## Pioneer sound.vision.soul

# DVD Player DV-45A ELITE













#### **IMPORTANT**



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

#### CALITION RISK OF ELECTRIC SHOCK DO NOT OPEN

#### CAUTION:

TO PREVENIT THE RISK OF ELECTRIC SHOCK DO NOT REMOVE COVER (ORBACK), NO USER-SERVICEABLE PARTS INSIDE REFER SERVICING TO OUALIFIED SERVICE



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.

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## **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

**HFED 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** — Unplug this product from the wall outlet before cleaning. The product should be cleaned only with a polishing cloth or a soft dry cloth. Never clean with furniture wax, benzine. 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

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 unused 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

**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:

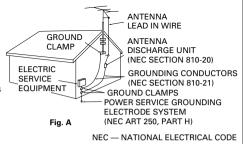
- When the power-supply cord or plug is damaged.
- If liquid has been spilled, or objects have fallen into the product.
- If the product has been exposed to rain or water
- If the product does not operate normally by following the operating instructions. Adjust only those controls that are covered by 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.



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

H001 En

## [For U.S. model] IMPORTANT NOTICE

The serial number for this equipment is located on the rear panel. Please write this serial number on your enclosed warranty card and keep it in a secure area. This is for your security. HOGG\_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.
   H010\_En

#### Information to User

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

#### 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.

#### CAUTION

- Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.
- The use of optical instruments with this product will increase eye hazard.

  H013\_En

#### [For Canadian model]

CAUTION: TO PREVENT ELECTRIC SHOCK, DO NOT USE THIS (POLARIZED) PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.

ATTENTION: POUR PREVENIR LES CHOCS
ELECTRIQUES NE PAS UTILISER CETTE FICHE
POLARISEE AVEC UN PROLONGATEUR UNE
PRISE DE COURANT OU UNE AUTRE SORTIE
DE COURANT, SAUF SI LES LAMES PEUVENT
ETRE INSEREES A FOND SANS EN LAISSER
AUCUNE PARTIE A DECOUVERT.
H007A 2L

#### [For Canadian model]

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

#### [Pour le modèle Canadien]

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

H009 2L

#### [For U.S. model]



ENERGY STAR® and ENERGY STAR certification mark are registered US marks.

K001B 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

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.

This product includes FontAvenue® fonts licenced by NEC corporation. FontAvenue is a registered trademark of NEC Corporation.





### Dear Customer:

Selecting fine audio equipment such as the unit vou've just purchased is only the start of vour musical enjoyment. Now it's time to consider how you can maximize the fun and excitement your equipment offers. This manufacturer and the Electronic Industries Association's Consumer Electronics Group want vou to get the most out of your equipment by playing it at a safe level. One that lets the sound come through loud and clear without annoying blaring or distortionand, most importantly, without affecting your sensitive hearing.

Sound can be deceiving. Over time your hearing "comfort level" adapts to higher volumes of sound. So what sounds "normal" can actually be loud and harmful to your hearing. Guard against this by setting your equipment at a safe level BEFORE your hearing adapts.

#### To establish a safe level:

- Start your volume control at a low setting.
- Slowly increase the sound until you can hear it comfortably and clearly, and without distortion.

#### Once you have established a comfortable sound level:

Set the dial and leave it there.

Taking a minute to do this now will help to prevent hearing damage or loss in the future. After all, we want you listening for a lifetime.

#### We Want You Listening For **A** Lifetime

Used wisely, your new sound equipment will provide a lifetime of fun and enjoyment. Since hearing damage from loud noise is often undetectable until it is too late, this manufacturer and the Electronic Industries Association's Consumer Electronics Group recommend you avoid prolonged exposure to excessive noise. This list of sound levels is included for your protection.

