

Pioneer *sound.vision.soul*

Blu-ray Disc PLAYER

BDP-HD1 ELITE



www.pioneer.com

Register Your Product on
www.pioneerelectronics.com (US)
www.pioneerelectronics.ca (Canada)

Operating Instructions



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.



The lightning flash with arrowhead, 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.

CAUTION

**RISK OF ELECTRIC SHOCK
DO NOT OPEN**

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.



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.

D1-4-2-3_En

IMPORTANT NOTICE – THE SERIAL NUMBER FOR THIS EQUIPMENT IS LOCATED IN THE REAR. PLEASE WRITE THIS SERIAL NUMBER ON YOUR ENCLOSED WARRANTY CARD AND KEEP IN A SECURE AREA. THIS IS FOR YOUR SECURITY.

D1-4-2-6-1_En

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

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

D8-10-1-2_En

Information to User

Alteration or modifications carried out without appropriate authorization may invalidate the user's right to operate the equipment.

D8-10-2_En

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la Classe B est conforme à la norme NMB-003 du Canada.

D8-10-1-3_EF

CAUTION: This product satisfies FCC regulations when shielded cables and connectors are used to connect the unit to other equipment. To prevent electromagnetic interference with electric appliances such as radios and televisions, use shielded cables and connectors for connections.

D8-10-3a_En

FEDERAL COMMUNICATIONS COMMISSION DECLARATION OF CONFORMITY

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

Product Name: Blu-ray Disc PLAYER

Model Number: BDP-HD1

Responsible Party Name: PIONEER ELECTRONICS SERVICE, INC.

Address: 1925 E. DOMINGUEZ ST. LONG BEACH, CA 90801-1760, U.S.A.

Phone: 1-800-421-1404

WARNING – TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

D1-4-2-1_En



C67-7-3_En

IMPORTANT SAFETY INSTRUCTIONS

READ INSTRUCTIONS — All the safety and operating instructions should be read before the product is operated.

RETAIN INSTRUCTIONS — The safety and operating instructions should be retained for future reference.

HEED WARNINGS — All warnings on the product and in the operating instructions should be adhered to.

FOLLOW INSTRUCTIONS — All operating and use instructions should be followed.

CLEANING — The product should be cleaned only with a polishing cloth or a soft dry cloth. Never clean with furniture wax, benzene, insecticides or other volatile liquids since they may corrode the cabinet.

ATTACHMENTS — Do not use attachments not recommended by the product manufacturer as they may cause hazards.

WATER AND MOISTURE — Do not use this product near water — for example, near a bathtub, wash bowl, kitchen sink, or laundry tub; in a wet basement; or near a swimming pool; and the like.

ACCESSORIES — Do not place this product on an unstable cart, stand, tripod, bracket, or table. The product may fall, causing serious injury to a child or adult, and serious damage to the product. Use only with a cart, stand, tripod, bracket, or table recommended by the manufacturer, or sold with the product. Any mounting of the product should follow the manufacturer's instructions, and should use a mounting accessory recommended by the manufacturer.

CART — A product and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the product and cart combination to overturn.



VENTILATION — Slots and openings in the cabinet are provided for ventilation and to ensure reliable operation of the product and to protect it from overheating, and these openings must not be blocked or covered. The openings should never be blocked by placing the product on a bed, sofa, rug, or other similar surface. This product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to.

POWER SOURCES — This product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your home, consult your product dealer or local power company.

LOCATION — The appliance should be installed in a stable location.

NONUSE PERIODS — The power cord of the appliance should be unplugged from the outlet when left un-used for a long period of time.

GROUNDING OR POLARIZATION

- If this product is equipped with a polarized alternating current line plug (a plug having one blade wider than the other), it will fit into the outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug.
- If this product is equipped with a three-wire grounding type plug, a plug having a third (grounding) pin, it will only fit into a grounding type power outlet. This is a safety feature. If you are unable to insert the plug into the outlet, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the grounding type plug.

POWER-CORD PROTECTION — Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the product.

OUTDOOR ANTENNA GROUNDING — If an outside antenna or cable system is connected to the product, be sure the antenna or cable system is grounded so as to provide some protection against voltage surges and built-up static charges. Article 810 of the National Electrical Code, ANSI/NFPA 70, provides information with regard to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna-discharge unit, connection to grounding electrodes, and requirements for the grounding electrode. See Figure A.

LIGHTNING — For added protection for this product during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the product due to lightning and power-line surges.

POWER LINES — An outside antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits, or where it can fall into such power lines or circuits. When installing an outside antenna system, extreme care should be taken to keep from touching such power lines or circuits as contact with them might be fatal.

OVERLOADING — Do not overload wall outlets, extension cords, or integral convenience receptacles as this can result in a risk of fire or electric shock.

OBJECT AND LIQUID ENTRY — Never push objects of any kind into this product through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Never spill liquid of any kind on the product.

SERVICING — Do not attempt to service this product yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

DAMAGE REQUIRING SERVICE — Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:

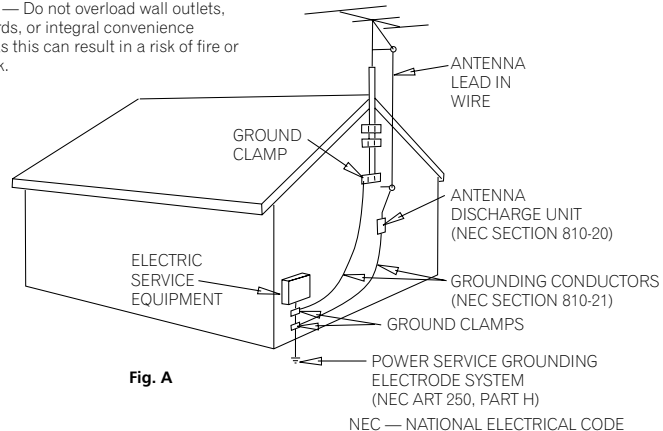
- When the power-supply cord or plug is damaged.
- If liquid has been spilled, or objects have fallen into the product.
- If the product has been exposed to rain or water.
- If the product does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to its normal operation.
- If the product has been dropped or damaged in any way.
- When the product exhibits a distinct change in performance — this indicates a need for service.

REPLACEMENT PARTS — When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, or other hazards.

SAFETY CHECK — Upon completion of any service or repairs to this product, ask the service technician to perform safety checks to determine that the product is in proper operating condition.

WALL OR CEILING MOUNTING — The product should not be mounted to a wall or ceiling.

HEAT — The product should be situated away from heat sources such as radiators, heat registers, stoves, or other products (including amplifiers) that produce heat.



D1-4-2-2_En

CAUTION : USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.

CAUTION : THE USE OF OPTICAL INSTRUMENTS WITH THIS PRODUCT WILL INCREASE EYE HAZARD. D6-8-2-1_En

This product contains mercury. Disposal of this material may be regulated due to environmental considerations. For disposal or recycling information, please contact your local authorities or the Electronics Industries Alliance : www.eiae.org. **K057_En**

WARNING: Handling the cord on this product or cords associated with accessories sold with the product will expose you to chemicals listed on proposition 65 known to the State of California and other governmental entities to cause cancer and birth defect or other reproductive harm.

Wash hands after handling

D36-P4_A_En

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. **K041_En**

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. If you find it damaged, contact the Pioneer service center on the back cover, or your dealer for a replacement.

This product incorporates copyright protection technology that is protected by method claims of certain U.S. patents and other intellectual property rights owned by Macrovision Corporation and other rights owners. Use of this copyright protection technology must be authorized by Macrovision Corporation, and is intended for home and other limited viewing uses only unless otherwise authorized by Macrovision Corporation. Reverse engineering or disassembly is prohibited.

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EI GE FFNETE ECKUNG IST L SE ST HLUNG E
KLASSE 3 IM GE ATEKNE EN V HAN EN.
AUGEN NICHT EM LASE ST AHL AUSSETZEN!

UNDGÄ UDSÆTTELSE F ST LUNG,
UN VIK TT UTS TT IGF ST LEN.
VORSICHT EI GE FFNETE ECKUNG IST L SE ST HLUNG E
KLASSE 3 IM GE ATEKNE EN V HAN EN.
AUGEN NICHT EM LASE ST AHL AUSSETZEN!

PRECAUCIÓN CUAN SE A E MAY A IACI N LASE E CLASE 3 .
AVATTAESSA ÄLITSTUT LU K N 3 LASE SÄTEILYLLE.
ÄLÄ KATS SÄTEESEEN.
注意 ここを開くと CLASS 3 レーザ光が出ます
ビームを直接見たり、触れたりしないこと

W2277-A



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Chapter 1

Before you start

Features

BD-ROM playback

Blu-ray Disc is a next-generation video disc format featuring far higher disc capacity than conventional DVD. The higher capacity makes a whole range of new and enhanced features possible, such as support for high-definition video up to 1920 x 1080 pixels, high quality, surround sound audio, greater interactivity and richer content.

BD-ROM discs are commercially produced discs (Video Distribution format) that can contain movie and other video content, interactive content, enhanced menu features such as pop-up menus (press **MENU** during playback for these), full-color, high-definition animated buttons and animated menu transition effects, button sounds (sounds are played when menu buttons are selected or activated), high-definition bitmap subtitles supporting full-color images with frame-accurate animation effects up to full video frame rate, and so on.

While BD capacity is enough for most applications, the BD-ROM standard allows for content to be spread across several discs, removing the limit of one physical disc. Follow the on-screen instructions during playback when using these special kinds of discs.

BD-J application



esmertec

The BD-ROM specification supports Java for interactive content. The Java specification for BD-ROM is known as BD-J. This allows content providers to put games and other interactive material linked to specific titles on to BD-ROM discs. (This player does not support downloadable BD-J content, direct connection to the Internet or the retrieval of content through the Internet.)

*Java and all Java-based marks are trademarks or registered trademarks of Sun Microsystems, Inc.
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Connect to a local area network

Connect this player to one or more computers in your house via Ethernet and use them as media servers, streaming audio, video and still image files for playback on your TV and/or audio system.

HDMI digital interface

The HDMI (High Definition Multimedia Interface) interconnect provides high quality digital audio and video, all from a single user-friendly connector. HDMI is the first consumer electronics interface to support uncompressed standard, enhanced, or high-definition video plus standard to multi-channel surround sound audio, all using one interface. You can easily connect to an HDMI-equipped AV receiver or audio-visual device for high quality audio and video.

HDMI, the HDMI logo and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC.

1080/60p and 1080/24p video output

This player supports a variety of video output resolutions, up to 1080 lines/60 frames per second, progressive (HDMI only), making it ideal for playing high-definition Blu-ray Discs.

Pure Cinema

There are two types of video signals: Video material, with a frame rate of 30 frames/second; and film material, that has a frame rate of 24 frames/second.

In PureCinema mode film material is converted to 60 frames/second progressive for an exceptionally clear picture.

High quality audio



Blu-ray supports DTS, DTS-HD (DTS-HD is played back as DTS), Dolby Digital, Dolby Digital Plus, Dolby TrueHD (Dolby Digital Plus and Dolby TrueHD are played back as Dolby Digital) and Linear PCM audio in up to eight channels (up to two channels for 24-bit/192 kHz audio). Connect this player to a surround-sound AV receiver for a true home theater experience.

- *Manufactured under license from Dolby Laboratories. "Dolby" and the double-D symbol are trademarks of Dolby Laboratories.*
- *"DTS" and "DTS Digital Surround" are registered trademarks of Digital Theater Systems, Inc.*

Movie file playback

Video files encoded in the WMV (Windows Media* Video), MPEG-1/2 formats are playable from DVD-R/RW, or from a connected media server.

Music file playback

This player supports various audio formats, including WMA (Windows Media* Audio), MP3 and WAV. You can play files stored on DVD-R/RW, or from a connected media server.

Photo file playback

PNG, GIF and JPEG image files—including the popular EXIF format used by most digital cameras to store picture shooting information together with the JPEG image—are playable from DVD-R/RW, or from a connected media server.

** "Windows Media"™ is a trademark of Microsoft Corporation.*

This product includes technology owned by Microsoft Corporation and cannot be used or distributed without a license from Microsoft Licensing, Inc.

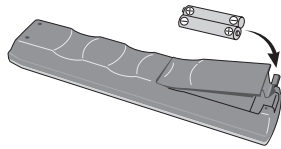
What's in the box

Please confirm that the following accessories are in the box along with these operating instructions when you open it:

- Remote control
- AA/R6P dry cell batteries x2
- Stereo audio cable (red/white plugs)
- Video cable (yellow plugs)
- Power cable
- Warranty card

Putting the batteries in the remote control

1 Insert two AA/R6P batteries into the battery compartment following the indications (+, -) inside the compartment.



Important

Incorrect use of batteries can result in hazards such as leakage and bursting. Please observe the following:

- Don't mix new and old batteries together.
- Don't use different kinds of batteries together—although they may look similar, different batteries may have different voltages.
- Make sure that the plus and minus ends of each battery match the indications in the battery compartment.
- Remove batteries from equipment that isn't going to be used for a month or more.
- When disposing of used batteries, please comply with governmental regulations or environmental public instruction's rules that apply in your country or area.

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.

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Using the remote control

Please keep in mind the following when using the remote control:

- Make sure that there are no obstacles between the remote and the remote sensor on the unit.
- The remote has a range of about 23 feet (at an angle of 30° from either side of the sensor). Use within this range in front of the remote control sensor on the front panel.
- Remote operation may become unreliable if strong sunlight or fluorescent light is shining on the unit's remote sensor.
- Remote controllers for different devices can interfere with each other. Avoid using remotes for other equipment located close to this unit.

- Replace the batteries when you notice a fall off in the operating range of the remote.
- When the batteries run down or you change the batteries, the TV preset codes are automatically reset. See *Setting up the remote to control your TV* on page 47 to reset them.



Disc/content format playback compatibility

General disc compatibility

This player is compatible with a range of disc types (media) and formats. Compatible discs will usually feature one of the following logos on the disc and/or disc packaging. Note however that some disc types, such as recordable DVD or BD, may be in an unplayable format—see below for further compatibility information.

Blu-ray Disc (BD)



- "Blu-ray Disc" and  are trademarks.
-  is a trademark of DVD Format/Logo Licensing Corporation.
- This player may not be able to play perfectly every disc that features one of the logos listed above. Please contact Pioneer if you find a disc that won't play properly.



Important

- This player is not compatible with BD-R/RE, DVD-R/RW (VR mode), DVD-Audio, DVD-RAM, CDs or disc types other than those listed above.
- This player is only compatible with NTSC discs.
- Do not use 8 cm disc adapters with this player. 8 cm discs can be played directly by placing them in the 8 cm disc depression in the center of the disc tray.

BD-ROM compatibility

- BD-ROM discs should conform to the BD-ROM Profile1.
- If a disc containing DTS-HD Bitstream audio is played, this player is only compatible with bitstream output or playback decoding of current DVD (DTS) material (sampling rate: 48 kHz max., 5.1 ch.).
- If a disc containing Dolby Digital Plus or Dolby TrueHD audio is played, this player is only compatible with bitstream output or playback decoding of current DVD (Dolby Digital) material.
- This player cannot play 8 cm BD-ROM discs.

DVD-R/RW compatibility

- This player is compatible with DVD-R/RW discs recorded in DVD-Video format.
- DVD-R/RW discs containing PC data can also be played. See below for file compatibility.
- Unfinalized DVD-R/RW discs and VR mode DVD-R/RW discs cannot be played in this player.

PC-created disc compatibility

Discs recorded using a personal computer may not be playable in this unit due to the settings of the application software used to create the disc. Check with the software publisher for more detailed information.

DualDisc playback

A DualDisc is a new 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 will play in this product (excluding any DVD-Audio content).

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.

Disclaimer Notice

This Blu-ray Disc player is not designed to play and cannot play the DVD portion of a hybrid disc.

File compatibility

- Compatible media: DVD-R, DVD-RW, media server on network (some formats may not be supported depending on the media server type).
- Even when they are in a supported format, some files may not play or display depending on the content.
- Even when playing a supported format, some functions may not operate properly depending on the content.

Video file compatibility

- **Windows Media Video (WMV)**
 - WMV HD is supported
- **MPEG-2 (PS/TS)**
 - MP@HL
- **MPEG-1**

Audio file compatibility

- **Windows Media Audio (WMA)**
 - WMA9 (including variable bit-rate (VBR)), WMA9 Pro (up to 5.1 ch) are supported. WMA9 Voice and WMA Lossless are not supported
 - Sampling rates: up to 48 kHz (including WMA9 Pro)
 - Bit rate: up to 192 kbps (WMA constant bit-rate (CBR)); up to 384 kbps (WMA9 variable bit-rate (VBR)); up to 768 kbps (WMA9 Pro)

- **MPEG-1 Audio Layer 3 (MP3)**
 - Variable bit-rate (VBR) is supported
 - Sampling rates: up to 48 kHz
 - Bit rate: up to 320 kbps
- **WAVE (Linear PCM)**
 - Sampling rates: up to 48 kHz

Image file compatibility

- **JPEG**
 - Baseline JPEG and progressive JPEG/Exif are supported
 - Resolution: up to 4096 x 4096 pixels
- **PNG**
 - Resolution: up to 4096 x 4096 pixels
- **GIF**
 - Resolution: up to 4096 x 4096 pixels

File extensions

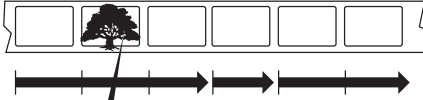
The following file extensions should be used with this player:

- **Video**
.wmv .mpg .mpeg
- **Audio**
.wma .mp3 .wav
- **Image**
.jpg .jpeg .png .gif

Even when files have a supported file extension, some files may not play or display depending on the content or media server type.

Titles and chapters

BD and DVD movie discs are divided into one or more titles. Titles may be further subdivided into chapters.



DVD-Video regions

All commercially produced DVD movies (DVD-Video discs) carry a region mark on the disc case somewhere that indicates which region(s) of the world the disc is compatible with. This player also has a region mark, which you can find on the rear panel. Discs from incompatible regions will not play in this player. Discs marked **ALL** will play in any player.

The diagram below shows the various DVD regions of the world.

This player is **REGION 1**.

BD-ROM regions

Like DVD movies, BD movie discs (BD-ROM) also carry a region mark that indicates which region(s) of the world the disc is compatible with. This player also has a region mark, which you can find on the rear panel. Discs from incompatible regions will not play in this player. Discs marked **ALL** will play in any player.

