| Input of the connected TV and AV system switches automatically. | Is Control set to On? | The input of the TV and AV system (AV receiver or amplifier, etc.) connected to the HDMI OUT terminal may automatically switch to the player when playback starts on the player or the menu screen (Source function, etc.) is displayed. If you do not want the inputs of the connected TV and AV system (AV receiver or amplifier, etc.) to switch automatically, set Control to Off (page 41).  
| | Settings I have made have been cleared. | • Have you disconnected the power cord while the player’s power was on?  
• Has there been a power failure? | Always press \(\uparrow\) STANDBY/ON on the player’s front panel or \(\uparrow\) STANDBY/ON on the remote control and check that POWER OFF has turned off from the player’s front panel display before disconnecting the power cord. Be particularly careful when the power cord is connected to the AC outlet on another device because the player turns off in conjunction with the device.  
| | USB (external storage) device does not work with this player properly. | Is the USB device properly connected? | • Turn the player’s power off, then turn the power back on.  
• Turn the player’s power off, then reconnect the external storage device (page 21).  
| | Is the USB device connected via an extension cable? | Do not use an extension cable. The player may not work properly with it. |
| | Is the external storage device connected to the USB port via a memory card reader or USB hub? | External storage device may not work if connected to the USB port via a memory card reader or USB hub.  
| | Does the external storage device contain multiple partitions? | External storage devices may not be recognized if they contain multiple partitions.  
| | Is the external storage device write-protected? | Turn the player’s power off, then disable the write-protection.  
| | Is the USB device’s file system FAT16 or FAT32? | USB devices formatted in the FAT16 or FAT32 file system can be used.  
| | | Some external storage devices may not operate. |
Glossary

❖ Angle (Multi angle)
Up to 9 camera angles can be recorded simultaneously on BD-ROM or DVD-Video discs, letting you view the same scene from different angles.

❖ AVCHD (Advanced Video Codec High Definition)
See page 60.

❖ BDAV
Of the BD format, the Audio Visual Format Specifications for HD digital broadcast recording is referred to as BDAV on this player and in these operating instructions.

❖ BD-J
See page 9.

❖ BD-LIVE
See page 8.

❖ BDMV
Of the BD format, the Audio Visual Format Specifications designed for pre-packaged high definition (HD) movie contents is referred to as BDMV on this player and in these operating instructions.

❖ BONUSVIEW
See page 8.

❖ Deep Color
See page 16.

❖ Default Gateway
A default gateway is a communication device such as a router which passes data between networks. It is used to direct data to networks on which the destination gateway is not explicitly specified.

❖ DHCP (Dynamic Host Configuration Protocol)
This protocol provides configuration parameters (IP address, etc.) for computers and other devices connected to the network.

❖ DNS (Domain Name System)
This is a system for associating Internet host names with IP addresses.

❖ Dolby Digital
Dolby Digital is an audio format to record the sound in up to 5.1 channels with a fraction of the amount of data as compared to linear PCM audio signals.

❖ Dolby Digital Plus
Dolby Digital Plus is an audio format for high-definition media. Built on Dolby Digital, it combines the efficiency and flexibility to provide high quality multi-channel audio. With BD-ROMs, up to 7.1 channels of digital sound can be recorded.

❖ Dolby TrueHD
Dolby TrueHD is an audio format using lossless coding. With BD-ROMs, up to 8 channels can be recorded at 96 kHz/24 bits, or up to 6 channels at 192 kHz/24 bits.

❖ Dolby Vision
Dolby Vision is one of the High Dynamic Range (HDR) technologies. This imaging technology expands the dynamic range of images, and improve the contrast and color representation capability by having meta data such as brightness information for each scene.

❖ DRM
A technology for protecting copyrighted digital data. Digitized videos, images and audio retain the same quality even when they are copied or transferred repeatedly. DRM is a technology for restricting the distribution or playback of such digital data without the authorization of the copyright holder.

❖ DSD (Direct Stream Digital)
The Digital Audio encoding system found on SACDs, that expresses the audio signals by the pulse density of one bit data.

❖ DTS Digital Surround
DTS Digital Surround is an audio format to record 48 kHz/24 bits audio signals in 5.1 channels.

❖ DTS-HD High Resolution Audio
DTS-HD High Resolution Audio is an audio format using lossy coding. It can record 7.1 channels at 96 kHz/24 bits.

❖ DTS-HD Master Audio
DTS-HD Master Audio is an audio format using lossless coding. With BD-ROMs, 7.1 channels can be recorded at 96 kHz/24 bits, or 5.1 channels at 192 kHz/24 bits.

❖ Ethernet
A standard for local area networks (LANs) used to connect multiple computers, etc. in the same location. This player supports 10BASE-T/100BASE-TX/1000BASE-T.

❖ Frames and fields
A frame is the unit for one of the still pictures which compose motion pictures. One frame consists of a picture of odd lines and a picture of even lines called fields in video signal with interlaced scan method (1080i, etc.).