Level	Example
30	Quiet library, soft whispers
40	Living room, refrigerator, bedroom
	away from traffic
50	Light traffic, normal conversation,
	quiet office
60	Air conditioner at 20 feet, sewing
	machine
70	Vacuum cleaner, hair dryer, noisy
	restaurant
80	Average city traffic garbage

#### THE FOLLOWING NOISES CAN BE DANGEROUS UNDER CONSTANT **EXPOSURE**

disposals, alarm clock at two feet.

90	Subway, motorcycle, truck traffic,
	lawn mower
100	Garbage truck, chain saw, pneumatic
	drill
120	Rock band concert in front of
	speakers, thunderclap

Rocket launching pad Information courtesy of the Deafness Research Foundation.

Gunshot blast, jet plane



140

180

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#### **Contents**

# 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.* 

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#### **Features**

#### **DVD-Audio and SACD compatible**

Experience the super high-quality audio performance of DVD-Audio and Super Audio CD (SACD).

The on-board 24-bit/192kHz DAC means that this player is fully compatible with high sampling-rate discs, capable of delivering exceptional sound quality in terms of dynamic range, low-level resolution and high-frequency detail.

# Built-in Dolby\*1 Digital and DTS\*2 decoding with multichannel outputs

Logos: DIGITAL



This player features multichannel analog outputs for connection to an AV amplifier to give you stunning surround sound from Dolby Digital, DTS and multichannel DVD-Audio discs.

#### TruSurround\*3 and Virtual Dolby Digital

Logo: **TruSurround** by SRS(●)

TruSurround/Virtual Dolby Digital creates a realistic surround-sound effect from any Dolby Digital source using just two speakers (see **page 48**).

#### PureCinema progressive scan

When connected to a progressive scancompatible TV or monitor using the component video outputs, you can enjoy extremely stable, flicker free images, with the same frame refresh rate as the original movie (see page 50).

#### Super Fine Focus digital filter

This improves the quality of the video output by reducing video noise and increasing the horizontal resolution to 540 lines (see **page 51**).

#### MP3 compatibility

This player is compatible with CD-R, CD-RW and CD-ROM discs that contain MP3 audio tracks (see pages 10-11).

#### **Graphical on-screen displays**

Setting up and using your DVD player is made very easy using the graphical onscreen displays.

#### **Energy saving design**

This unit is designed to use 0.3 W of power when in standby mode.

- \*1 Manufactured under license from Dolby Laboratories. "Dolby" and the double-D symbol are trademarks of Dolby Laboratories.
- \*2 "DTS" and "DTS Digital Surround" are registered trademarks of Digital Theater Systems, Inc.
- \*3 TruSurround and the ( ) \*symbol are trademarks of SRS Labs, Inc. TruSurround technology is incorporated under license from SRS Labs, Inc.

#### What's in the box

Please confirm that the following accessories are in the box when you open it.

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

#### Putting the batteries in the remote control

Open the battery compartment cover on the back of the remote control.



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



3 Close the cover.





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

- Don't mix new and old hatteries together.
- · Don't use different kinds of battery 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.

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#### Using the remote control

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 ft. (7 meters)
- 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

#### **Disc / Content Format Play**back Compatibility

#### **General Disc Compatibility**

 This player was designed and engineered to be compatible with software containing one or more of the following logos.







DVD-Audio DVD-Video

DVD-R

DVD-RW









Video CD Audio CD

CD-R

CD-RW



Super Audio CD

· Other formats, including but not limited to the following, are not playable in this player:

#### Photo CD / DVD-RAM / DVD-ROM / CD-ROM

(except those that contain MP3 files formatted as specified in the "Compressed Audio Compatibility" section)

• DVD-R/RW and CD-R/RW discs (Audio CDs and Video CDs) recorded using a DVD Recorder, CD Recorder or Personal Computer may not be playable on this machine. This may be caused by a number of possibilities, including but not limited to: the type of disc used; the type of recording; or damage, dirt or condensation on either the disc or the player's pick-up lens.