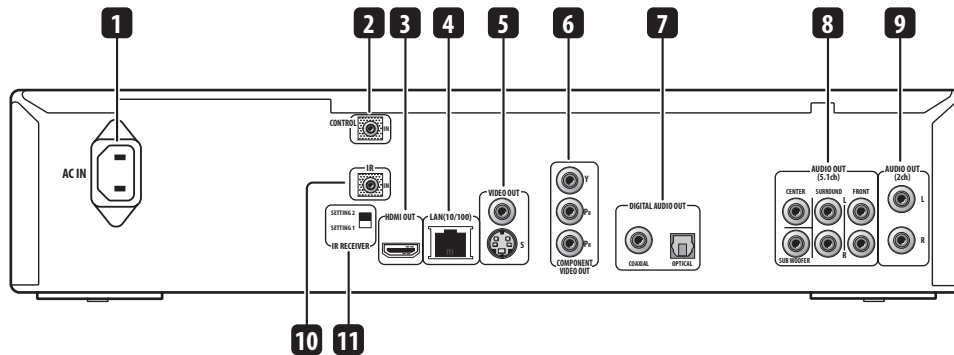
The diagram below shows the various BD-ROM regions of the world.

This player is **REGION A**.

Chapter 2


Connecting up

Rear panel

**1 AC IN**

Connect the supplied power cord here, then plug into a power outlet.

2 CONTROL IN

Use to control this player from the remote sensor of another Pioneer component with a **CONTROL OUT** terminal and bearing the  mark. Connect the **CONTROL OUT** of the other component to the **CONTROL IN** of this player using a mini-plug cord (page 16).

3 HDMI OUT

HDMI output providing a high quality interface for digital audio and video (page 13).

4 LAN (10/100)

Ethernet port for 10base-T (10 Mbps) or 100base-TX (100 Mbps) network connection (page 16).

5 VIDEO OUT and S-VIDEO OUT

Video output (composite) that you can connect to your TV or AV receiver using the supplied video cable (page 12).

S-Video output that you can use instead of the **VIDEO OUT** jacks (page 15).

6 COMPONENT VIDEO OUT

High quality video output for connection to a TV, monitor or AV receiver that has component video inputs.

Connect using a commercially available three-way component video cable (page 14).

7 DIGITAL AUDIO OUT – COAXIAL/OPTICAL

Digital audio outputs for connection to a PCM, Dolby Digital, and/or DTS-compatible AV receiver (page 15).

8 AUDIO OUT (5.1ch)

Multichannel (5.1ch) analog audio outputs for connection to an AV receiver with multichannel analog audio inputs (page 15).

9 AUDIO OUT (2ch)

Stereo analog audio outputs for connection to your TV, AV receiver or stereo system (page 12).

10 IR IN

Jack for an external IR (infrared) remote control receiver (page 16).

11 IR RECEIVER switch

Switch to the setting compatible with your external IR remote control receiver (page 16).

**Tip**

- When connecting this player to your TV, AV receiver or other equipment, make sure that all components are **switched off** and **unplugged**.
- You may find it useful to have the manuals supplied with your other components handy when connecting this player.

Connecting for HDMI output

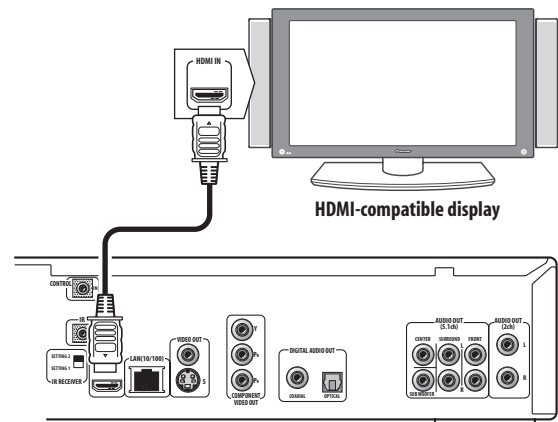
If you have an HDMI or DVI (with HDCP) equipped monitor or display, you can connect it to this player using a commercially available HDMI cable.

The HDMI connector outputs uncompressed digital video, as well as most digital audio formats.

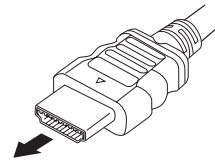
Important

- This unit has been designed to be compliant with HDMI (High Definition Multimedia Interface). Depending on the component you have connected, using a DVI connection may result in unreliable signal transfers.
- If you change the display connected to the HDMI output, you will also need to change the Output Format settings to match the new display (see *Changing the video output format* on page 14 to do this).
- The HDMI connection is compatible with 8-channel linear PCM signals (44.1 kHz to 192 kHz¹, 16 bit/20 bit/24 bit), Dolby Digital bitstream and DTS (5.1 channel signals) bitstream.
- Depending on the HDMI cable being used, 1080p output may not appear correctly.
- If you connect a DVI device to the HDMI output of this player, ensure that it is compliant with High Definition Content Protection (HDCP). If you choose to connect to a DVI connector, you will need a separate adaptor (DVI → HDMI) to do so. A DVI connection, however, does not support audio signals. Consult your local audio dealer for more information.

- Use an HDMI cable (not supplied) to connect the HDMI OUT interconnect on this player to an HDMI interconnect on an HDMI-compatible display.



- The arrow on the cable connector body should be face up for correct alignment with the connector on the player.



After switching on the player you may need to set the video output format and HDMI color space for compatibility with your display. See *Changing the video output format* on page 14 and **HDMI Color Space** in *Using the Initial Setup menu* on page 41.

About HDMI

HDMI supports both standard and high-definition video, plus standard and multi-channel surround-sound audio. HDMI features include uncompressed digital video, one connector (instead of several cables and connectors), and communication between the AV source and AV devices such as DTVs.

HDMI was developed to provide the technologies of High Bandwidth Digital Content Protection (HDCP) as well as Digital Visual Interface (DVI) in one specification. HDCP is used to protect digital content transmitted and received by DVI-compliant displays.

HDMI, the HDMI logo and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing, LLC.

Note

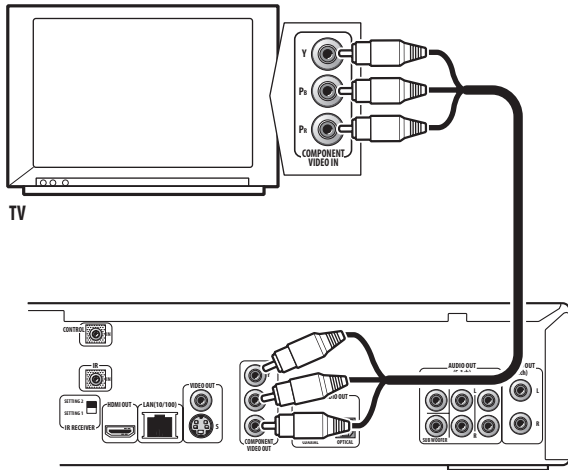
¹ 192 kHz output is limited to 2 channels.

Connecting using the component video output

You can use the component video output instead of the standard video out jack to connect this player to your TV (or other equipment).

- Use a component video cable (not supplied) to connect the COMPONENT VIDEO OUT jacks to a component video input on your TV, monitor or AV receiver.

Be careful to match up the colors of the three jacks for correct connection.



Note

- Depending on your display, some of the settings may result in the picture disappearing. In this case, press **OUTPUT FORMAT** repeatedly until the picture re-appears.
- 1080/60p and 1080/24p output is only compatible with HDMI displays. They are not compatible with the component video output.
- When *Output Format* is set to **720p**, **1080i** or **1080p**, video is output in 16:9 format even if *TV Aspect Ratio* is set to **4:3 (Standard)**. See *TV Aspect Ratio* on page 41.
- If the contours of the displayed subjects look jagged or blurred, try setting the Output Format to 480i. (If you connected this player to your TV with the HDMI connection and the picture disappears when you switch the Output Format to 480i, use the component connection with the 480i Output Format or S-Video, the standard composite connection instead.)
- Note that when using a Component Video connection with a TV or other AV component (*not* using HDMI), 480/60i video may be output in 480/60p.

24p output

For smooth presentation of 1080/24p or 720/24p video with an HDMI-equipped display compatible with 1080/24p input, set *24p Direct Out* on this player to **On** (see page 41).

This player will output 1080/24p video over HDMI in the following cases:

- 1080/24p video: When Output Format is set to **Auto** or **Source Direct**.
- 720/24p video: When Output Format is set to **Auto**.

Changing the video output format

Use the **OUTPUT FORMAT** button located on both the front panel and the remote control to switch the video output format for the component and HDMI video outputs.

The table below shows the output settings.

Setting	HDMI output	Component output	Video/S-Video output
AUTO	TV's preferred format *3,5	480/60i	480/60i
480i	480/60i	480/60i	480/60i
480p	480/60p	480/60p	480/60i
720p	720/60p	720/60p *1,2	480/60i
1080i	1080/60i	1080/60i *1,2	480/60i
1080p	1080/60p	480/60i	480/60i
Source Direct	Dependent on source *3,5	Dependent on source *2,4,5	480/60i

*1 Video output is 480i during copy protected DVD-Video playback.

*2 Video output during BD-ROM playback is 480i depending on the disc.

*3 Refer to 24p output below for conditions.

*4 The frame frequency for 1080/24p is still 60 Hz.

*5 The video output will be interrupted when switching the video output.

Note

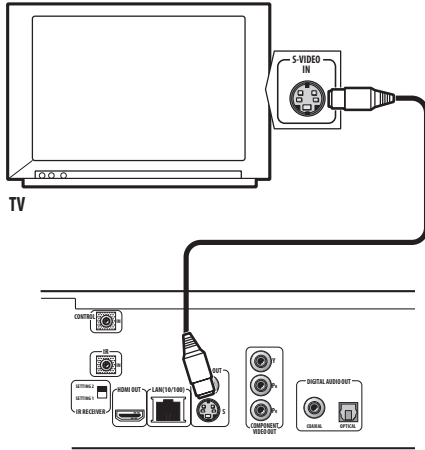
- Even when *24p Direct Out* is set to **On**, if a TV not compatible with 1080/24p video is connected, the actual frame frequency of the video output will be 60 Hz.
- The video output will be interrupted when switching the video output from 1080/24p or 720/24p to other output resolutions, or when switching to 1080/24p or 720/24p from other output resolutions.

Connecting using an S-Video output

You can use the S-Video output instead of the VIDEO OUT jack to connect this player to your TV (or other equipment).

- Use an S-Video cable (not supplied) to connect the S-VIDEO OUT to an S-Video input on your TV, monitor or AV receiver.

Line up the small triangle above the jack with the same mark on the plug before plugging in.



you should hear the plug click into position when fully inserted. Take care not to force the plug as this may damage the shutter, the cable and/or the player.

Coaxial connection: Use a coaxial cable (not supplied) to connect the DIGITAL AUDIO OUT – COAXIAL jack to a coaxial input on your AV receiver.

Note

- Linear PCM audio output over the DIGITAL AUDIO OUT jacks is limited to 2 ch, 48 kHz.

Analog connections

- Connect the AUDIO OUT (5.1ch) jacks on this player to the multi-channel analog inputs on your AV receiver.

Use a dedicated six-way cable (not supplied), or three sets of stereo cables (not supplied) to connect the six channels.

Check carefully that each channel is connected to its corresponding channel on the AV receiver.

After connecting, you can make settings for the number of speakers connected to your system—see the Speakers section of the Initial Setup menu on page 43 and *Speaker Setup* on page 45.

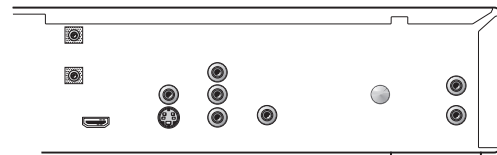
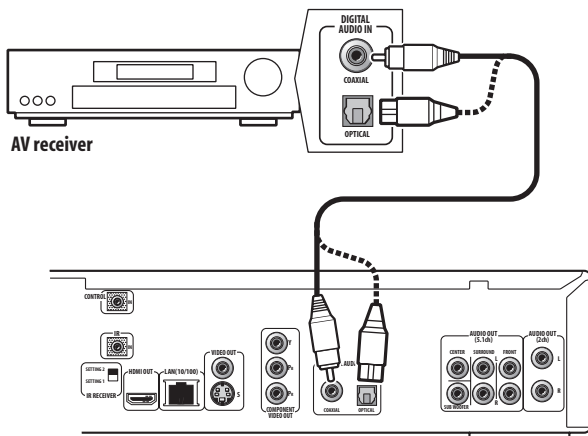
Connecting for surround sound

This player offers both analog and digital connections for surround sound. The digital outputs (coaxial and optical) provide a convenient way to connect this player to an AV receiver with built-in Dolby Digital and/or DTS decoders. The 5.1ch analog outputs can be used to connect to an AV receiver with multi-channel analog audio inputs.

Check the operating instructions that came with your AV receiver for more on these connections.

Digital connections

- Connect one of the DIGITAL AUDIO OUT jacks on this player to a digital input on your AV receiver.



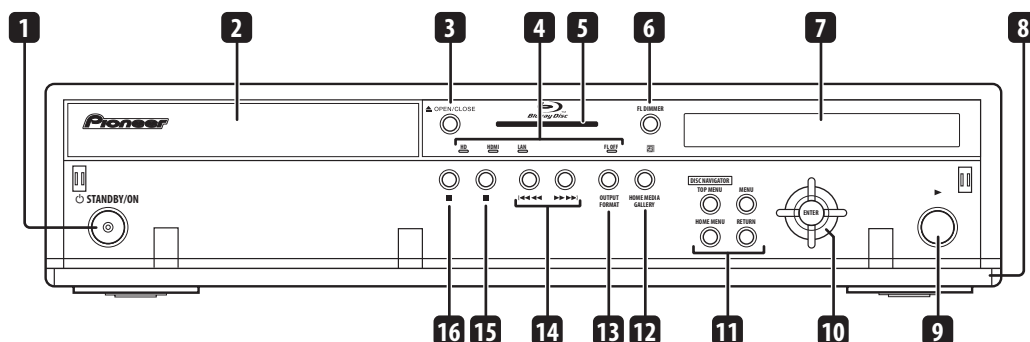
Optical connection: Use an optical cable (not supplied) to connect the DIGITAL AUDIO OUT – OPTICAL jack to an optical input on your AV receiver.

- When inserting the plug, the protective shutter will open and

Chapter 3

Controls and displays

Front panel

**1** **STANDBY/ON**

Press to switch the player on (the power indicator lights blue when the power is on) or into standby.

2 **Disc tray****3** **OPEN/CLOSE**

Press to open or close the disc tray.

4 **Indicators**

- **HD** – Lights when the video output is 720p, 1080i or 1080p (HDMI), or 720p or 1080i (component).
- **HDMI** – Lights when a device is connected via HDMI.
- **LAN** – Lights when there is an active local area network (LAN) connection.
- **FL OFF** – Lights when the display and other indicators are switched off.

5 **Blu-ray indicator**

Lights when a BD-ROM is loaded.

6 **FL DIMMER**

Press to change the brightness of the display. When the display and other indicators are off, the **FL OFF** indicator (see above) lights.

7 **Display**

Shows disc status and playback information.

8 **Flip-down cover****9**

Press to start or resume playback.

10 **and ENTER**

Use to navigate on-screen menus.

11 **Menu navigation buttons**

- **MENU** – BD-ROM: Press to display/hide the pop-up menu. DVD-Video: Press to display the disc menu (if there is one).
- **RETURN** – Press to return to a previous screen.
- **DISC NAVIGATOR / TOP MENU** – Press to display the top menu of a BD-ROM or DVD-Video disc. When playing a DVD-R/RW disc, press to display/exit the Disc Navigator.
- **HOME MENU** – Press to display the player's Home Menu, from which you can access most of the player's functions.

12 **HOME MEDIA GALLERY**

Press to access the Home Media Gallery screen.

13 **OUTPUT FORMAT**

Press to switch the output format over HDMI and component video outputs. See *Changing the video output format* on page 14.

14 **Skip/scan buttons**

- – Press to jump to the next chapter, track, etc. Press and hold for fast forward scanning.
- – Press to jump back to the beginning of the current chapter, track, etc. then to previous chapters, tracks, etc. Press and hold for fast reverse scanning.

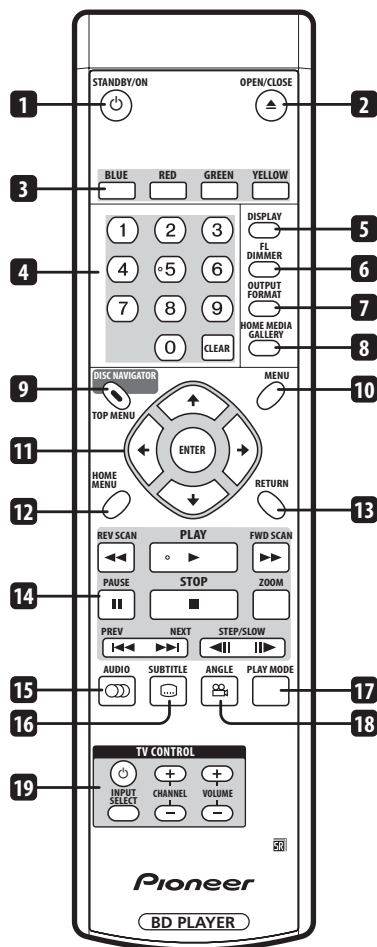
15

Press to stop playback (you can resume playback by pressing (play)).

16

Press to pause playback. Press again to restart.

Remote control



1 **⏻ STANDBY/ON**

Press to switch the player on or into standby.

2 **⏏ OPEN/CLOSE**

Press to open or close the disc tray.

3 **BLUE/RED/GREEN/YELLOW**

Use to navigate BD-ROM menus.

4 **Number buttons**

Use to enter title, chapter numbers, etc.

CLEAR : Press to clear a numeric entry, etc.

5 **DISPLAY**

Press to display information (see page 25).

6 **FL DIMMER**

Press to change the brightness of the display. When the display and other indicators are off, the **FL OFF** indicator (see page 17) lights.

7 **OUTPUT FORMAT**

Press to switch the output format over HDMI and component video outputs (see page 14).

8 **HOME MEDIA GALLERY**

Press to display the Home Media Gallery screen (see page 32).

9 **DISC NAVIGATOR/TOP MENU**

Press to display the top menu of a BD-ROM or DVD-Video disc. When playing a DVD-R/RW disc, press to display/exit the Disc Navigator.

10 **MENU**

BD-ROM: Press to display/hide the pop-up menu.

DVD-Video: Press to display the disc menu (if there is one).

11 **↑/↓/←/→ and ENTER**

Use to navigate on-screen displays and menus. Press **ENTER** to select an option or execute a command.

12 **HOME MENU**

Press to display the player's Home Menu, from which you can access most of the player's functions.

13 **RETURN**

Press to return to a previous screen.

14 **Playback controls**

◀◀ / ▶▶ : Press to start reverse/forward scanning.

▶ **PLAY** : Press to start or resume playback.

⏸ **PAUSE** : Press to pause playback; press again to restart.

■ **STOP** : Press to stop playback (you can resume playback by pressing ▶ **PLAY**).