❖ HDMI (High-Definition Multimedia Interface)
See page 16.

❖ HDR
HDR is an abbreviation for High Dynamic Range. Compared to the conventional SDR (Standard Dynamic Range), this technology expands the dynamic range of images by expanding the brightness information of images. This product supports two types of HDR methods, which are HDR10 and Dolby Vision.

❖ HEVC (H.265/HEVC)
HEVC is an abbreviation for High Efficiency Video Coding. This is one of the compression standards for motion pictures. The compression efficiency of HEVC is better than that of MPEG-2 and MPEG-4 AVC (H.264).
Interactive audio
The audio signals recorded in the titles of BD-ROMs. They include for example the clicking sound made when the menu screen is operated.

Interlaced scan
With this method, one picture is displayed by scanning it twice. The odd lines are displayed in the first pass, the even lines are displayed in the second, to form a single picture (frame). Interlaced scan is indicated in this player and operating instructions by an “i” after the resolution value (for example, 1080i).

IP address
An address that identifies a computer or other device connected to the Internet or local area network. It is represented a number in four sections.

Linear PCM
This is referred as the audio signals that are not compressed.

MAC (Media Access Control) address
A hardware identification number assigned specifically to the network device (LAN card, etc.).

MPEG (Moving Picture Experts Group)
The name of a family of standards used to encode video and audio signals in a digital compressed format. The video encoding standards include MPEG-1 Video, MPEG-2 Video, MPEG-4 Visual, MPEG-4 AVC, etc. The audio encoding standards include MPEG-1 Audio, MPEG-2 Audio, MPEG-2 AAC, etc.

Multi-session
Multi-session/multi-border recording is a method of recording two or more sessions/borders on a single disc. When recording data on a disc, the unit comprising the data from the beginning to the end of that instance of recording is called a session or border.

Parental Lock
See page 45.

Picture-in-Picture (P-in-P)
This is a function for superimposing a sub video on the main video. Some BD-ROMs include secondary video, which can be superimposed on the primary video.

Port number
This is a sub-address provided below the IP address for simultaneously connecting to multiple parties during Internet communications.

Progressive scan
With this method, one picture is consisted of a single picture, without dividing it in two pictures. Progressive scan provides clear pictures with no flicker, in particular for still pictures that contain much text, graphics, or horizontal lines. Progressive scan is indicated in this player and operating instructions by a “p” after the resolution value (for example, 576p).

Proxy server
This is a relay server for ensuring fast access and safe communications when connecting to the Internet from an internal network.

Region number
See page 9.

Secondary audio
Some BD-ROMs include sub audio streams mixed with the main audio stream. These sub audio streams are called “secondary audio”. On some discs this secondary audio is recorded as the audio for the secondary video.

Secondary video
Some BD-ROMs include sub videos superimposed on the main videos using the Picture-in-Picture function. These sub videos are called “secondary video”.

Subnet mask
This is used to identify which part of the IP address corresponds to the subnet (a separately managed network). The subnet mask is expressed as ‘255.255.255.0’.

USB (Universal Serial Bus)
USB is the industry standard for connecting peripherals to PCs.

VC-1
A video codec developed by Microsoft and standardized by the Society of Motion Picture and Television Engineers (SMPTE). Some BDs include videos encoded in this codec.

x.v.Color
See page 16.
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dts-hd

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Covered by one or more claims of the patents listed at patentlist.hevcadvance.com.
### Specifications

<table>
<thead>
<tr>
<th>Model</th>
<th>UDP-LX500</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>UNIVERSAL DISC PLAYER</td>
</tr>
</tbody>
</table>
| Rated voltage | AC 120 V (For North American models) 
               AC 110 V to 240 V (For others) |
| Rated frequency | 50 Hz/60 Hz |
| Power consumption | 28 W |
| Power consumption (standby) | 0.4 W (For North American models) 
                           0.45 W (For others) |
| Power consumption (Network Standby on) | 1.2 W (For North American models) 
                           1.3 W (For others) |
| Weight | 10.3 kg (22.7 lb) |
| External dimensions (including projecting parts) | 435 mm (W) x 118 mm (H) x 337 mm (D) 
       17 7/8 in. (W) x 4 5/8 in. (H) x 13 1/4 in. (D) |
| Tolerable operating temperature | +5 °C to +35 °C |
| Tolerable operating humidity | 5 % to 85 % (no condensation) |
| HDMI | 2 set, 19-pin: 5 V, 250 mA |
| Audio outputs | 2-channel (left/right) |
| Audio output level | 1 set, RCA jacks |
| Frequency response | 200 mVrms (1 kHz, –20 dB) |
| Digital audio outputs | 4 Hz to 88 kHz (192 kHz sampling) |
| Coaxial | 1 set, RCA jacks |
| Optical | 1 set, Optical digital jack |
| LAN | 1 set, Ethernet jack (1000BASE-T/100BASE-TX/10BASE-T) |
| USB | 2 set, Type A |

**Note**

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