Special note about particular formats or software follows below:

#### CD-R/RW Compatibility

- This unit will play CD-R and CD-RW discs recorded in CD Audio, Video CD. or MP3 audio formatting. However, any other content may cause the disc not to play, or create noise/distortion in the output
- This unit cannot record CD-R or CD-RW discs
- Un-finalized CD-R/RW discs recorded in CD Audio can be played, but not all Table of Contents (playing time, etc..) will be displayed.

#### **DVD-R/RW Compatibility**

- This unit will play DVD-R/RW discs that were recorded using the DVD Video format
- This unit will play DVD-RW discs that were recorded using the Video Recording format.
- This unit cannot record DVD-R/RW discs
- Un-finalized DVD-R/RW discs cannot be played in this player.

#### **Compressed Audio Compatibility**

- This unit will play compressed audio files formatted in the MPEG-1 Audio Laver 3 format (MP3) with a 44.1 or 48kHz fixed bit rate. Incompatible files will not play and "UNPLAYABLE" will be displayed on the unit.
- Variable Bit-Rate (VBR) files are playable, but playing time may not be shown correctly.
- The CD-ROM used to compile your MP3 files must be ISO 9660 Level 2 compli-
- CD physical format: Mode1, Mode2 XA Form1.
- This player only plays tracks that are named with the file extension ".mp3" or ".MP3".

#### **Refore You Start**

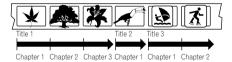
- This player is compatible with multisession discs, but only plays sessions that are closed
- Use CD-R or CD-RW media for recording your MP3 files.
- This player can recognize a maximum of 250 folders or 250 tracks. Discs containing more than 250 folders or 250 tracks will play, but only the first 250 folders / tracks.
- Folder and track names (excluding the ".mp3" extension) are displayed.
- There are many different recording bitrates available to encode your MP3 files. This unit was designed to be compatible with all of them. Audio encoded at 128Kbps should sound close to regular CD Audio quality. This player will play lower bit-rate MP3 tracks, but please note that the sound quality becomes noticeably worse at lower bit-rates.

#### **PC Created Disc Compatibility**

- If you record a disc using a Personal Computer, even if it is recorded in a "compatible format" as listed above, there will be cases in which the disc may not be playable in this machine due to the setting of the application software used to create the disc. In these particular incidences, check with the software publisher for more detailed information.
- DVD-R/RW and CD-R/RW software disc boxes also have additional compatibility information.

#### Titles, chapters, Groups and tracks

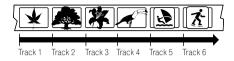
DVD-Video discs are generally divided into one or more titles. Titles may be further subdivided into chapters.



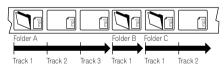
DVD-Audio discs are divided into one or more groups that can each contain a number of tracks.



CDs, SACDs and Video CD are divided into tracks.



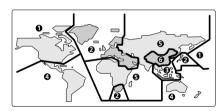
CD-ROMs containing MP3 files are divided into folders and tracks. Folders may also contain further subfolders.



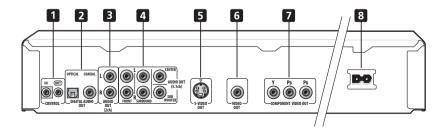
#### **DVD-Video regions**

All DVD-Video discs carry a region mark on the case somewhere that indicates which region(s) of the world the disc is compatible with. Your DVD 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.



#### Rear panel



When connecting this player up to your TV, AV receiver or other components, make sure that all components are switched off and unplugged.

#### 1 CONTROL IN / OUT

For passing remote control signals to other Pioneer components (**page 17**).

## 2 DIGITAL AUDIO OUT – OPTICAL / COAXIAL

Digital audio outputs for connection to a PCM, Dolby Digital, DTS and/or MPEG-compatible AV receiver (page 16).