ZOOM : Press to zoom the screen when displaying a moving or still image (see page 25).

⏮ ▶▶ : Press to jump to the start of the previous/next chapter/track.

◀● ▶▶ : Use for slow motion and step frame (see page 23).

15 **AUDIO**

Press to select the audio channel or language (see page 25).

16 **SUBTITLE**

Press to select a subtitle display (see page 25).

17 **PLAY MODE**

Press to change the Play Mode (repeat play, for example) (see page 24).

18 **ANGLE**

Press to change the camera angle during BD-ROM or DVD-Video movie multi-angle scene playback (see page 24).

19 **TV CONTROL buttons**

See also *Setting up the remote to control your TV* on page 47.

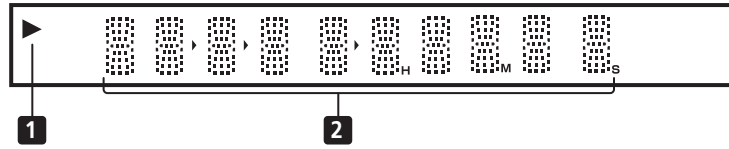
⏻ : Press to turn the TV on or into standby.

VOLUME +/- : Use to adjust the volume.

CHANNEL +/- : Use to select TV channel.

INPUT SELECT : Press to change the input function of the TV.

Front panel display



1 ▶

Lights during playback of a disc.

2 Character display

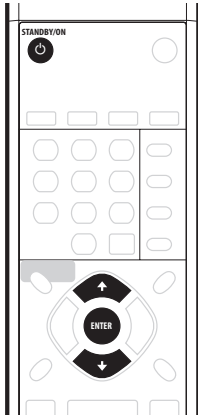
Shows various playback information—disc time, chapter and title number, etc.

Chapter 4

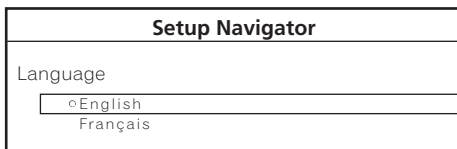
Getting Started

Switching on and setting up

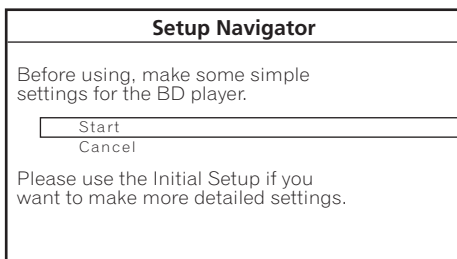
When you switch the player on for the first time the Setup Navigator screen appears. We recommend using this to make a few basic player settings.



- 1 Switch on your TV and set the video input to this player.
- 2 Press the **STANDBY/ON** button on the remote control or the front panel to switch on.
 - It can take up to one minute for the unit to turn on.
 - When you switch on for the first time, your TV should display the Setup Navigator screen. (If the Setup Navigator doesn't appear, you can also access it from the Initial Setup menu; see page 43).
- 3 Use the **↑/↓** buttons to choose a language, then press **ENTER**.



- 4 Press **ENTER** to start setting up using the Setup Navigator.



- If you don't want to use the Setup Navigator, press **↓** to select **Cancel**, then press **ENTER** to exit the Setup Navigator.

- 5 Use the **↑/↓** buttons to select the output format, then press **ENTER**.



If you connected this player to your TV using the HDMI connector, select from **Auto**, **480i** (interlaced), **480p** (progressive), **720p**, **1080i**, **1080p**, or **Source Direct**, then skip to step 7 (the aspect ratio will automatically be set to **16:9 (Widescreen)**). Generally, the **Auto** setting is recommended.

If you're using an S-Video or composite video connection, select **S-Video/Video only**.

If you're using a component video connection, match the output setting with the capabilities of your TV. Select from: **480i**, **480p**, **720p**, **1080i** or **Don't Know**. If you select **720p** or **1080i**, skip the next step since the aspect ratio will automatically be set to **16:9 (Widescreen)**.

- 6 Use the **↑/↓** buttons to select the aspect ratio of your TV then press **ENTER**.

If you have a widescreen TV, select **16:9 (Widescreen)**; if you have a standard size TV, select **4:3 (Standard)**.

- 7 Select **'Finish Setup'** to accept the settings and exit the Setup Navigator, or **'Go Back'** to go through the settings again.

You can run the Setup Navigator at any time by selecting it from the Options menu—see page 43.

About the screen saver

If the player is stopped or paused for more than five minutes with no other operation, the screen saver starts.

Once the screen saver has started, pressing any button on the front panel or remote will clear it and return the player to normal operation.

Using the on-screen displays

This player makes extensive use of graphical on-screen displays (OSDs). You should get used to the way these work as you'll need to use them when setting up the player, using some of the playback features, and when making more advanced settings for audio and video.

All the screens are navigated in basically the same way, using the cursor buttons (↑/↓/←/→) to change the highlighted item and pressing **ENTER** to select it.

Button	What it does
HOME MENU	Display/exit the on-screen display
↑ ↓ ← →	Changes the highlighted menu item
ENTER	Selects the highlighted menu item
↶ (RETURN)	Returns to the previous menu or screen without saving changes



Tip

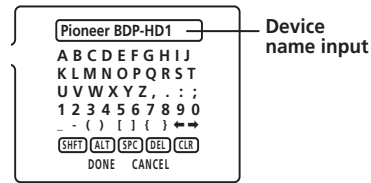
- Information at the bottom of an OSD screen explains the currently selected menu item and shows which buttons can be used for that screen.

Setting up for network use

If you've connected this player to a local area network (LAN) you may need to make a few settings before you can use the Home Media Gallery feature over the network.

- 1 Press **HOME MENU** and select '**Initial Setup**'.
- 2 Select '**Network**'.
- 3 Select '**Device Name**' then '**Next Screen**'.

- 4 Use the on-screen keypad to enter a name for the player. This is how the player will appear to connected devices on the local area network.

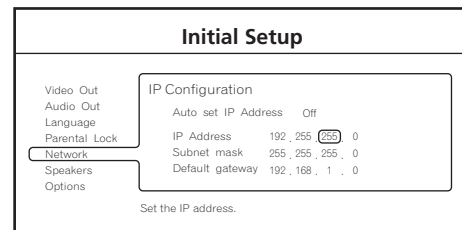


- Use the ↑/↓/←/→ buttons and **ENTER** to select characters from the keypad.
- Select **SHFT** to toggle between upper and lower case.
- Select **ALT** to toggle between regular and special (accented, etc.) characters (ISO 8859-1 character set).
- Select **SPC** to insert a space.
- Select **DEL** to delete the character at the current cursor position in the name field.
- Select **CLR** to clear the name field.

- 5 Select '**DONE**' to register the name and exit the input screen.

- Select **CANCEL** to close the keypad without registering the name.

- 6 Select '**IP Configuration**' then '**Next Screen**' to display the IP configuration screen.



- 7 Set '**Auto set IP Address**' to '**On**'.

If there is a DHCP server on the local area network (LAN), this player will automatically be allocated an IP address. If you're using a broadband router or broadband modem that has a DHCP (Dynamic Host Configuration Protocol) server function, select **On**. The IP address will automatically be determined.

If there is no DHCP server on the network and you select **On**, this player will use its own Auto IP function to determine the IP address.

- If you want to set the IP address manually, select **Off** then set the IP Address, Subnet mask and Default gateway: Use the ↑/↓/←/→ buttons to select a field; use the number buttons to enter a value. Press **ENTER** to finish and exit the screen.

- 8 Press **HOME MENU** to exit the Initial Setup menu.

You should now be able to use the Home Media Gallery (accessible from the Home Menu). See *Using the Home Media Gallery* on page 32 for more.

- For information on DHCP refer to the network device's operating instructions.
- You may need to contact your service provider or network administrator when manually entering an IP address.

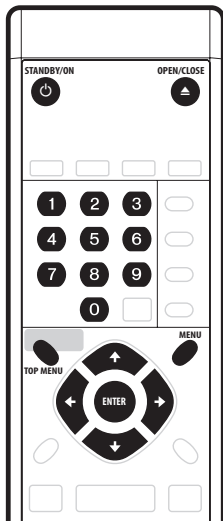
Playing movies, music and photos

Using this player, you can enjoy watching movies, listening to music and browsing photos, from BD and DVD discs or from a media server on the network. How you navigate, browse and play content varies according to the format of the content and the media:

- To play a BD or DVD movie disc (i.e., one containing BD-ROM or DVD-Video application format), see *Playing BD and DVD movies* below.
- To play a DVD-R/RW disc recorded with movie, music or photo files, turn to *Using the Disc Navigator* on page 27.
- To play content from a media server, please refer to *Using the Home Media Gallery* on page 32.

Playing BD and DVD movies

BD and DVD movie discs contain video titles and chapters. They often feature disc menus, from which you can navigate the content, choose from various audio and subtitle options, and so on.



1 If the player isn't already on, press **STANDBY/ON** to switch it on.

Also turn on your TV and make sure that it is set to the correct video input.

2 Press **OPEN/CLOSE** to open the disc tray.

3 Load a disc.

Load a disc with the label side facing up, using the disc tray guide to align the disc (if you're loading a double-sided DVD-Video disc, load it with the side you want to play face down).

The player will take a short while to read the disc, after which the disc type will show up in the front panel display.

4 Press **PLAY** to start playback.

- Use the **PAUSE** and **STOP** buttons to pause or stop playback. You can resume playback in either case by pressing **PLAY**. See also *Resuming playback* on page 23.
- See *Playback controls* below for other controls available during playback of BD and DVD movie discs.

When playing BD-ROM discs:

- Commercially produced BD-ROM movie discs often go straight to the disc menu when playback is started (sometimes preceded by an opening sequence). Navigate through the disc menu using the cursor keys (**↑/↓/←/→**) and the **ENTER** button. You can also use the number buttons to select numbered items in some menus.
- To get back to the top menu, press **TOP MENU**.
- Some BD-ROM discs feature pop-up menus that do not interrupt playback; press **MENU** to access these.

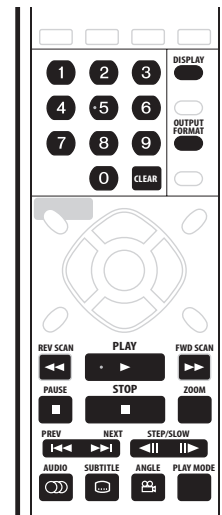
When playing DVD-Video discs:

- Commercially produced DVD movies often go straight to the disc menu when playback is started (sometimes preceded by an opening sequence). Navigate the disc menu using the cursor (**↑/↓/←/→**) and **ENTER** buttons. You can also use the number buttons to select numbered items in some menus.
- To get back to the top menu, press **TOP MENU**.
- To get back to the disc menu, press **MENU**.

5 When you've finished using the player, eject the disc and switch the player back into standby.

- To open/close the disc tray, press **OPEN/CLOSE**. Remove the disc before putting the player into standby.
- Press **STANDBY/ON** to switch the player into standby.

Playback controls



Resuming playback



The resume function offers a convenient way to restart playback from where you stopped it previously.

Resuming playback of BD and DVD movies

If you stop playback before the end of the disc, the playback stop position is stored so that you can resume watching the disc from the same place later.

- To resume playback, press ► **PLAY**. Playback will start from the stored resume position.
- Press ■ **STOP** again to cancel the resume function.

Note

In the following case, the resume position is cleared:

- Eject the disc
- Use Home Media Gallery/Disc Navigator
- Switch the player off (BD-ROM only)

Resuming playback of movie, music and photo files

Movie and music files are resumed from the start of the title/track (rather than the stop position within the title/track): photo slideshow playback is resumed from the photo file within the slideshow.

- If you interrupt playback of a movie or slideshow by pressing **RETURN** to display the Disc Navigator or Home Media Gallery screen, you can still resume playback of the same title/slideshow photo using the ► **PLAY** button, regardless of what is highlighted on the screen. (Use the **ENTER** button to start playback of the currently highlighted item in the Disc Navigator/Home Media Gallery.)
- Some actions in the Disc Navigator/Home Media Gallery (such as changing the Browse category) will cause the resume position to be lost.

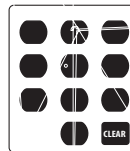
Scanning music and video



You can fast-scan BD and DVD movies and music files forward or backward at various speeds, and only forward when playing movie files.¹

- 1 During playback, press ◀◀ or ▶▶ to start scanning.**
 - There is no sound while scanning music and video.
- 2 Press repeatedly to increase the scanning speed.**
 - The scanning speed is shown on-screen.
- 3 To resume normal playback, press ► PLAY.**
 - Depending on the disc, normal playback may automatically resume when a new chapter is reached on a BD or DVD movie disc.
 - When scanning a movie or song file, normal playback will automatically resumes when the end or beginning of the file is reached.

Selecting titles and chapters directly



You can select titles and chapters directly with BD and DVD movies.²

- 1 Use the number buttons to select a title or chapter.**
 - If the disc is stopped, playback starts from the selected title.
 - If the disc is playing, playback jumps to the start of the selected chapter.

Skipping content

You can skip over content during playback of BD and DVD movies, movie and song files, and photo slideshows.

- **During playback, press ◀◀ or ▶▶ to skip content.²** When playing a BD or DVD movie, playback jumps to the start of the previous/next chapter or title. (If the disc is stopped, playback will start).

During movie or song file playback, the previous or next file will start playing.

During photo slideshow playback, you can skip to the previous or next photo.

Playing video in slow motion

You can play BD and DVD movies and movie files at different forward slow motion speeds.^{1,3}

- 1 During playback, press ⏪ to start slow motion playback.**
 - The slow motion speed is shown on-screen.
 - There is no sound during slow motion playback.
- 2 Press repeatedly to change the slow motion speed.**
- 3 To resume normal playback, press ► PLAY.**
 - Depending on the disc, normal playback may automatically resume when a new chapter is reached.
 - During slow motion playback, normal playback resumes when the end of the file is reached.

Video step forward and step reverse



You can use step forward and step reverse when playing a BD or DVD movie, and only forward when playing a movie file.¹

Note

¹ Does not work with DRM-protected PC files.

² With some titles on BD-ROM or DVD-Video discs it is not possible to jump to the start of the selected title or chapter.

³ This function may not be supported, depending on the content.

- 1 During playback, press **II PAUSE**.
- 2 Press **◀||** or **||▶** to move the video forward or back one step.¹
- 3 To resume normal playback, press **▶ PLAY**.
 - When playing a BD or DVD movie, normal playback may automatically resume when a new chapter is reached.

Changing the Play Mode

Use the **PLAY MODE** button on the remote control to select one of the various playback modes for BD and DVD movie discs, movie and music files and photo slideshows.

You can't select a Play Mode while a BD or DVD disc menu is being displayed, or while playing some BD/DVD movie titles or PC files.

- **During playback, press PLAY MODE to change the Play Mode.**

See *Play Mode option compatibility* below for the options available with the disc/file you're playing.

- **Time Search** (see *Using time search* below)
- **Title Search** (see *Using title search* below)
- **Repeat Chapter** (repeats the current chapter)
- **Repeat Title** (repeats the current title)
- **Repeat Track** (repeats the current track)
- **Repeat All** (repeats the current browse list)
- **Random** (plays the current browse list in a random order)
- **Repeat Off** (cancels the repeat and random modes)

The current Play Mode is displayed on-screen. Press **CLEAR** to resume normal playback.

Play Mode option compatibility

The available options depend on what kind of disc/file is playing (✓=available / ✗=unavailable):²

Using time search

You can navigate directly to a certain point in a BD or DVD movie, or in a movie file.³

- 1 During playback, press **PLAY MODE** and select 'Time Search'.
- 2 Use the number buttons to enter a time in hours, minutes and seconds for playback to resume from. For a BD or DVD movie, the time you enter should be the time into the currently playing title. For a movie file it will be the playback time into the file.
 - For example, press **4, 5, 0, 0** to have playback start from 45 minutes into the title/file. For 1 hour, 20 minutes, press **1, 2, 0, 0, 0**.
 - Press **CLEAR** to clear the input.
- 3 Press **ENTER** to start playback from the time you entered.


Using title search

You can directly jump to the start of any title on a BD-ROM or DVD-Video.²

- 1 During playback, press **PLAY MODE** and select 'Title Search'.
- 2 Use the number buttons to select a title.
 - Press **CLEAR** to clear the input.
- 3 Press **ENTER** to start playback of the title you selected.

Switching camera angles

Some BD and DVD movies feature scenes shot from two or more angles—check the disc box for details.

When a multi-angle scene is playing, a  icon appears on screen to let you know that other angles are available (this can be switched off if you prefer—see *Angle Indicator* on page 43).

- **During playback, press ANGLE to switch the angle.**
 - There may be a short delay after pressing the button before the angle changes.

Zooming the screen



During playback of a BD or DVD movie, movie file or photo slideshow you can zoom the screen to 2 x view or 4 x view.

1 During playback, press ZOOM to change the zoom.

Press repeatedly to cycle through: normal → 2 x zoom → 4 x zoom.

2 Use the cursor keys (↑/↓/←/→) to move the zoomed area of the screen.

- The zoom mode is canceled when you stop playback.
- You can't zoom the screen when a BD or DVD movie disc menu is displayed.

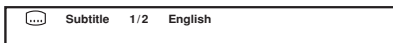
Switching subtitles



Some BD and DVD movie discs have subtitles in one or more languages; the disc box will usually tell you which subtitle languages are available.

• Press SUBTITLE repeatedly to select a subtitle option.¹

The current subtitle language/option is displayed on-screen and in the front panel display.



• To switch the subtitle display off, press SUBTITLE then CLEAR.

- There may be a short delay after pressing the button before the subtitles change.



Tip

- To set subtitle language preferences, see *Subtitle Language* on page 42.

Switching audio streams/channels



Some BD and DVD movie discs contain multiple audio streams that you can select on playback. These might be different audio languages and/or different audio formats (such as a DTS 5.1-channel sound track and a Dolby Digital 2-channel sound track).

• Press AUDIO repeatedly to select an audio channel/stream option.²

The current option is shown on-screen.



Switching audio languages on a BD/DVD movie

- There may be a short delay after pressing the button for the audio channel to change.



Tip

- To set audio language preferences, see *Audio Language* on page 42.

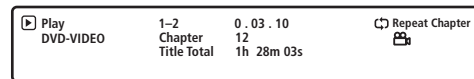
Displaying disc or file information



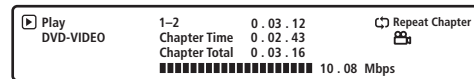
Various track, chapter and title information, as well as the video transmission rate for DVD and BD movies, can be displayed on-screen. The information available depends on the type disc or file, and whether it's playing or stopped.

• Press DISPLAY to show/switch the information displayed.

Press DISPLAY repeatedly to change the displayed information.³



DVD-Video Play display 1



DVD-Video Play display 2

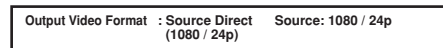
Switching the video output format



You can switch the video output format for component and HDMI output.

• Press OUTPUT FORMAT repeatedly to select a video output format.

The current source and output format are shown on-screen.



Note

- Depending on your display, some of the settings may result in the picture disappearing. In this case, press **OUTPUT FORMAT** repeatedly until the picture re-appears.
- See *Changing the video output format* on page 14 for more information.

Note

¹ Some discs only allow you to change the subtitle language from the disc menu. Press **MENU** to access.

² Some discs only allow you to change the audio language from the disc menu. Press **MENU** to access.

³ There may be instances with some discs where no information can be displayed.

Frequently Asked Questions

- *Why won't the disc I loaded play?*

First check that you loaded the disc the right way up (label side up), and that it's clean and not damaged. See *Taking care of your player and discs* on page 46 for information on cleaning discs.

If a disc loaded correctly won't play, it's probably an incompatible format or disc type, such as CD. See *Disc/content format playback compatibility* on page 8 for more on disc compatibility.

- *There's no picture!*

Your TV is probably not compatible with the selected video output format. Check your TV for compatibility with progressive scan video and higher resolutions. Press the **OUTPUT FORMAT** button to switch the video output. See also *Changing the video output format* on page 14.

- *I can't see any picture, or get high definition video output when playing some BDs!*

When playing some discs, there may be no composite video, S-Video and/or component video output, or high-definition content may be converted to standard-definition 480i or 480p component output. This is for content protection. To view the disc, connect the player to an HDMI-compatible display. See *Connecting for HDMI output* on page 13.

- *I have a widescreen TV so why are there black bars at the top and bottom of the screen when I play some discs?*

Some movie formats are such that even when played on a widescreen TV, black bars appear at the top and bottom of the screen. This is not a malfunction.

- *I've connected to a HDMI/DVI compatible component but I can't get any signal and the front panel HDMI indicator won't light!*

Make sure that you've selected this player as the HDMI input in the settings for the component you're using. You may need to refer to the instruction manual of the component to do this.

An HDMI connection can only be made with other HDMI components, or a High Definition Content Protection (HDCP)-compatible DVI component. See *Connecting for HDMI output* on page 13 for more on HDMI compatibility.

- *There's no picture from the HDMI output!*

Make sure the output format of this player matches that of the component you have connected using HDMI. See *Changing the video output format* on page 14.

- *Why is the playback sample rate of the DVD only 48 kHz instead of 96 kHz?*

Playback sample rate of the audio is downsampled to 48 kHz.

- *My AV receiver is definitely compatible with 96 kHz Linear PCM audio, but it doesn't seem to work with this player. What's wrong?*

192 kHz/96 kHz BD and 96 kHz DVD discs only output digital audio downsampled to 48 kHz through the optical and coaxial outputs.

96 kHz 7.1ch BD discs only output digital audio downsampled to 48 kHz through HDMI output when video output is 480i or 480p over HDMI. These are not malfunctions.

- *Why is the mono audio on some discs rather quiet compared to other discs?*

When mono audio is split into the L and R channels, there may be a small loss of volume.

- *There's no sound when connected using HDMI!*

You won't hear any sound from the HDMI output if your component is only DVI/HDCP-compatible.

- *I can't connect to my local area network!*

First of all check the settings of the media server you're using. Make sure that if you made the network settings automatically on this player then you also select auto setup on the server. (Likewise, if you made the settings manually on the server, you should set up this player manually.)

Check also that you are using the right kind of LAN cable for the type of connection you made: a standard straight LAN cable if this player is connected to a hub; a crossed LAN cable for direct connection to a PC. See also *Network connection* on page 16.

Chapter 5

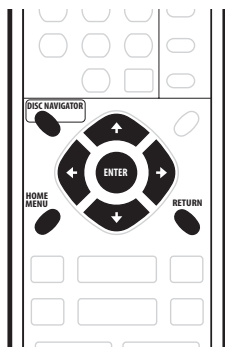
Using the Disc Navigator

Introduction

Most of the features described in this chapter make use of on-screen displays. Navigate these using the **↑/↓/←/→** and **ENTER**. To go back to the previous menu or screen, use the **RETURN** button. The button guide at the bottom of every screen shows which buttons do what.

Using the Disc Navigator

Use the Disc Navigator to browse through the PC files on a disc to find what you want to play. You can use the Disc Navigator when a disc is playing or stopped.

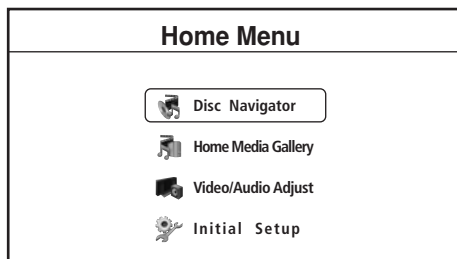


Important

- It's not possible to use the Disc Navigator with BD-ROM or DVD-Video discs.

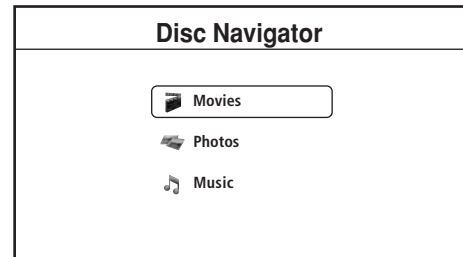
1 Press HOME MENU and select 'Disc Navigator' from the on-screen display.

Alternatively, press **DISC NAVIGATOR**.



2 Select 'Movies', 'Photos' or 'Music'.

See the sections below for more information on each of these.



3 Press HOME MENU to exit the Disc Navigator screen.

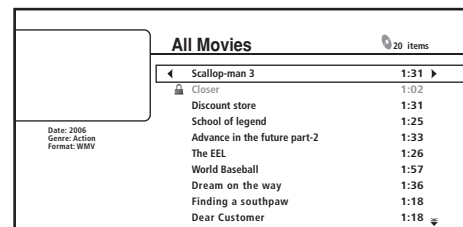
Movie Navigator

The movie section of the Disc Navigator allows you to browse and play all the compatible movie files stored on the loaded DVD-R/RW disc (non-movie files are not displayed).

See also *File compatibility* on page 9 for more on compatible file types.

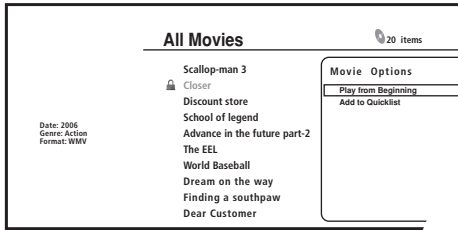
- If you haven't already done so, select **'Disc Navigator' from the Home Menu, then 'Movies'**.

You should see a list of all the movie files found on the disc, together with their playing times.

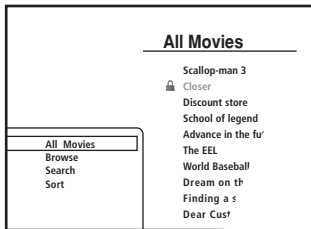


- Movie files that appear in the list with a lock icon (🔒) are DRM protected and cannot be played.
- Use the **↑/↓** buttons to change the current selection (highlighted in yellow).
On the left side of the screen you can see file information, such as the genre, date and file format, for the current selection.
- Press **ENTER** to play the currently highlighted movie.
Press **▶ PLAY** to start or resume playback from the last title played.

- Press **→** to display the Movie Options menu:



- **Play from Beginning:** Play the selected movie from beginning.
- **Add to Quicklist:** Add the selected movie to the Quicklist. The Quicklist feature is a useful way to organize movie selection and playback. The Quicklist can contain up to 10 movies.¹
- Press **←** to display the Browse menu



Depending on the browse method, some movies may not be selectable.

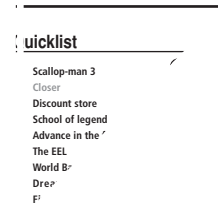
- **All Movies:** Display all movies.
- **Browse:** Browse movies by genre. See *Browsing movies* below.
- **Search:** Find a movie by entering a few letters. The search results will be displayed in order of relevance. See *Searching for movies* below.
- **Sort:** Sort movies by release date or alphabetically by title.

There are three ways to browse movies.

All Movies		20 Items
Scallop-man 3	1:31	
Closer	1:02	
Discount store	1:31	
School of legend	1:25	
Advance in the future part-2	1:33	
The EEL	1:26	
World Baseball	1:57	
Dream on the way	1:36	
Finding a southpaw	1:18	
Dear Customer	1:18	

From the previous menu, you can select a movie genre and how many movies are in that genre and press **ENTER** to see the list of movies.

From the list of all the movies currently in view, you can select a movie to display the Movie Options menu or remove movies from the Quicklist.



From the previous menu, you can select a movie to display the Movie Options menu or remove movies from the Quicklist.

Searching for movies

From the main menu, you can select a movie to search for.

or



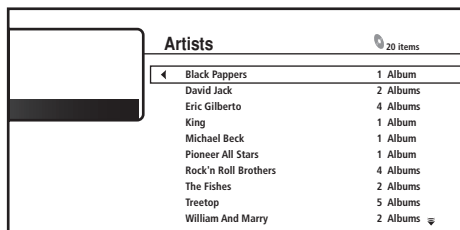
Music Navigator

The music section of the Disc Navigator allows you to browse and play all the compatible music files found on the loaded DVD-R/RW disc (non-music files are not displayed).

See also *File compatibility* on page 9 for more on compatible file types.

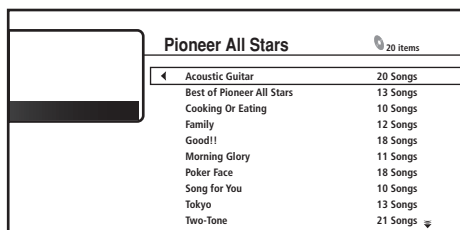
- If you haven't already done so, select 'Disc Navigator' from the Home Menu, then 'Music'.

You should see a list of the artist names on the disc.

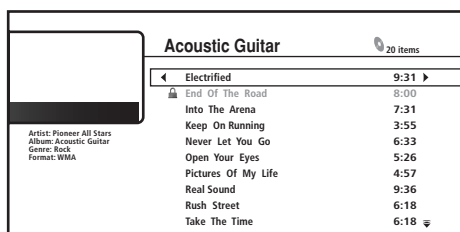


- 1 Use the ↑/↓ buttons to change the current selection (highlighted in yellow).

- 2 Press ENTER to display the Album list.



- 3 Select the Album you want to listen to and press ENTER to display the Song list.



- Music files that appear in the list with a lock icon (🔒) are DRM protected and cannot be played.

- Use the ↑/↓ buttons to change the current selection (highlighted in yellow).

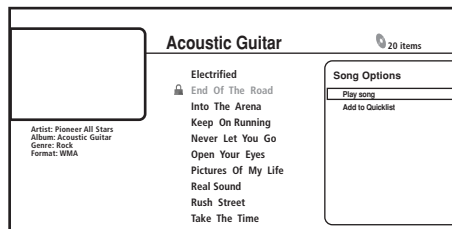
On the left side of the screen you can see file information, such as the artist and album name, genre and file format, for the current selection.

- Press ENTER to play the currently highlighted music.

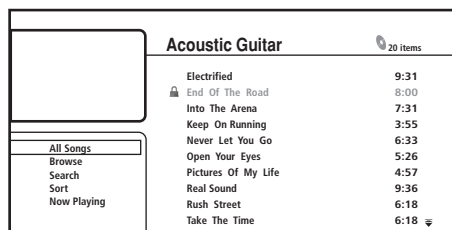
Press ► **PLAY** to start or resume playback from the last track played.

The display shows the **Now Playing** screen.

- Press → to display Song Options menu:



- **Play Song:** Play the selected song from the beginning.
- **Add to Quicklist:** Add the selected song to your Quicklist. The Quicklist feature is a useful way to organize music files for handy selection and playback. The Quicklist can contain up to 25 songs.¹
- Press ← to display the Browse menu:



Depending on the browse menu, certain options may not be selectable.

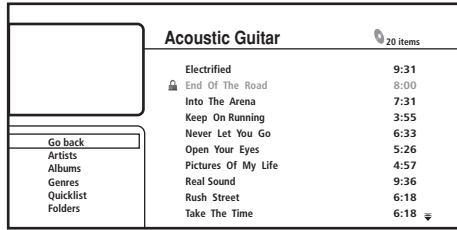
- **All Songs:** Display all songs (files/tracks) found on the disc.
- **Browse:** Browse songs by Artist, Album, Genre, Quicklist or Folder. See also *Browsing songs* on page 30.
- **Search:** Find a song by entering a name (or a few letters) to search for. The search results are narrowed down as you enter more letters. See also *Searching songs* on page 30.
- **Sort:** Sort songs by date (oldest first or most recent first), or alphabetically by song title, artist, album or genre ('A' first or 'Z' first).
- **Now Playing:** Display song information (track name, artist, album, genre, etc.) and playback information. See also *Now playing song information* on page 30.

Note

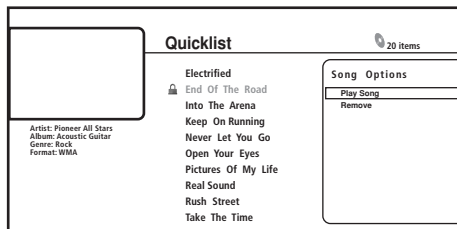
¹ The Quicklist is lost when the player is switched off.

Browsing songs

The Browse sub-menu gives you various ways to browse songs.



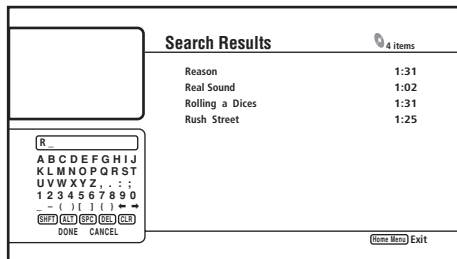
- **Go back:** Return to the previous menu.
- **Artists:** Display a list of artists, and how many albums are associated with each. Select an artist and press **ENTER** to see the album list by that artist.
- **Albums:** Display a list of albums, and how many songs are associated with each. Select an album and press **ENTER** to see the list of songs on that album.
- **Genres:** Display all music genres, and how many songs are in each one. Select a genre and press **ENTER** to see the list of artists in that genre.
- **Quicklist:** Display a list of all the songs currently in your Quicklist. Press **→** to display the Song Options menu, where you can start playback or remove songs from the Quicklist:



- **Folders:** Display a list of folders and song files. Select a folder and press **ENTER** to see the list of subfolders/songs.

Searching songs

From the Search sub-menu you can enter a few characters (up to 20) of a song title, genre, artist, or album. As each character is entered into the search field the search results are dynamically updated, narrowing down the list until you can see the one you're looking for.



See *Searching movies* on page 28 for how to use the screen keypad.

Now playing song information

The Now Playing screen shows detailed information about the song playing, including:

- Artist and song title
- Progress bar (elapsed time and song length)
- Album name
- Genre
- File format
- Browse Menu
- Play Status
- Play Mode
- Next/Previous Song Names

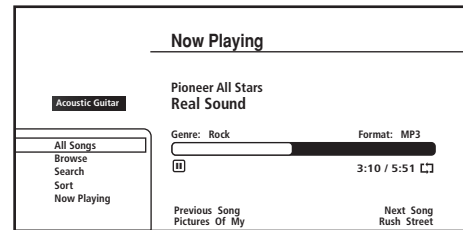


Photo Navigator

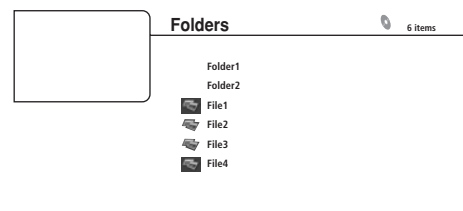
The photo section of the Disc Navigator allows you to browse and display all the compatible photo files found on the loaded DVD-R/ RW disc (non-photo files are not displayed).

See also *File compatibility* on page 9 for more on compatible file types.

- **If you haven't already done so, select 'Disc Navigator' from the Home Menu, then 'Photos'.**

You should see a list of folders/photo files from the disc.

- 1 Use the **↑/↓** buttons to change the current selection (highlighted in yellow).

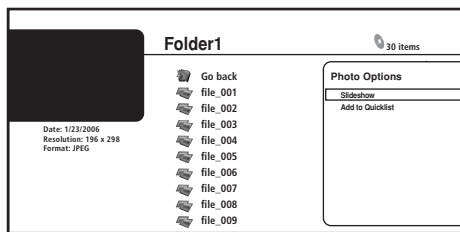


- 2 Select a folder and press **ENTER** to see the list of photos and subfolders within the folder.

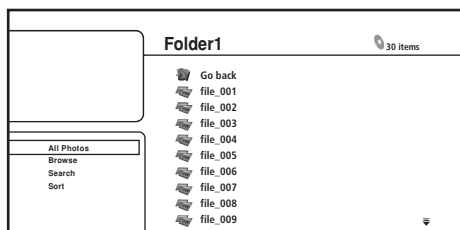


- Use the **↑/↓** buttons to change the current selection (highlighted in yellow).
- Press **ENTER** to start full-screen slideshow playback from the currently selected photo.
- Press **▶ PLAY** to start or resume slideshow playback from the last photo displayed.

- Press **⇒** to display the photo options menu.
- Press **ENTER** to display the photo options menu when displaying photos in thumbnail view.



- **Slideshow:** Start full-screen slideshow playback from the currently selected photo. During the slideshow, press **▶▶** to advance to the next photo; **◀◀** to go back to the previous photo; **⏸** **PAUSE** to pause the slideshow; **■** **STOP** to stop and exit the slideshow; **ZOOM** to enlarge the picture on the screen (see also *Zooming the screen* on page 25).
- **Add to Quicklist:** Add the selected photo to your Quicklist. The Quicklist feature is a useful way to organize photos for handy selection and slideshow playback. The Quicklist can contain up to 25 photos.¹
- Press **←** to display the browse menu.
- From the left-most column, press **←** to display the browse menu when displaying photos in thumbnail view:

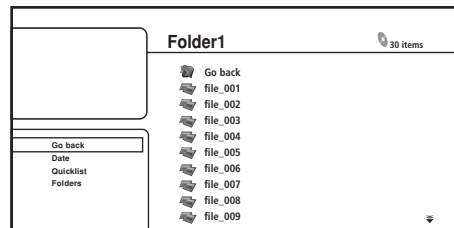


Depending on the browse menu, certain options may not be selectable.