#### 3 AUDIO OUT (2ch)

Two channel analog audio outputs for connection to your TV, AV receiver or stereo system (pages 13, 15, 16).

#### 4 AUDIO OUT (5.1ch)

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

#### 5 S (S-Video output)

S-Video output(s) that you can use instead of the video output described in **6** below (**page 14**).

#### 6 VIDEO OUT

Standard video output(s) that you can connect to your TV or AV receiver using the supplied audio/video cable (pages 13, 15, 16).

#### 7 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. Be careful to match the colors of the jacks and cables for correct connection (page 14).

#### 8 ACIN

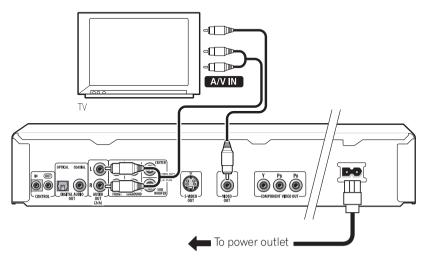
Connect the supplied power cord here, then plug into a power outlet.



#### Tip

- You may find it useful to have the manuals supplied with your other components handy when connecting this player.
- If you come across any unfamiliar terms in this section of the manual, take a look at the *Glossary* starting on **page 73**.

#### **Easy connections**



The setup described here is a basic setup that allows you to play discs using just the cables supplied with the player. In this setup, stereo audio is played through your TV.



#### **Important**

• This player is equipped with copy protection technology. Do not connect this player to your TV via a VCR using AV cables, as the picture from this player will not appear properly on your TV. (This player may also not be compatible with some combination TV/VCRs for the same reason; refer to the manufacturer for more information.)

# 1 Connect the VIDEO OUT and AUDIO OUT (2ch) jacks to a set of A/V inputs on your TV.

Use the supplied red/white stereo audio and yellow video cable. Make sure you match up the left and right audio outputs with their corresponding inputs for correct stereo sound.

See the next page if you want to use an S-Video or component or a connection.

 If you need another pair of stereo outputs (and don't need to use the multichannel analog outputs), you can use the AUDIO OUT (5.1ch) FRONT L / R jacks (page 15).

# 2 Connect the supplied AC power cord to the AC IN inlet, then plug into a power outlet.



#### Important

- Before unplugging the player from the power outlet, make sure you first switch it into standby using either the front panel **Ö STANDBY/ON** button, or the remote control, and wait of the **-OFF**message to disappear from the player's display.
- For the above reasons, do not plug this player into a switched power supply found on some amplifiers and AV receivers.

# Using other types of video output

This player has standard (composite), S-Video and component video outputs. The main difference between them is the quality of the picture.

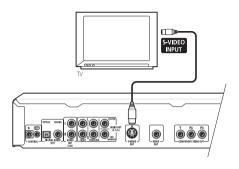
S-Video delivers a better picture than standard composite video, while component video gives better picture quality still. The variety of outputs also gives you the flexibility of connecting your particular equipment using the best connection type available.

# 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 OUTPUT 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.



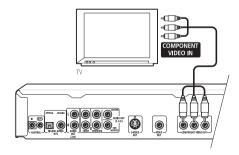


 If you connect both S-video jacks, but one of the connected components is not S1/S2 compatible, the automatic aspect ratio switching will not work with either connected component.

# 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).

1 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.



#### **Connecting Up**

# Connecting for multichannel surround sound

You can connect this player to your AV receiver using the multichannel analog outputs or one of the digital outputs.

In addition to these connections, you should also connect the 2 channel analog outputs for compatibility with all discs.

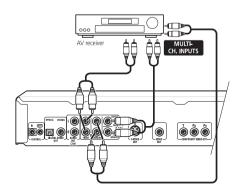
You'll probably also want to connect a video output to your AV receiver. You can use any of the video outputs available on this player (the illustration shows a standard (composite) connection).