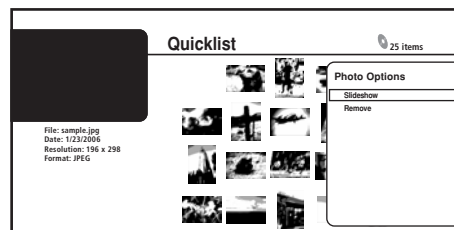
- **All Photos:** Display all photos found on the disc as thumbnail files.
- **Browse:** Browse photos by Date, Quicklist or Folder. See also *Browsing photos* below.
- **Search:** Find a photo by entering a name (or a few letters) to search for. The search results are narrowed down as you enter more letters. See also *Searching photos* below.
- **Sort:** Sort photos by date (oldest first or most recent first), or alphabetically by name ('A' first or 'Z' first).

Browsing photos

The Browse sub-menu gives you several ways to browse photos.



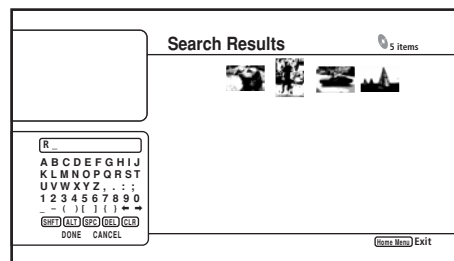
- **Go back:** Return to the previous menu.
- **Date:** Browse photos as thumbnails by date (year and month). Select a year then press **ENTER** to further browse by month. Select a month and press **ENTER** to see the photos taken that month.
- **Quicklist:** Display thumbnails of all the photos currently in your Quicklist. Press **ENTER** to display the Photo Options menu, from where you can start slideshow playback or remove photos from the Quicklist:



- **Folders:** Display a list of folders and photo files on the disc. Select a folder and press **ENTER** to see the subfolders/photos.

Searching photos

From the Search sub-menu you can enter a few (up to 20) characters of a photo title. As each character is entered into the search field the search results are dynamically updated, narrowing down the list of photos until you can see the one you're looking for.



See *Searching movies* on page 28 for how to use the screen keypad.

Note

¹ The Quicklist is lost when the player is switched off.

Chapter 6

Using the Home Media Gallery



Introduction

The Home Media Gallery allows you to browse and play movies, music and photos stored on media servers connected on an identical Local Area Network (LAN) as the player. This unit allows playing files stored on a Microsoft Windows XP computer with Windows Media Connect and a DLNA-compatible digital media server (PC and Consumer Electronics).

About network playback

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

Windows Media Connect

See *About Windows Media Connect* on page 38 for details, including how to install it on your PC.

PlaysForSure



PlaysForSure is a marketing certification given by Microsoft. The PlaysForSure logo makes it easy to find digital media stores and devices that work together. Digital media purchased from online stores carrying the PlaysForSure logo is available for use on this unit.

This unit complies with PlaysForSure Requirements Specification for Network Devices Version 1.21.

The PlaysForSure logo, Windows Media and the Windows logo are trademarks or registered trademarks of Microsoft Corporation in the USA and other countries.

Windows Media DRM

Microsoft Windows Media Digital Rights Management (WMDRM) is a platform to protect and securely deliver content for playback on computers, portable devices and network devices. Home Media Gallery functions as a WMDRM 10 for networked devices. WMDRM-protected content can only be played on media servers supporting WMDRM.

Content owners use WMDRM technology to protect their intellectual property, including copyrights. This device uses WMDRM software to access WMDRM-protected content. If the WMDRM software fails to protect the content, content owners may ask Microsoft to revoke the software's ability to use WMDRM to play or copy protected content. Revocation does not affect unprotected content. When you download licenses for protected content, you agree that Microsoft may include a revocation list with the licenses. Content owners may require you to upgrade WMDRM to access their content. If you decline an upgrade, you will not be able to access content that requires the upgrade.

This product is protected by certain intellectual property rights of Microsoft. Use or distribution of such technology outside of this product is prohibited without a license from Microsoft.

DLNA



DLNA CERTIFIED Audio/Video/Image Player

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

The DLNA certification logo makes it easy to find products that comply with the DLNA Interoperability Guidelines. This unit complies with DLNA Interoperability Guidelines v1.0.

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

DLNA and DLNA CERTIFIED are trademarks and/or service marks of Digital Living Network Alliance.

Content playable over a network

Even when encoded in a compatible format, some files may not play correctly. See *File compatibility* on page 9. Some functions may not be supported depending on the server type or version used.

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 100BASE-TX connection between player and PC is recommended.
- Playback performance will vary with the power and condition (seek time of the hard disk, etc.) of the PC being used.
- 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.
- Problems with the PC may cause malfunctions.

Pioneer is not responsible for any malfunction of the player and/or the Home Media Gallery features due to communication error/malfunctions associated with your network connection and/or your PC, or other connected equipment. Please contact your PC manufacturer or Internet service provider.

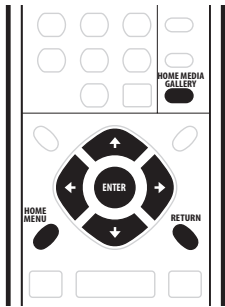
About the network settings

This unit uses DHCP and Auto IP functionality to make all the network settings automatically.

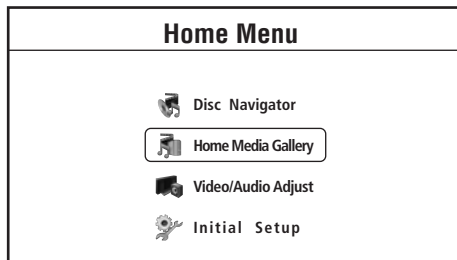
If you are using a broadband router or a broadband modem with a DHCP server function, setup should be completely automatic with no manual settings required.

Using the Home Media Gallery

Before using the Home Media Gallery, make sure that you have connected the player to the network and made the necessary settings. See *Network connection* on page 16 and *Setting up for network use* on page 21 for more information.

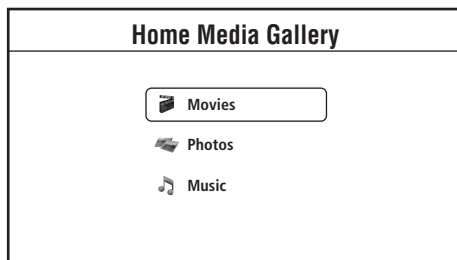


1 Press **HOME MENU** and select 'Home Media Gallery' from the on-screen display.



- Alternatively, press **HOME MEDIA GALLERY**.
- The Home Media Gallery is only available when the network or server contains movies, photos or music files.

2 Select 'Movies', 'Photos' or 'Music'.



- On selecting an option, a list of movies, photos or music files that the player finds on the selected server is displayed. From here you can browse, play and sort network files.
- See the sections below for more information on each part of the Home Media Gallery.

3 Press **HOME MENU** to exit the Home Media Gallery screen.

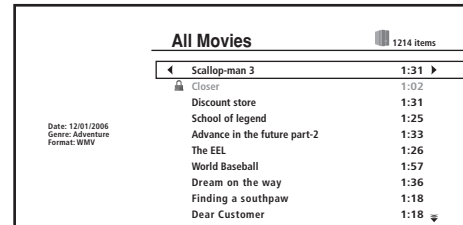
Movie Navigator

From the movie section of the Home Media Gallery you can browse and play all the compatible movie files found on your local area network (non-movie files are not displayed).

See also *File compatibility* on page 9 for more on compatible file types.

- If you haven't already done so, select 'Home Media Gallery' from the Home Menu, then 'Movies'.

You should see a list of all the movie files found on the selected server, together with their playing times.

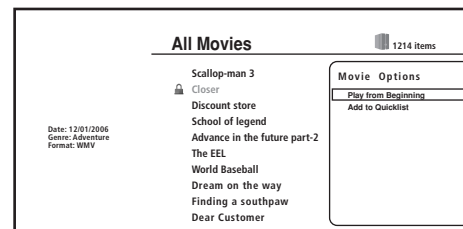


Movie files that appear in the list with a lock icon (🔒) are DRM-protected and cannot be played.

- Use the **↑/↓** buttons to change the current selection (highlighted in yellow).

On the left side of the screen you can see file information, such as the genre, date and file format, for the current selection.

- Press **ENTER** to play the currently highlighted movie.
 - Press **▶ PLAY** to start or resume playback from the last title played.
- Press **⇒** to display the Movie Options menu:

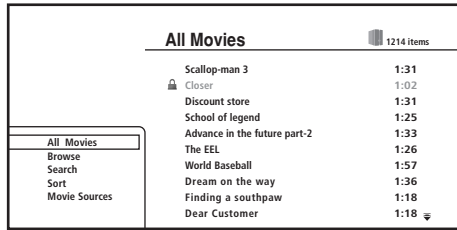


- **Play from Beginning:** Play the selected movie from the beginning.
- **Add to Quicklist:** Add the selected movie to your Quicklist. The Quicklist feature is a useful way to organize movie files for handy selection and playback. The Quicklist can contain up to 25 movies.¹

Note

¹ The Quicklist is lost when the player is switched off.

- Press **←** to display the Browse menu:

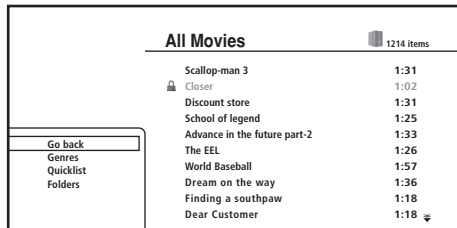


Depending on the browse menu, certain options may not be selectable.

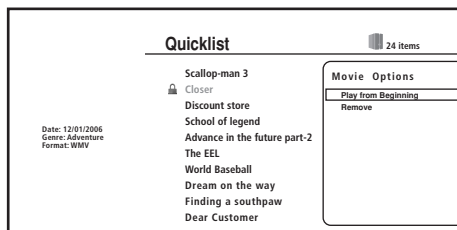
- **All Movies:** Display all movie files found on the selected server.
- **Browse:** Browse movies by genre, Quicklist or folder. See also *Browsing movies* below.
- **Search:** Find a movie by entering a name (or a few letters) to search for. The search results are narrowed down as you enter more letters. See also *Searching movies* below.
- **Sort:** Sort movies by date (oldest first or most recent first), or alphabetically by title or genre ('A' first or 'Z' first).
- **Movie Sources:** Display servers on the network. See also *Movie sources* below.

Browsing movies

The Browse sub-menu gives you three ways to browse movies.



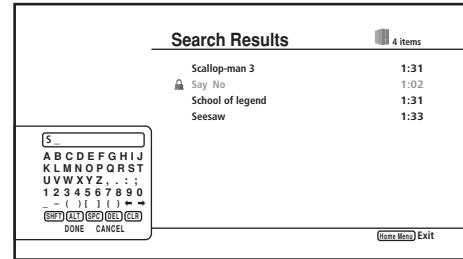
- **Go back:** Return to the previous menu.
- **Genres:** Display all movie genres and how many movies are in each one. Select a genre and press **ENTER** to see the list of movies in that genre.
- **Quicklist:** Display a list of all the movies currently in your Quicklist. Press **→** to display the Movie Options menu, where you can start playback or remove movies from the Quicklist:



- **Folders:** Display a list of folders and movie files. Select a folder and press **ENTER** to see the list of movies and subfolders within the folder. (The folder configuration may change depending on the server type.)

Searching movies

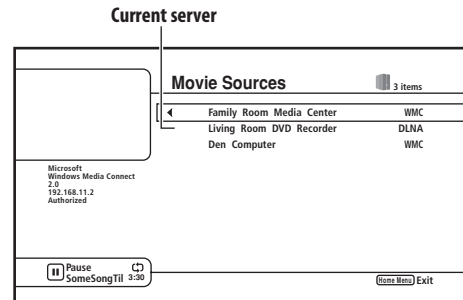
From the Search sub-menu you can enter a few (up to 20) characters of a movie title or genre. As each character is entered into the search field the search results are dynamically updated, narrowing down the list of movies until you can see the one you're looking for.



- Use the **↑/↓/←/→** and **ENTER** buttons to select characters from the keypad.
- Select **SHFT** to toggle between upper and lower case.
- Select **ALT** to toggle between regular and special (accented, etc.) characters (ISO 8859-1 character set).
- Select **SPC** to insert a space.
- Select **DEL** to delete the character at the current cursor position in the search field.
- Select **CLR** to clear the search field.
- Select **DONE** to close the keypad and select a movie or genre from the search results; select **CANCEL** to close the keypad and clear the search results.

Movie sources

From the movie sources window you can see all the servers found on the network and change the selected server.



- Some servers found on the network may not be available for the following reasons:
 - The player is collecting file information from the server.
 - There are no playable movie files on the server.
 - This player is not authorized for the PC (Windows Media Connect only). See also *Authorizing this player* on page 38.
- Servers not currently available appear with a lock icon (🔒) in the server list.

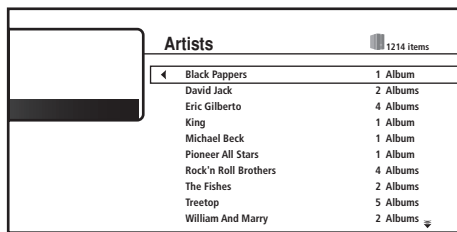
Music Navigator

From the music section of the Home Media Gallery you can browse and play all the compatible song files found on your local area network (non-music files are not displayed). You can also play a photo slideshow in the Photo Navigator while playing music (see *Photo Navigator* on page 37).

See also *File compatibility* on page 9 for more on compatible file types.

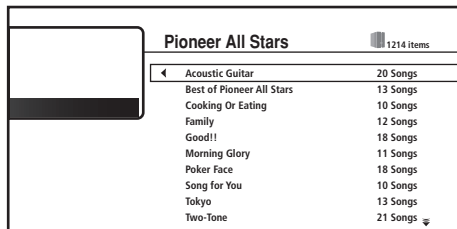
- If you haven't already done so, select 'Home Media Gallery' from the Home Menu, then 'Music'.

You should see a list of all the artist names found on the selected server.

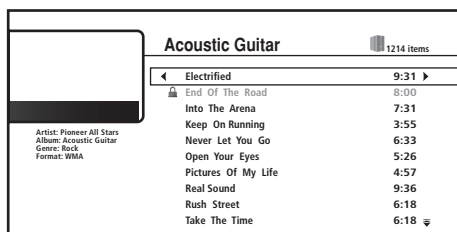


- 1 Use the ↑/↓ buttons to change the current selection (highlighted in yellow).

- 2 Press ENTER to display the Album list.



- 3 Select the Album you want to listen to and press ENTER to display the Song list.



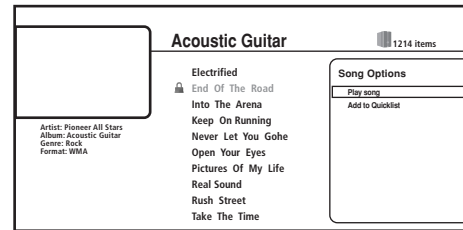
- Music files that appear in the list with a lock icon (🔒) are DRM-protected and cannot be played.

- Use the ↑/↓ buttons to change the current selection (highlighted in yellow).

On the left side of the screen you can see file information, such as the artist and album name, genre and file format, for the current selection.

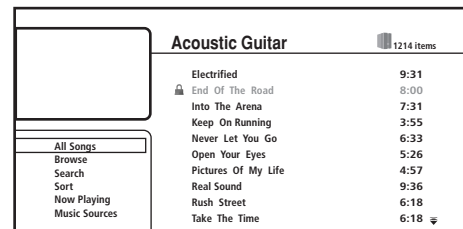
- Press ENTER to play the currently highlighted music.
- Press ► **PLAY** to start or resume playback from the last track played.
- The display shows the **Now Playing** screen.

- Press ➡ to display Song Options menu:



- **Play Song:** Play the selected song from the beginning.
- **Add to Quicklist:** Add the selected song to your Quicklist. The Quicklist feature is a useful way to organize music files for handy selection and playback. The Quicklist can contain up to 25 songs.¹

- Press ← to display the Browse menu:



Depending on the browse menu, certain options may not be selectable.

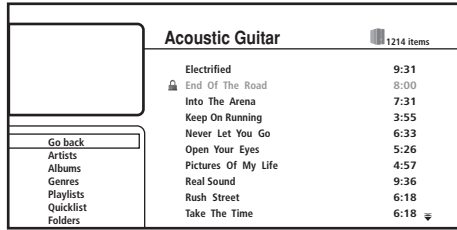
- **All Songs:** Display all songs (files/tracks) found on the server.
- **Browse:** Browse songs by Artist, Album, Genre, Playlist, Quicklist or Folder. See also *Browsing songs* on page 36.
- **Search:** Find a song by entering a name (or a few letters) to search for. The search results are narrowed down as you enter more letters. See also *Searching songs* on page 36.
- **Sort:** Sort songs by date (oldest first or most recent first), or alphabetically by song title, artist, album or genre ('A' first or 'Z' first).
- **Now Playing:** Display song information (track name, artist, album, genre, etc.) and playback information. See also *Now playing song information* on page 36.
- **Music Sources:** Display servers on the network. See also *Music sources on page 36*.

Note

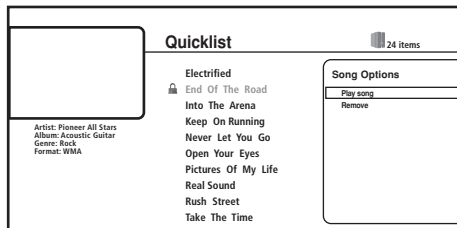
¹ The Quicklist is lost when the player is switched off.

Browsing songs

The Browse sub-menu gives you various ways to browse songs.



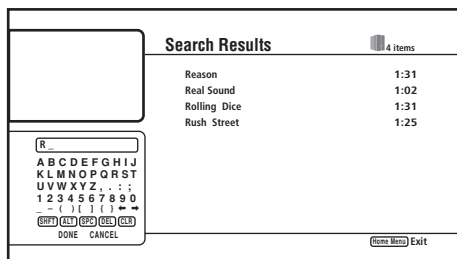
- **Go back:** Return to the previous menu.
- **Artists:** Display a list of artists, and how many albums are associated with each. Select an artist and press **ENTER** to see the album list by that artist.
- **Albums:** Display a list of albums, and how many songs are associated with each. Select an album and press **ENTER** to see the list of songs on that album.
- **Genres:** Display all music genres, and how many songs are in each one. Select a genre and press **ENTER** to see the list of artists in that genre.
- **Playlists:** Display the server Playlists.
- **Quicklist:** Display a list of all the songs currently in your Quicklist. Press **→** to display the Song Options menu, where you can start playback or remove songs from the Quicklist:



- **Folders:** Display a list of folders and song files. Select a folder and press **ENTER** to see the list of songs and subfolders within the folder. (The folder configuration may change depending on the server type.)

Searching songs

From the Search sub-menu you can enter a few characters (up to 20) of a song title, genre, artist or album. As each character is entered into the search field the search results are dynamically updated, narrowing down the list of songs until you can see the one you're looking for.

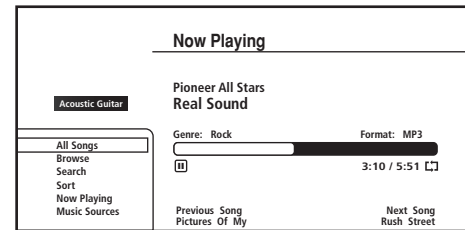


See *Searching movies* on page 34 for how to use the screen keypad.

Now playing song information

The Now Playing screen shows detailed information about the song playing, including:

- Artist and song title
- Progress bar (elapsed time and song length)
- Album name
- Genre
- File format
- Browse menu
- Play status
- Play Mode
- Next/Previous song names



Music sources

From the music sources window you can see all the servers found on the network and change the selected server. See *Movie sources* on page 34 for more information.

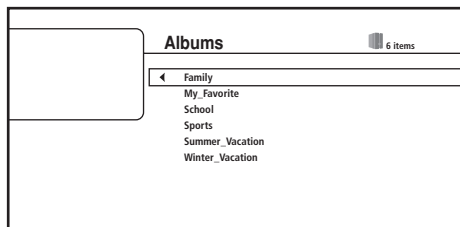
Photo Navigator

The photo section of the Home Media Gallery allows you to browse and display all the compatible photo files found on your local area network (non-photo files are not displayed). You can play a photo slideshow in the Photo Navigator while playing music.

See also *File compatibility* on page 9 for more on compatible file types.

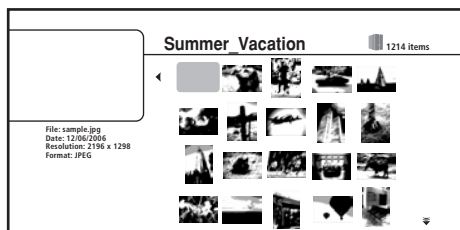
- If you haven't already done so, select 'Home Media Gallery' from the Home Menu, then 'Photos'.

You should see a list of albums from the selected server.

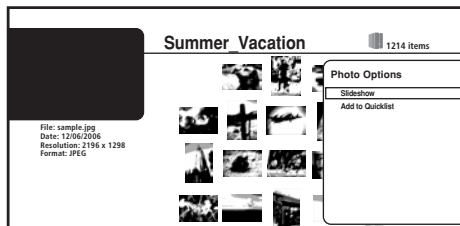


- 1 Use the **↑/↓** buttons to change the current selection (highlighted in yellow).

- 2 Press **ENTER** to display the selected photo list.

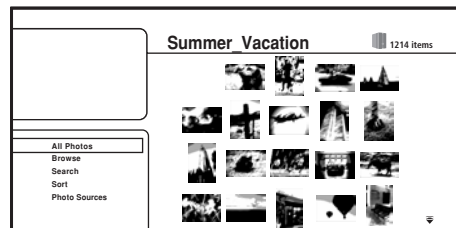


- Use the **↑/↓/←/→** buttons to change the current thumbnail selection (highlighted in yellow).
 - Press **▶ PLAY** to start or resume slideshow playback from the last photo displayed.
- Press **ENTER** to display the Photo Options menu:



- **Slideshow:** Starts full-screen slideshow playback from the currently selected photo. During the slideshow, press **▶▶** to advance to the next photo; **◀◀** to go back to the previous photo; **⏸ PAUSE** to pause the slideshow; **■ STOP** to stop and exit the slideshow; **ZOOM** to enlarge the picture on the screen (see also *Zooming the screen* on page 25).
- **Add to Quicklist:** Add the selected photo to your Quicklist. The Quicklist feature is a useful way to organize photos for handy selection and slideshow playback. The Quicklist can contain up to 25 photos.¹

- From the left-most column, press **←** to display the Browse menu:

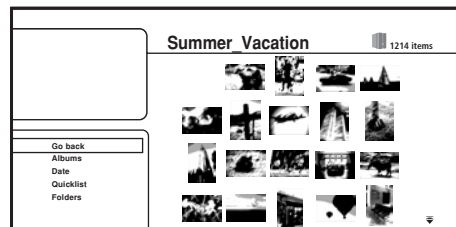


Depending on the browse menu, certain options may not be selectable.

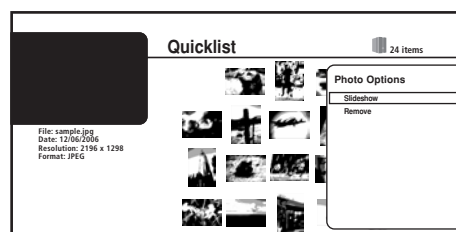
- **All Photos:** Display all photos found on the server.
- **Browse:** Browse Album, Date, Quicklist or Folder. See also *Browsing photos* below.
- **Search:** Find a photo by entering a name (or a few letters) to search for. The search results are narrowed down as you enter more letters. See also *Searching photos* on page 38.
- **Sort:** Sort photos by date (oldest first or most recent first), or alphabetically by name ('A' first or 'Z' first).
- **Photo Sources:** Display servers on the network. See also *Photo sources* on page 38.

Browsing photos

The Browse sub-menu gives you several ways to browse photos.



- **Go back:** Return to the previous menu.
- **Albums:** Display a list of server albums.
- **Date:** Browse photos by date (year and month). Select a year then press **ENTER** to further browse by month. Select a month and press **ENTER** to see the photos taken that month.
- **Quicklist:** Display thumbnails of all the photos currently in your Quicklist. Press **ENTER** to display the Photo Options menu, where you can start slideshow playback or remove photos from the Quicklist:



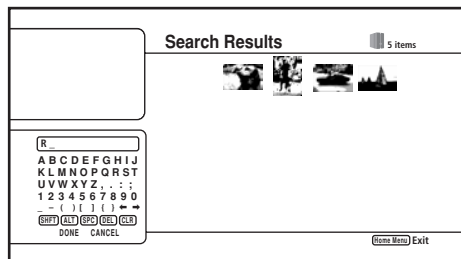
- **Folders:** Display a list of folders and photo files. Select a folder and press **ENTER** to see a list of photos and subfolders within the folder. (The folder configuration may change depending on the server type.)

Note

¹ The Quicklist is lost when the player is switched off.

Searching photos

From the Search sub-menu you can enter a few (up to 20) characters of a photo title. As each character is entered into the search field the search results are dynamically updated, narrowing down the list of photos until you can see the one you're looking for.



See *Searching movies* on page 34 for how to use the screen keypad.

Photo sources

From the photo sources window you can see all the servers found on the network and change the selected server. See *Movie sources* on page 34 for more information.

About Windows Media Connect

Windows Media Connect is software to deliver music, photos and movies from a Microsoft Windows XP computer to home stereo systems and TVs.

With this software, you can play back files stored on the PC through various devices wherever you like in your home.

Installing Windows Media Connect

Before installing Windows Media Connect, make sure that Windows XP Service Pack 2 is installed. Licensed Windows XP users can download them at no charge from the Microsoft Website, or via Windows Update.

- See the Microsoft Web site for details regarding minimum system requirements and installation procedures.
- **Download the Windows Media Connect software.** This can be downloaded either directly from the Microsoft Website, or via Windows Update.

Authorizing this player

In order to be able to browse and play files from a Windows XP PC with Windows Media Connect this player must be authorized. This happens automatically when the player makes a connection over the network to the PC. If not, please authorize this player manually on the PC.

FAQ

- *Some files don't show up. Where are they?*
– File names that don't end with one of the permitted extensions won't be recognized by this player. See also *File compatibility* on page 9.

Chapter 7

Video/Audio Adjust menu

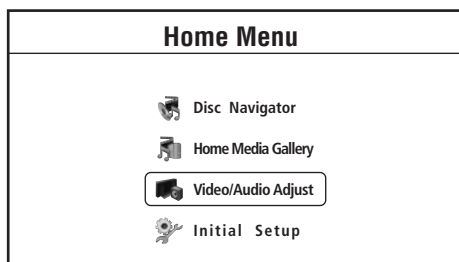
From the Video/Audio Adjust menu you can make various settings that affect how video is presented on your TV and how the sounds. Items in the Video/Audio Adjust menu can only be changed during playback.

Video Adjust

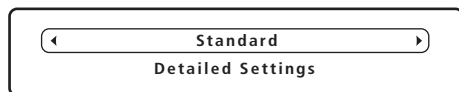
- Default setting: **Standard**

From the Video Adjust screen you can select the Standard or Cinema video presentation or define presets of your own in Memory 1 to 3.

- 1 Press **HOME MENU** and select 'Video/Audio Adjust' from the on-screen display.



- 2 Select 'Video Adjust'.
- 3 Use the **←/→** buttons to select a preset.



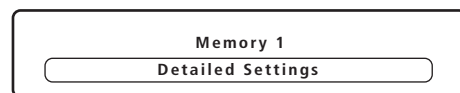
- **Standard** – Standard setting
- **Cinema** – Optimized for watching movies
- **Memory1-3** – Use for saving your own presets (see *Creating your own presets* below)

- 4 Press **ENTER** or **RETURN** to make the setting and exit the Video Adjust screen.

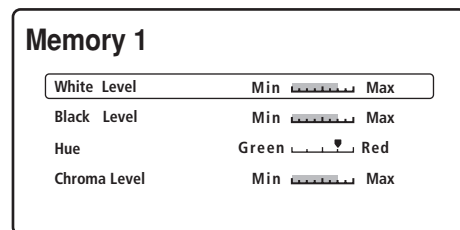
Creating your own presets

You can create up to three presets of your own.

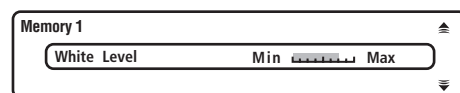
- 1 Select one of the Memory presets.
- 2 Press **↓** to select 'Detailed Settings' then press **ENTER**.



- 3 Adjust the picture quality settings.
 - Use the **↑/↓** buttons to select a setting.
 - Use the **←/→** buttons to adjust the current setting.



Select a setting then press **ENTER** to display just that setting. This gives you more screen area in which to see the effects of changes you make.



- Press **ENTER** or **RETURN** to go back to full-screen display.
- You can adjust any or all of the following picture quality settings:
- **White Level** – Adjusts the intensity of white.
 - **Black Level** – Adjusts the intensity of black.
 - **Hue** – Adjusts the overall color balance between red and green.
 - **Chroma Level** – Adjusts how saturated colors appear.

- 4 Press **RETURN** to save the preset and exit the Detailed Settings screen.

Audio Adjust

From the Audio Adjust menu you can set the Audio DRC (Dynamic Range control).

Audio DRC

- Default setting: **Off**

When watching Dolby Digital BD and DVD discs, as well as PC files with Dolby Digital audio, at low volume, it's easy to lose the quieter sounds completely—including some of the dialog. Switching Audio DRC (Dynamic Range Control) to On can help by bringing up the quieter sounds, while controlling loud peaks.

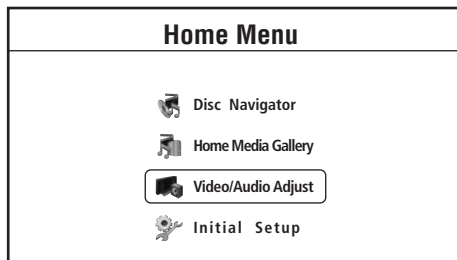
How much of a difference you hear depends on the material you're listening to. If the material doesn't have wide variations in volume, you may not notice much change.



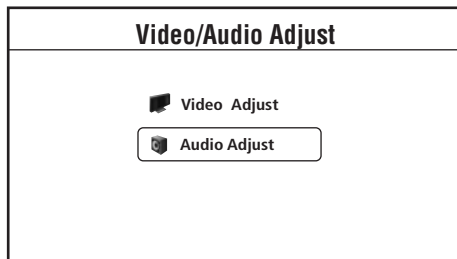
Important

- Audio DRC is effective with the following types of audio:
 - Analog audio from the **AUDIO OUT (2ch)** and **AUDIO OUT (5.1ch)** jacks.
 - PCM audio from the **DIGITAL AUDIO OUT** and **HDMI OUT** jacks (see also *About the audio output settings* on page 44).

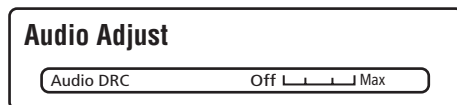
- 1 Press **HOME MENU** and select '**Video/Audio Adjust**' from the on-screen display.



- 2 Select '**Audio Adjust**'.



- 3 Highlight **Audio DRC**, then use the **←/→** buttons to change to '**Off**', '**Level 1**', '**Level 2**' or '**Max**' as required.



- 4 Press **ENTER** or **RETURN** to make the setting and exit the Audio Adjust screen.

Chapter 8

Initial Setup menu

Using the Initial Setup menu

The Initial Setup menu is where you can set various player options for sound, picture, language and so on. Note that settings can only be changed when the player is stopped.

If no button (remote or front panel) is pressed for more than five minutes, the screen saver starts.

If you disconnect the player from the wall outlet before switching the player off, any new settings made during that session will be lost.

- **Press HOME MENU and select 'Initial Setup'.**

In the table below, the default option is marked with a •.

Setting	Options	Explanation
Video Out		
TV Aspect Ratio	4:3 (Standard)	Select if you have a standard 4:3 TV. See <i>Changing the video output format</i> on page 14. When <i>Output Format</i> is set to 720p , 1080i or 1080p , video is output in 16:9 widescreen format even if <i>TV Aspect Ratio</i> is set to 4:3 (Standard) .
	16:9 (Widescreen) •	Select if you have a widescreen 16:9 TV.
4:3 Video Out	Full	4:3 video material is output without black bars on either side of the picture if the <i>TV Aspect Ratio</i> setting (above) is set to 16:9 (Widescreen) .
	Normal •	4:3 video material is output with black bars on either side of the picture if the <i>TV Aspect Ratio</i> setting (above) is set to 16:9 (Widescreen) .
DVD 16:9 Video Out	Letter Box •	If the <i>TV Aspect Ratio</i> setting (above) is set to 4:3 (Standard) , select this if you prefer letterbox presentation of 16:9 format DVDs.
	Pan & Scan	If the <i>TV Aspect Ratio</i> setting (above) is set to 4:3 (Standard) , select this if you prefer Pan & Scan presentation of 16:9 format DVDs.
<i>Some discs contain only Letter Box or Pan & Scan presentation so the video output will depend on the disc.</i>		
HDMI Color Space	YCbCr •	This is the standard setting for HDMI-compatible devices.
	RGB (16–235)	Use this setting if colors appear overly rich and the black too deep on the RGB (0–255) setting.
	RGB (0–255)	Use if colors are weak and black appears to 'float' on the RGB (16–235) setting.
<i>When using an HDMI monitor that accepts only RGB input, this player outputs RGB video even if this setting is set to YCbCr. If the monitor is DVI-compatible, the player outputs RGB (0–255) color space. If however the picture looks unnatural, set it to RGB (16–235).</i>		
24p Direct Out	On	Gives smooth movement in BD/DVD film material video. This setting is only effective when the player is connected to a 1080 / 24p-compatible TV using HDMI.
	Off •	Choose this setting if you notice picture disturbance when the video switches between video and film material.
<i>When 24p Direct Out is On, you may experience some picture disturbance when the video switches between video and film material. See also Changing the video output format on page 14.</i>		

Setting	Options	Explanation
Audio Out		
Dolby Digital Out	Dolby Digital •	Outputs a Dolby Digital signal when a Dolby Digital source is being played.
	Dolby Digital → PCM	Converts Dolby Digital sources to Linear PCM output. Use if your connected equipment doesn't support Dolby Digital audio.
<i>This setting is effective in digital audio outputs.</i>		
DTS Out	DTS •	Outputs a DTS signal when a DTS source is being played.
	DTS → PCM	Converts sources with DTS audio to Linear PCM output. Use if your connected equipment doesn't support DTS audio.
<i>This setting is effective in digital audio outputs.</i>		
DTS Downmix	Stereo •	If you've selected DTS → PCM in <i>DTS Out</i> above, you can choose the way the DTS signal is downmixed PCM audio. Stereo downmixes the signal to 2-channel stereo.
	Lt / Rt	Downmixes to a 2-channel signal compatible with Dolby surround matrix decoders. (This allows you to hear surround sound if your AV receiver or amplifier has Dolby Pro Logic capability.)
HDMI Audio Out	Auto •	Dolby Digital and DTS sources are output as a bitstream signal. However, depending on the HDMI device connected and the content being played, Linear PCM audio may be output.
	PCM	All audio signals are converted to Linear PCM.
Language		
OSD Language	English •	Sets the language of the on-screen displays to English.
	Français	Sets the language of the on-screen displays to French.
Audio Language	English •	Sets both the BD-ROM and DVD-Video default audio language to English.
	French	Sets both the BD-ROM and DVD-Video default audio language to French.
	Other	Continue to the next screen to set the default audio language for BD-ROM and DVD-Video disc playback. You can select the language name or enter the code number (see <i>BD/DVD language code list</i> on page 48 for the code list).
<i>Discs do not necessarily have audio in your selected language. Also, some discs override the Audio Language preference.</i>		
Subtitle Language	English •	Sets the default subtitle language for BD-ROM and DVD-Video playback to English.
	French	Sets the default subtitle language for BD-ROM and DVD-Video playback to French.
	Other	Continue to the next screen to set the default subtitle language for BD-ROM and DVD-Video disc playback. You can select the language name or enter the code number (see <i>BD/DVD language code list</i> on page 48 for the code list).
<i>Discs do not necessarily have subtitles in your selected language. Also, some discs override the Subtitle Language preference.</i>		
BD/DVD Menu Language	w/Subtitle Language •	Sets the language of BD-ROM and DVD-Video menus to the same as that set for the subtitle language.
	English	Sets the language of BD-ROM and DVD-Video menus to English.
	French	Sets the language of BD-ROM and DVD-Video menus to French.
	Other	Continue to the next screen to set the default menu language for BD-ROM and DVD-Video disc menus. You can select the language name or enter the code number (see <i>BD/DVD language code list</i> on page 48 for the code list).
<i>Discs do not necessarily have menus in your selected menu language.</i>		
Subtitle Display	On •	Select to have BD-ROM and DVD-Video discs display subtitles.
	Off	Select to switch off subtitle display.
<i>Some discs may override these settings.</i>		
Parental Lock		
Change Password (Set Password)	Next Screen	Set or change the password necessary to play BD or DVD discs that have level/age restrictions. In order to change the password, you'll need to first enter your existing one.
DVD Parental Lock	Change Level	Enter your password and then set the parental lock level. Discs with a lock level higher than that set in the player will require the password to play.
	DVD Country Code	Enter your password and then set a country/area code. This ensures that you see the scenes intended for your country or area. See <i>BD/DVD country/area code list</i> on page 48.
BD Parental Lock	Change Age Restriction	Enter your password and then set the age restriction.
<i>Only certain discs have parental lock features. Check the disc packaging to see what features the disc has. If you forget your password you can reset it by resetting the player to its factory settings. See <i>Resetting the player</i> on page 47.</i>		
Network		
IP Configuration	Next Screen	Continue to the next screen to input IP address details. See <i>Setting up for network use</i> on page 21 for more detailed information.