# Connecting using the multichannel analog outputs

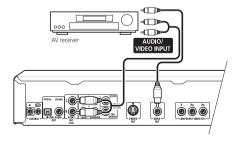
If your AV receiver has 5.1 channel analog inputs, we recommend connecting this player to it using the multichannel analog outputs. Doing this will ensure that you can enjoy all kinds of disc, including Dolby Digital and DTS DVD-Video discs, as well as high sampling rate and multichannel DVD-Audio and SACD discs.

1 Connect the MULTICHANNEL AUDIO outputs on this player to the multi-channel audio inputs on your AV receiver.

It's convenient to use three stereo audio cables; one for the **FRONT**, one for the **SURROUND** and one for the **CENTER** and **SUBWOOFER** channels.



2 Connect the analog AUDIO OUT L/R and VIDEO OUTPUT jacks on this player to a set of analog audio and video inputs on your AV receiver.



The diagram shows standard video connections, but you can alternatively use the S-Video or component video connections if they're available.

3 Connect the AV receiver's video output to a video input on your TV.

#### **Connecting Up**



#### Tip

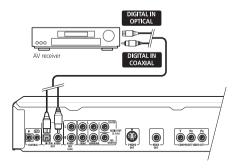
 You usually have to connect the same kind of video cable between your DVD player and AV receiver, and between your AV receiver and TV.

#### Connecting using a digital output

You can also connect this player to your AV receiver using one of the digital outputs. There are both coaxial and optical digital jacks; use whichever is convenient.

We recommend also connecting this player to your AV receiver using a stereo analog connection.

# 1 Connect one of DIGITAL OUT jacks on this player to a digital input on your AV receiver.



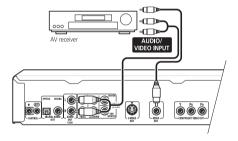
This enables you to listen to multichannel surround sound.

For an optical connection, use an optical cable (not supplied) to connect the **OPTICAL DIGITAL OUT** jack to an optical input on your AV receiver.

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

For a coaxial connection, use a coaxial cable (similar to the supplied video cable) to connect the **COAXIAL DIGITAL OUT** jack to a coaxial input on your AV receiver.

#### 2 Connect the analog AUDIO OUT L/R and VIDEO OUTPUT jacks on this player to a set of analog audio and video inputs on your AV receiver.



The diagram shows standard video connections, but you can alternatively use the S-Video or component video connections if they're available.

## 3 Connect the AV receiver's video output to a video input on your TV.



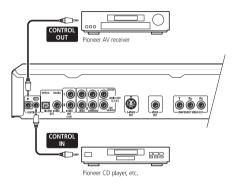
#### Tip

 You usually have to connect the same kind of video cable between your DVD player and AV receiver, and between your AV receiver and TV.

# Controlling this player from another Pioneer component

This player has SR jacks which allow you to use the remote sensor on one Pioneer component to control another.

Use a mini-jack plug to connect the **CONTROL OUT** of one component to the **CONTROL IN** of another. In this way you can daisy-chain several components together.





 My TV doesn't have any inputs to connect the DVD player. How can I watch DVDs?

Unfortunately, if your TV has no inputs you can't use this player with it.

 My VCR is already connected to my TV, so there aren't any spare inputs. What should I do?

If all your TV's inputs are already in use, you can buy a video input selector from an electronics store, which effectively gives you more inputs.

• My TV only has one input for the sound. What should I plug it into?

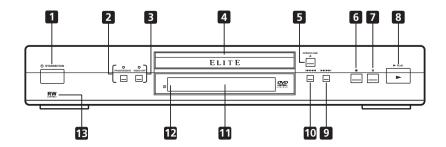
If you don't mind mono sound, you can buy a stereo RCA-to-mono RCA cable from an electronics store. Connect the stereo end to this player and the mono end to your TV.

If you want stereo sound, connect this player to your amplifier or stereo system using a stereo audio cable.