Setting	Options	Explanation
Device Name	Next Screen	Continue to the next screen to set the name of this player as it will appear to other devices on the network. See <i>Setting up for network use</i> on page 21 for more detailed information.
Display Network Config.	Next Screen	Continue to the next screen to see a summary of your network settings.
Speakers		
Audio Output Mode	2 Channel •	Set if you connected this player to an amplifier using only the front left/right channels of the AUDIO OUT (5.1ch) outputs.
	5.1 Channel	Set if you connected this player to an amplifier using all 5.1 channels of the AUDIO OUT (5.1ch) outputs. On this setting the audio output from the AUDIO OUT (2ch) jacks will be incorrect.
Speaker Setup	Next Screen	Continue to the next screen to specify which speakers are connected to your system. This setting affects how audio is output from the multichannel analog outputs. See <i>Speaker Setup</i> on page 45 for more detailed information.
Options		
On Screen Display	On •	The player displays operation displays (Stop , Play , etc.) on-screen.
	Off	Switches off the on-screen operation displays.
Angle Indicator	On •	A camera icon appears on-screen during multi-angle scenes on a BD-ROM or DVD-Video disc.
	Off	Nothing is indicated on-screen when a multi-angle scene is showing.
BD Country Code	Next Screen	Set a country/area code to ensure that you see the scenes intended for your country or area. See <i>BD/DVD country/area code list</i> on page 48.
Auto Power Off	On •	If the player is stopped or paused for more than 30 minutes with no operation by the user, the player automatically switches itself off.
	Off	No automatic power off.
Setup Navigator	Start	Select to start the Setup Navigator. See also <i>Switching on and setting up</i> on page 20.

About the audio output settings

The table below shows how the audio settings you make in the Initial Setup menu (page 41) affect the output to the analog (2ch/5.1ch), digital and HDMI outputs with various types of disc/files.

Disc audio format		Analog outputs		Digital outputs		HDMI output	
		2ch ^{*1}	5.1ch ^{*1}	PCM convert ^{*2}	Bitstream ^{*3}	PCM ^{*4}	Auto ^{*4}
BD-ROM	Dolby Digital	2ch downmix PCM	5.1ch PCM	2ch downmix PCM	Dolby Digital ^{*11}	5.1ch PCM ^{*9}	Dolby Digital ^{*8,11}
	Dolby Digital plus	2ch downmix PCM	5.1ch PCM	2ch downmix PCM	Dolby Digital ^{*5,11}	5.1ch PCM ^{*9}	Dolby Digital ^{*5,8,11}
	Dolby TrueHD	2ch downmix PCM	5.1ch PCM	2ch downmix PCM	Dolby Digital ^{*6,11}	5.1ch PCM ^{*9}	Dolby Digital ^{*6, 8,11}
	DTS	2ch downmix PCM	5.1ch PCM	2ch downmix PCM	DTS ^{*11}	5.1ch PCM ^{*9}	DTS ^{*8,11}
	DTS-HD	2ch downmix PCM	5.1ch PCM	2ch downmix PCM	DTS ^{*7,11}	5.1ch PCM ^{*9}	DTS ^{*7,8,11}
	Linear PCM 7.1ch ^{*12}	2ch downmix PCM	5.1ch downmix PCM	2ch downmix PCM	2ch downmix PCM	7.1ch PCM ^{*9,13}	7.1ch PCM ^{*9,13}
	Linear PCM 5.1ch ^{*12}	2ch downmix PCM	5.1ch PCM ^{*10}	2ch downmix PCM	2ch downmix PCM	5.1ch PCM ^{*9, 10}	5.1ch PCM ^{*9,10}
Linear PCM 2ch ^{*12}	2ch PCM	2ch PCM	2ch PCM	2ch PCM	2ch PCM	2ch PCM	
DVD-Video	Dolby Digital	2ch downmix PCM	5.1ch PCM	2ch downmix PCM	Dolby Digital	5.1ch PCM ^{*9}	Dolby Digital ^{*8}
	DTS	2ch downmix PCM	5.1ch PCM	2ch downmix PCM	DTS	5.1ch PCM ^{*9}	DTS ^{*8}
	MPEG	2ch PCM	2ch PCM	2ch PCM	2ch PCM	2ch PCM	2ch PCM
	Linear PCM	2ch PCM	2ch PCM	2ch PCM	2ch PCM	2ch PCM	2ch PCM

^{*1} 2 Channel or 5.1 Channel setting (see Audio Output Mode on page 43).

^{*2} Dolby Digital → PCM or DTS → PCM setting (see Dolby Digital Out and DTS Out on page 42).

^{*3} Dolby Digital or DTS setting (see Dolby Digital Out and DTS Out on page 42).

^{*4} PCM or Auto setting (see HDMI Audio Out on page 42).

^{*5} Only the independent substream is output.

^{*6} Only the Dolby substream is output.

^{*7} Only the core substream is output.

^{*8} If the HDMI device you are using is not compatible with these compressed formats, the signal is output as linear PCM.

^{*9} If the connected HDMI device is compatible with fewer channels of Linear PCM audio than this player, the output will be adjusted to be compatible with the HDMI device.

^{*10} Outputs 2 ch downmix PCM when the sampling rate is 192 kHz.

^{*11} Even if there is interactive audio, interactive audio is not mixed.

^{*12} Interactive audio is not mixed when the sampling rate is 192 kHz or 96 kHz.

^{*13} When the video output of HDMI is 480i or 480p, output sampling rate is automatically downsampled to 48 kHz.

Note

- Output sampling rate is 48 kHz through the digital audio outputs.
- MPEG audio is always output as linear PCM.

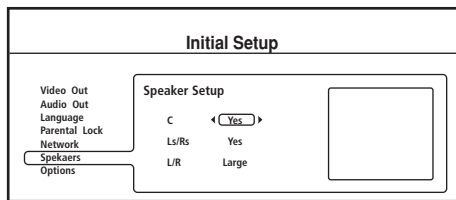
Speaker Setup

You only need to make this setting if you connected this player to your amplifier using the 5.1 channel analog outputs.

This setting does not affect any digital audio output.

Use the Speaker Setup screen to tell the player what kinds of speakers you have connected.

- 1 Press HOME MENU and select 'Initial Setup'.
- 2 Select 'Speakers'.
- 3 Select 'Speaker Setup', then 'Next Screen'.
- 4 Use the **↑/↓** buttons to select a speaker.



- 5 Use the **←/→** buttons to change the speaker setup.

Specify which speakers you have in your setup:

- **C (Center): Yes or No**
- **Ls / Rs (Surround): Yes or No**
- **L / R (Main): Small or Large**
(This setting is only applicable if the **C** and **Ls/Rs** speakers are present.)

- 6 Press ENTER to save the settings and exit the Speaker Setup screen.

Chapter 9

Additional information

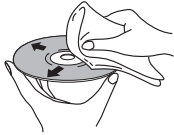
Taking care of your player and discs

Handling discs

When holding discs of any type, take care not to leave fingerprints, dirt or scratches on the disc surface. Hold the disc by its edge or by the center hole and edge.

Damaged or dirty discs can affect playback performance. Take care also not to scratch the label side of the disc. Although not as fragile as the recorded side, scratches can still result in a disc becoming unusable.

Should a disc become marked with fingerprints, dust, etc., clean using a soft, dry cloth, wiping the disc lightly from the center to the outside edge as shown in the diagram below.



Wipe lightly from the center of the disc using straight strokes.



Don't wipe the disc surface using circular strokes.

If necessary, use a cloth soaked in alcohol, or a commercially available DVD/BD cleaning kit to clean a disc more thoroughly. Never use benzine, thinner or other cleaning agents, including products designed for cleaning vinyl records.

Storing discs

Although BD and DVD discs are more durable than vinyl records, you should still take care to handle and store discs correctly. When you're not using a disc, return it to its case and store upright. Avoid leaving discs in excessively cold, humid, or hot environments (including under direct sunlight).

Don't 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.

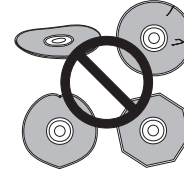


For more detailed care information see the instructions that come with discs.

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

Damaged and odd-shaped discs

Discs spin at high speed inside the player. If you can see that a disc is cracked, chipped, warped, or otherwise damaged, don't risk using it in your player—you could end up damaging it.



This player is designed for use with conventional, fully circular discs only. Use of shaped discs is not recommended for this product. Pioneer disclaims all liability arising in connection with the use of shaped discs.

Do not use any kind of adapter when playing 8 cm DVD discs. This size disc can be played in this player without an adapter; just use the smaller disc guide in the disc tray.

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 DVD players are commercially available, we advise against using them since some may damage the lens.

Problems with condensation

Condensation may form inside the player if it is brought into a warm room from outside, or if the temperature of the room rises quickly. Although the condensation won't damage the player, it may temporarily impair its performance. For this reason you should leave it to adjust to the warmer temperature for about an hour before switching on and using.

Hints on installation

We want you to enjoy using this product for years to come, so please bear in mind the following points when choosing a suitable location for it:

Do...

- Use in a well-ventilated room.
- Place on a solid, flat, level surface, such as a table, shelf or stereo rack.

Don't...

- Use in a place exposed to high temperatures or humidity, including near radiators and other heat-generating appliances.
- Place on a window sill or other place where the player will be exposed to direct sunlight.
- Use in an excessively dusty or damp environment.
- Place directly on top of an amplifier, or other component in your stereo system that becomes hot in use.
- Place the player on top of or immediately next to the television or monitor as you may experience interference.
- Use in a kitchen or other room where the player may be exposed to smoke or steam.
- Use on a thick rug or carpet, or cover with cloth—this may prevent proper cooling of the unit.
- Place on an unstable surface, or one that is not large enough to support all four of the unit's feet.

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 **⏻ STANDBY/ON** to switch the power to standby, checking that the power off indication in the 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.

Screen sizes and disc formats

BD-ROM and DVD-Video discs come in several different screen aspect ratios, ranging from TV programs, which are generally 4:3, to CinemaScope widescreen movies, with an aspect ratio of up to about 7:3.

Televisions, too, come in different aspect ratios; 'standard' 4:3 and 'widescreen' 16:9.

Widescreen TV users

If you have a widescreen TV, the *TV Aspect Ratio* setting (page 41) of this player should be set to **16:9 (Widescreen)**.

When you watch discs recorded in 4:3 format, you can use the TV controls to select how the picture is presented. Your TV may offer various zoom and stretch options; see the instructions that came with your TV for details.

Please note that some movie aspect ratios are wider than 16:9, so even though you have a widescreen TV, these discs will still play in a 'letter box' style with black bars at the top and bottom of the screen.

Standard TV users

If you have a standard TV, the *TV Aspect Ratio* setting (page 41) of this player should be set to **4:3 (Standard)**.

Setting up the remote to control your TV

1 Input the manufacturer code.

While holding down the **TV CONTROL** **⏻** button, input the two digit code from the table below that corresponds to the make of your TV.

For example, if you have a Pioneer TV, press and hold **TV CONTROL** **⏻**, then press **0, 0** on the remote control.

2 Confirm that the TV is responding to the programmed code.

On the remote, press the **TV CONTROL** **⏻** button. If the TV switches on (or into standby if it was on previously), then you have the correct code.

If nothing happens when you press the **TV CONTROL** **⏻** button, start again from step 1 using a different code.

- Some manufacturers have several codes. Try each one until you find the one that works.

Preset code list

Manufacturer	Preset Code
Aiwa	38
Funai	36
GE	11, 28
General	29
Goldstar	10, 23
Gradiente	30
Hitachi	06, 24, 25
JVC	13
Magnavox	12
Mitsubishi	09
NEC	37
Panasonic	08, 22
Philips	07, 45
Pioneer	00
RCA	01, 15, 16, 17, 18, 39, 40
Sanyo	14, 21, 43
Sharp	02, 19, 27, 41, 42
Sony	04
Toshiba	05, 26
Zenith	03, 20

Resetting the player

Use this procedure to reset all the player's settings to the factory default.

1 Make sure that the player is on.

2 Press and hold **■ STOP** and press **⏻ STANDBY/ON**.

The player turns off with all settings reset.

BD/DVD language code list

Language (Language code letter), **Language code**

Japanese (ja), 1001	Catalan (ca), 0301	Indonesian (in), 0914	Burmese (my), 1325	Serbian (sr), 1918
English (en), 0514	Corsican (co), 0315	Icelandic (is), 0919	Nauru (na), 1401	Siswati (ss), 1919
French (fr), 0618	Czech (cs), 0319	Hebrew (iw), 0923	Nepali (ne), 1405	Sesotho (st), 1920
German (de), 0405	Welsh (cy), 0325	Yiddish (ji), 1009	Norwegian (no), 1415	Sundanese (su), 1921
Italian (it), 0920	Danish (da), 0401	Javanese (jw), 1023	Occitan (oc), 1503	Swedish (sv), 1922
Spanish (es), 0519	Bhutani (dz), 0426	Georgian (ka), 1101	Oromo (om), 1513	Swahili (sw), 1923
Dutch (nl), 1412	Esperanto (eo), 0515	Kazakh (kk), 1111	Oriya (or), 1518	Tamil (ta), 2001
Russian (ru), 1821	Estonian (et), 0520	Greenlandic (kl), 1112	SPanjabi (pa), 1601	Telugu (te), 2005
Chinese (zh), 2608	Basque (eu), 0521	Cambodian (km), 1113	Polish (pl), 1612	Tajik (tg), 2007
Korean (ko), 1115	Persian (fa), 0601	Kannada (kn), 1114	Pashto, Pushto (ps), 1619	Thai (th), 2008
Greek (el), 0512	Finnish (fi), 0609	Kashmiri (ks), 1119	Portuguese (pt), 1620	Tigrinya (ti), 2009
Afar (aa), 0101	Fiji (fj), 0610	Kurdish (ku), 1121	Quechua (qu), 1721	Turkmen (tk), 2011
Abkhazian (ab), 0102	Faroese (fo), 0615	Kirghiz (ky), 1125	Rhaeto-Romance (rm), 1813	Tagalog (tl), 2012
Afrikaans (af), 0106	Frisian (fy), 0625	Latin (la), 1201	Kirundi (rn), 1814	Setswana (tn), 2014
Amharic (am), 0113	Irish (ga), 0701	Lingala (ln), 1214	Romanian (ro), 1815	Tonga (to), 2015
Arabic (ar), 0118	Scots-Gaelic (gd), 0704	Laothian (lo), 1215	Kinyarwanda (rw), 1823	Turkish (tr), 2018
Assamese (as), 0119	Galician (gl), 0712	Lithuanian (lt), 1220	Sanskrit (sa), 1901	Tsonga (ts), 2019
Aymara (ay), 0125	Guarani (gn), 0714	Latvian (lv), 1222	Sindhi (sd), 1904	Tatar (tt), 2020
Azerbaijani (az), 0126	Gujarati (gu), 0721	Malagasy (mg), 1307	Sangho (sg), 1907	Twi (tw), 2023
Bashkir (ba), 0201	Hausa (ha), 0801	Maori (mi), 1309	Serbo-Croatian (sh), 1908	Ukrainian (uk), 2111
Byelorussian (be), 0205	Hindi (hi), 0809	Macedonian (mk), 1311	Sinhalese (si), 1909	Urdu (ur), 2118
Bulgarian (bg), 0207	Croatian (hr), 0818	Malayalam (ml), 1312	lovak (sk), 1911	Uzbek (uz), 2126
Bihari (bh), 0208	Hungarian (hu), 0821	Mongolian (mn), 1314	Slovenian (sl), 1912	Vietnamese (vi), 2209
Bislama (bi), 0209	Armenian (hy), 0825	Moldavian (mo), 1315	Samoan (sm), 1913	Volapük (vo), 2215
Bengali (bn), 0214	Interlingua (ia), 0901	Marathi (mr), 1318	Shona (sn), 1914	Wolof (wo), 2315
Tibetan (bo), 0215	Interlingue (ie), 0905	Malay (ms), 1319	Somali (so), 1915	Xhosa (xh), 2408
Breton (br), 0218	Inupiak (ik), 0911	Maltese (mt), 1320	Albanian (sq), 1917	Yoruba (yo), 2515
				Zulu (zu), 2621

BD/DVD country/area code list

Country/Area, **Country/Area code**, **Country/Area code letter**

Argentina, 0118, ar	Finland, 0609, fi	Malaysia, 1325, my	Singapore, 1907, sg
Australia, 0121, au	France, 0618, fr	Mexico, 1324, mx	Spain, 0519, es
Austria, 0120, at	Germany, 0405, de	Netherlands, 1412, nl	Switzerland, 0308, ch
Belgium, 0205, be	Hong Kong, 0811, hk	New Zealand, 1426, nz	Sweden, 1905, se
Brazil, 0218, br	India, 0914, in	Norway, 1415, no	Taiwan, 2023, tw
Canada, 0301, ca	Indonesia, 0904, id	Pakistan, 1611, pk	Thailand, 2008, th
Chile, 0312, cl	Italy, 0920, it	Philippines, 1608, ph	United Kingdom, 0702, gb
China, 0314, cn	Japan, 1016, jp	Portugal, 1620, pt	United States of America, 2119, us
Denmark, 0411, dk	Korea, Republic of, 1118, kr	Russian Federation, 1821, ru	

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 after checking the items below, please contact customer services. In the US, call Toll Free (800) 421-1404. (Telephone lines are open Monday through Friday 6:00 AM to 4:30 PM (Pacific Time) and Saturday 8:00 AM to 4:30 PM (Pacific Time).) In Canada, call Local (905) 479-4411, or Long distance +1(877) 283-5901. (Telephone lines are open Monday through Friday 9:00 AM to 5:15 PM (EST).)

Playback

Problem	Remedy
The disc won't play or is automatically ejected after loading.	<ul style="list-style-type: none"> • Make sure the disc is free from dirt and dust and is not damaged (see <i>Taking care of your player and discs</i> on page 46). • Make sure the disc is loaded with the label side face-up and aligned properly in the disc tray guide. • Incompatible region: If the region on a BD-ROM or DVD-Video disc does not match the region on the player, the disc cannot be used (see <i>BD-ROM regions</i> and <i>DVD-Video regions</i> on page 10). • Condensation inside the player: Allow time for condensation to evaporate. Avoid using the player near an air-conditioning unit. • Make sure the disc is compatible with this player (see <i>Disc/content format playback compatibility</i> on page 8).
Picture freezes and the front panel and remote control buttons stop working.	<ul style="list-style-type: none"> • Press ■ (stop), then start playback again (▶(play)). • Press the front panel ⏻ STANDBY/ON button to switch the power off, then switch back on and restart playback. If the power fails to switch off, press and hold ⏻ STANDBY/ON for 20 seconds until the power switches off. Then switch on again by pressing ⏻ STANDBY/ON. • Unplug from the wall socket, then plug back in and switch on again by pressing ⏻ STANDBY/ON to switch the player on.
No picture/No color.	<ul style="list-style-type: none"> • Incorrect video connections: Check that connections are correct and that plugs are inserted fully. Also check the video cable for damage. • TV/monitor or AV amplifier settings are incorrect: Check the instruction manual of the connected equipment. • Depending on your display, some of the settings may result in the picture disappearing. In this case, press OUTPUT FORMAT repeatedly until the picture re-appears. (see <i>Changing the video output format</i> on page 14). • Some BD-ROM discs output video only over HDMI.
The video output is set to 720p/1080i/1080p, but the actual output is 480i or 480p.	<ul style="list-style-type: none"> • For copy-protection purposes, DVD-Video and some BD-ROM discs output 480i/480p over the component output.
Screen is stretched or aspect does not change.	<ul style="list-style-type: none"> • The <i>TV Aspect Ratio</i> or <i>4:3 Video Out</i> setting in the Initial Settings menu is incorrect. See <i>TV Aspect Ratio</i> and <i>4:3 Video Out</i> on page 41 for how to set these correctly for your TV/monitor. • When <i>Output Format</i> is set to 720p, 1080i or 1080p, video is output in 16:9 Widescreen format even if <i>TV Aspect Ratio</i> is set to 4:3 (Standard).
Picture disturbance during playback or dark image.	<ul style="list-style-type: none"> • This player is compatible with Macrovision System copy guard. Some discs include a copy prevention signal, and when this type of disc is played back, stripes etc., may appear on some sections of the picture depending on the TV. This is not a malfunction. • Due to the player's copy protection circuits, connection of this device through a VCR or an AV selector may cause picture problems. This is not a malfunction.
No audio, or audio is distorted.	<ul style="list-style-type: none"> • No audio is output during slow motion playback or when scanning contents. • Check your amplifier/receiver's settings (volume, input function, speaker settings, etc.). • Check that the disc is free from dust and dirt, and that it is not damaged (<i>Taking care of your player and discs</i> on page 46). • Check that all interconnects are firmly inserted. • Check that the plugs and terminals are free of dirt, oxide, etc. and clean if necessary. Also check the cable for damage. • Make sure the player's output is not connected to the amplifier's phono (turntable) inputs. • Check the <i>Audio Output Mode</i> on page 43. If this is set to <i>5.1 Channel</i>, output from the AUDIO OUT (2ch) jacks will be incorrect. • Check the <i>Speaker Setup</i> on page 45. • For copy-protection purposes, some BD-ROM discs only output audio over optical/coaxial and HDMI.
The analog audio is OK, but there appears to be no optical/coaxial digital audio signal.	<ul style="list-style-type: none"> • Check that the <i>Dolby Digital Out</i> and <i>DTS Out</i> settings (see <i>Audio Out</i> on page 42) are suitable for your amplifier/receiver—check the instruction manual that came with your amplifier/receiver (also check that the output settings on your amplifier/receiver are correct).

Problem	Remedy
Cannot play multi-channel audio.	<ul style="list-style-type: none"> • Check the audio options available from the disc menu. • Multi-channel 192 kHz audio is output in 2 channels. • Check that the <i>Dolby Digital Out</i> and <i>DTS Out</i> settings (see <i>Audio Out</i> on page 42) are suitable for your amplifier/receiver—check the instruction manual that came with your amplifier/receiver. • If you connected this player to your amplifier/receiver using the 5.1 channel analog outputs, make sure the <i>Audio Output Mode</i> on page 43 and <i>Speaker Setup</i> on page 45 are set correctly. • If you connected this player to your amplifier/receiver using HDMI, or the optical/coaxial digital outputs, make sure that the output settings on your amplifier/receiver are correct (refer to the instruction manual that came with your amplifier/receiver).
Noise is output when DTS audio is played.	<ul style="list-style-type: none"> • If this unit is connected to a non-DTS compatible amplifier or decoder using a digital audio cable, set <i>DTS Out</i> to DTS→PCM. If you do not do this, noise will be output when you play a DTS disc.
Cannot output 96 kHz or 192 kHz digital audio from optical/coaxial digital output.	<ul style="list-style-type: none"> • The player does not output digital audio from the optical/coaxial jacks at this sampling rate. The digital output is automatically downsampled.
Disc containing PC files won't play.	<ul style="list-style-type: none"> • Make sure the disc is compatible with this player (see <i>Disc/content format playback compatibility</i> on page 8). • This player is compatible with multi-border discs, but only plays the first border. • Check that the file complies to one of the supported formats, bit rates or profiles (see <i>File compatibility</i> on page 9). Also check that the file is not damaged. • If the message Cannot play this format is displayed when you try to play PC files, check the file formats. • This player cannot play DRM-protected content on DVD and DRM-protected titles appear in the Disc Navigator with a lock icon (🔒).
No picture or High Definition video output when watching a BD.	<ul style="list-style-type: none"> • For copy-protection purposes, composite, S-video and component video output may not possible. See <i>Connecting for HDMI output</i> on page 13 to connect using HDMI.

HDMI troubleshooting

Problem	Remedy
No HDMI video output. (A connected HDMI component doesn't work with this player.)	<ul style="list-style-type: none"> • This unit has been designed to be compliant with HDMI (High Definition Multimedia Interface). Depending on the component you have connected, unreliable signal transfers may result. • If you connect a DVI device to the HDMI output of this player, ensure that it is compliant with High Definition Content Protection (HDCP). • If the front panel HDMI indicator is unlit then: <ul style="list-style-type: none"> – Make sure that you've selected this player as the HDMI input in the settings for the component you're using. You may need to refer to the instruction manual of the component to do this. – Check that the HDMI cable is connected properly and that the cable isn't damaged. • If the front panel HDMI indicator is lit: <ul style="list-style-type: none"> – Depending on your display, some of the settings may result in the picture disappearing. In this case, press OUTPUT FORMAT repeatedly until the picture re-appears (see <i>Changing the video output format</i> on page 14). • Depending on the HDMI cable being used, 1080p output may not appear correctly.
Colors are too rich or too weak, or black is too deep or appears to 'float'.	<ul style="list-style-type: none"> • Use a different <i>HDMI Color Space</i> setting (see <i>HDMI Color Space</i> on page 41).
No HDMI audio output.	<ul style="list-style-type: none"> • If you have connected to an HDCP-compatible DVI component, there won't be any audio output from the HDMI terminal. Connect using the optical/coaxial digital outputs (or the analog outputs). • This player does not output multi-channel 192 kHz audio. Press AUDIO during playback to switch between the available audio streams.

Network troubleshooting

Problem	Remedy
Home Media Gallery is not available.	<ul style="list-style-type: none"> • LAN indicator is unlit: <ul style="list-style-type: none"> – Check the physical connections (hub, 100BASE-TX/10BASE-T or crossed cable and other cable quality when cabled directly to a PC). – If the player is connected to a network via a hub, make sure that the Ethernet (CAT-5 LAN) cable you're using is a 'standard' or 'straight through' type. – If the player is connected directly to a PC, make sure that the Ethernet (CAT-5 LAN) cable you're using is a 'crossed' or 'crossover' type. • LAN indicator is lit: <ul style="list-style-type: none"> – If this player's IP address is set automatically, make sure that the media server's address is also set automatically. If the IP address of the media server has been set manually, set the IP address of the player manually too (see also <i>Network</i> settings page 42). – Check the logical connections (IP address setup, DHCP, etc.). Confirm that the IP address is correct if acquired using DHCP or Auto-IP in the Network Config. screen that follows the Initial Setup menu (see <i>Network</i> settings page 42). – Confirm that the media server is on and not in standby or sleep mode. – Check the network and other settings on the media server. – Check that this player and the media server are on the same Local Area Network (LAN). – Check if the media server (Windows Media Connect or DLNA-compliant) is running. Restart if necessary. – Check if the media server is setup correctly for file sharing, if the target folder has been deleted or if one or more folders has become corrupted on the server. – Check if the PC is operating properly. Reboot the PC after confirming its specifications and setup.
A connected media server does not show up in the source list in the Home Media Gallery.	<ul style="list-style-type: none"> • Confirm that the media server is on and not in standby or sleep mode. • Check the network and other settings on the media server. • Check that this player and the media server are on the same Local Area Network (LAN). • Check if the media server (Windows Media Connect or DLNA-compliant) is running. Restart if necessary. • Check if the media server is setup correctly for file sharing, if the target folder has been deleted or if one or more folders has become corrupted on the server. • Check if the PC is operating properly. Reboot the PC after confirming its specifications and setup. • Check that there are playable files on the media server. • After adding a new media server, exit the Home Media Gallery then, after a few moments, re-enter it.
A media server shows up in the source list but is not available (a lock icon (🔒) appears).	<ul style="list-style-type: none"> • Check the media server setup. If a client is registered (authorized) manually, the setup procedure may have to be run again. An option "Not Allowed" may have been selected for connections. • Check that there are playable files on the media server. • After adding a new media server, exit the Home Media Gallery then, after a few moments, re-enter it.
Content different from last time appears on the network (missing items, etc.).	<ul style="list-style-type: none"> • If the player cannot connect to the same server as last time (because it is switched off, for example), the player will connect to another server on the network. To see content on a particular server, make sure it is running and then select it as the source in the Home Media Gallery (see page 34).
Cannot play or display.	<ul style="list-style-type: none"> • Check the physical connections (hub, 100BASE-TX/10BASE-T, or crossed cable and other cable quality when cabled directly to a PC). • Check if the file complies to the supported format, bit rate or profile (see page 9). Also check if the file is damaged. • If the message Cannot play this format is displayed when you try to play PC files, check the file formats. • It takes time to capture and display a large-sized image; during this time you may have to wait to operate the player. • This player cannot play DRM-protected content stored on a DLNA server (not Windows Media Connect server). In the Home Media Gallery DRM-protected titles appear with a lock icon (🔒) next to them. • Some files that comply with one of the supported formats may not play or be displayed. • Check if there are too many files on the server. • Check if the PC is operating properly. Reboot the PC after confirming its specification and setup.

Problem	Remedy
Image or sound is interrupted or distorted (block noise appears).	<ul style="list-style-type: none"> • Check the physical connections (hub, 100BASE-TX/10BASE-T, or crossed cable and other cable quality when cabled directly to a PC). It is strongly recommended to use 100BASE-TX for playback quality and display speed. • When connected by a wireless LAN, check if the bit rate is sufficient. • Check that the file complies with the supported format, bit rate or profile (see <i>File compatibility</i> on page 9). Also check if the file is damaged. • Some files that comply with one of the supported formats may not play or be displayed. • Check if the PC is operating properly. Reboot the PC after confirming its specification and setup.
Genre (movie), Playlist (music), Album (photo) or folder configuration differs from one server to another.	<ul style="list-style-type: none"> • The configuration may change depending on server type. This is not a malfunction.
An available server is selected but cannot be navigated.	<ul style="list-style-type: none"> • Check if the server is correctly set up for file sharing, if the target folder has been deleted, or if one or more folders have been corrupted on the server. • Check if there are too many files on the server.

Miscellaneous troubleshooting

Problem	Remedy
It is taking a long time for the unit to start up.	It can take up to one minute for the system to start up once you press the ⏻ STANDBY/ON button. This does not mean that the player is experiencing problems.
The power automatically switches off.	The Auto Power Off function switches the player into standby if no operation is performed for 30 minutes while the player is stopped or paused. See <i>Auto Power Off</i> on page 43.
The remote control doesn't seem to work.	<ul style="list-style-type: none"> • The CONTROL IN jack on the rear panel is connected: Point the remote control at the connected component to control this player. • The remote control is too far from the player, or the angle with the remote sensor is too wide: Use the remote within its operating range (see <i>Using the remote control</i> on page 8). • The batteries are exhausted: Put in new ones (see <i>Putting the batteries in the remote control</i> on page 8). • If you are using an external IR receiver, you may need to set the IR RECEIVER switch (see <i>Using an external IR receiver with this player</i> on page 16).
Settings are canceled.	<ul style="list-style-type: none"> • When the power is cut due to power failure or by unplugging the power cord during operation, settings will be canceled. See <i>Moving the player</i> on page 47 for proper shutdown instructions.

Glossary

Analog audio

An electrical signal that directly represents sound. Compare this to digital audio which can also be an electrical signal, but is an indirect representation of sound. See also *Digital audio*.

Aspect ratio

The width of a TV screen relative to its height. Conventional TVs are 4:3 (in other words, the screen is almost square); widescreen models are 16:9 (the screen is almost twice as wide as it is high).

BD-J

BD-J is the Java specification for BD-ROM, allowing content providers to put interactive material linked to specific titles on the disc.

Default Gateway

Default Gateway is a node on a computer network that serves as an access point to another network. A default gateway (such as a computer and router) is used to forward all traffic that is not addressed to a station within the local subnet.

DHCP (Dynamic Host Configuration Protocol) Server

A DHCP server is a server that allocates IP addresses to hosts (network devices). In most cases, a broadband router serves as a DHCP server in a home network.

Digital audio

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

DRM (Digital Rights Management)

DRM is one of several technologies that controls access to and use of digital data, such as music, movies and other copyrighted contents.

Dynamic range

The difference between the quietest and loudest sounds possible in an audio signal (without distorting or getting lost in noise). Dolby Digital and DTS soundtracks are capable of a very wide dynamic range, delivering dramatic cinema-like effects.

Ethernet

A frame-based computer networking technology for local area networks (LANs). This player supports 100BASE-TX and 10BASE-T.

File extension

A tag added to the end of a filename to indicate the type of file. For example, ".jpg" indicates an JPEG image file.

HDMI

HDMI (High-Definition Multimedia Interface) is a high-speed digital interface which has the capability to support standard or high-definition video plus standard to multi-channel surround-sound audio on a single digital connection.

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Interactive audio

Interactive audio is Linear PCM (LPCM) audio activated by a BD-ROM application and mixed with the primary audio. It is typically used to provide dynamic sounds associated with interactive applications, such as button sounds.

Interlaced video

A method of displaying a picture in which odd-numbered lines are updated in one pass, then even-numbered lines updated in the next. See also *Progressive scan video*.

IP (Internet Protocol) address

A unique number that devices use in order to identify and communicate with each other on a network utilizing the Internet Protocol standard, such as '192.168.0.1'. No duplicate numbers are allowed in the network.

LAN cable

A cable that has an 8-pin modular plug on each end and is different from a telephone plug which has 4 pins. A straight cable is used when connecting this player to a home network via a hub. A cross-over cable is used when connecting directly to a PC. Use category 5 (CAT-5) LAN cables.

MAC (Media Access Control) address

An address attached to the port of any device. The MAC address cannot be changed.

PCM (Pulse Code Modulation)

A common system of encoding digital audio. Excellent quality, but requires a lot of data compared to formats such as Dolby Digital and MPEG audio. For compatibility with digital audio recorders and AV amplifiers with digital inputs, this unit can convert Dolby Digital, DTS and MPEG audio to PCM. See also *Digital audio*.

Pop-up menu (BD only)

A context-sensitive menu that can be used without interrupting playback of a BD.

Progressive scan video

Also called non-interlaced video, this method of displaying a picture updates all the lines in one pass, resulting in a more stable, flicker-free image than interlaced video (for a given scanning rate). See also *Interlaced video*.

Regions (DVD-Video and BD-ROM)

These associate discs and players with particular areas of the world. This unit will only play discs that have a compatible region code (i.e., the same code as your player). You can find the region code of your unit by looking on the rear panel. Some discs are compatible with more than one region (or all regions).

Note that the region systems for DVD and BD are not the same.

Sampling frequency

The rate at which sound is measured to be turned into digital audio data. The higher the rate, the better the sound quality, but the more digital information is generated. For example, a sampling frequency of 44.1 kHz means 44 100 samples (measurements) per second. See also *Digital audio*.

Subnet mask

The IP address is divided into the network address part and the host address part. The subnet mask is expressed as '255.255.255.0'. In most cases, the subnet mask is automatically assigned by the DHCP server.

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Specifications

General

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Power requirements	AC 120 V, 60 Hz
Power consumption	.39 W
Power consumption (standby)	0.5 W
Weight	6.3 kg (13 lb 15 oz)
Dimensions	.420 mm (W) x 94 mm (H) x 359 mm (D) (16 ⁹ / ₁₆ in. (W) x 4 ⁵ / ₈ in. (H) x 14 ³ / ₁₆ in. (D))
Operating temperature	+5 °C to +35 °C
Operating humidity	5 % to 85 % (no condensation)

HDMI output

HDMI output	19 pin
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Component Video output (Y, Pb, Pr)

Output level	Y: 1.0 Vp-p (75 Ω) Pb, Pr: 0.7 Vp-p (75 Ω)
Jacks	RCA jacks

S-Video output

Y (luminance) - Output level	1 Vp-p (75 Ω)
C (color) - Output level	286 mVp-p (75 Ω)
Jack	S-Video jack

Video output

Output level	1 Vp-p (75 Ω)
Jack	RCA jack

Audio output (1 stereo pair)

Output level	During audio output 200 mVrms (1 kHz, -20 dB)
Number of channels	2
Jacks	RCA jack

Audio output (multi-channel/L, R, C, SW, LS, RS)

Output level	During audio output 200 mVrms (1 kHz, -20 dB)
Number of channels	6
Jacks	RCA jack

Audio characteristics

Frequency response	4 Hz to 22 kHz
S/N ratio	114 dB
Dynamic range	102.5 dB
Total harmonic distortion	0.001 %
Wow and flutter	Limit of measurement (0.001 % W. PEAK) or lower

Digital output

Optical digital output	Optical digital jack
Coaxial digital output	RCA jack

Other terminals

LAN terminal	Ethernet jack 10 BASE-T/100 BASE-TX
Control in	Minijack (3.5 ø)
IR in	Minijack (3.5 ø)

Accessories

Remote control	1
AA/R6P dry cell batteries	2
Stereo audio cable (red/white plugs)	1
Video cable (yellow plugs)	1
Power cable	1
Warranty card	1
These operating instructions	

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8 0 0 - 4 2 1 - 1 4 0 4

Please do not ship your product to Pioneer without first calling the Customer Support Division at the above listed number for assistance.

Pioneer Electronics (USA) Inc.
Customer Support Division
P.O. BOX 1760, Long Beach,
CA 90801-1760, U.S.A.

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300 Allstate Parkway, Markham, Ontario L3R OP2
1(877)283-5901

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