 I connected the DVD player to my AV receiver, and although the sound is fine, there's no picture. What did I do wrong?

Make sure that the type of video connection from the DVD player to your AV receiver is the same as that from the receiver to your TV. Most AV receivers won't convert from one kind of connection to another.

#### **Front panel**



#### 1 & STANDBY/ON

Press to switch the player on or into standby

#### 2 PROGRESSIVE button/indicator

Press to switch the progressive video output mode between progressive and interlace. The indicator lights in progressive scan mode. See **page 19** for more information.

#### 3 VIDEO OFF button/indicator

Press to switch the video output on/off. The indicator lights when the video output is switched off (when listening to a DVD-Audio disc, for example)

#### 4 Disc tray

#### 5 ▲ OPEN/CLOSE

Press to open or close the disc tray

#### 6 ■

Press to stop the disc (you can resume playback by pressing ► (play))

#### 7 II

Press to pause playback. Press again to restart

#### 8 🕨

Press to start or resume playback

#### 9 ▶▶ ▶▶

- Press and hold for fast forward scanning
- · Press to jump to the next chapter or track

#### 10 |◀◀ ◀◀

- · Press and hold for fast reverse scanning
- Press to jump back to the beginning of the current chapter or track, then to previous chapters/tracks

#### 11 Display

See page 20 for a description of the display

#### 12 Remote control sensor

The remote control has a range of up to about 23ft. (7m)

#### 13 RW

This mark indicates compatibility with DVD-RW discs recorded on a DVD recorder in Video Recording mode.

#### **Controls and Displays**

#### About progressive scan video

Compared to interlace video, progressive scan video effectively doubles the scanning rate of the picture, resulting in a very stable, flicker-free image.

Progressive scan video is available only from the component video output. Use the **PROGRESSIVE** button on the front panel to switch the component video output between interlace and progressive. With a DVD-Video disc you can do this during playback, or when the disc is stopped. For other types of disc, the player must be stopped.



#### Important

If you connect a TV that is not compatible with a progressive scan signal and switch the player to progressive, you will not be able to see any picture at all. In this case, press the PROGRESSIVE button on the front panel to switch back to interlace (the PROGRESSIVE indicator should be unlit).



#### Note

- When set to progressive, there is no video output from the VIDEO and S-VIDEO jacks. If you want to display video on more than one monitor simultaneously, make sure that the video output is set to interlace.
- Some TVs display 4:3 material incorrectly in progressive scan mode. This player has an Auto Progressive setting to correct this problem. See page 55 for more information.
- You can't switch the video output when an OSD is on-screen.
- The picture on some TVs may momentarily break up when you switch the video output of this player.

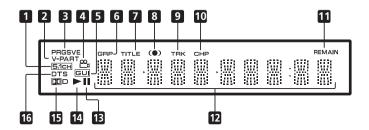
## Compatibility of this unit with progressive-scan TVs.

This player is compatible with progressive video Macro Vision System Copy Guard.

CONSUMERS SHOULD NOTE THAT NOT ALL HIGH DEFINITION TELEVISION SETS ARE FULLY COMPATIBLE WITH THIS PRODUCT AND MAY CAUSE ARTIFACTS TO BE DISPLAYED IN THE PICTURE. IN CASE OF 525 PROGRESSIVE SCAN PICTURE PROBLEMS, IT IS RECOMMENDED THAT THE USER SWITCH THE CONNECTION TO THE "STANDARD DEFINITION" OUTPUT. IF THERE ARE QUESTIONS REGARDING OUR TV SET COMPATIBILITY WITH THIS MODEL 525p DVD PLAYER, PLEASE CONTACT OUR CUSTOMER SERVICE CENTER.

 This player is compatible with the following Pioneer displays and monitors: PDP-5030HD, PRO-1000HD, PRO-800HD, PDP-4330HD, PRO-720HD, PRO-620HD, PRO-520HD, SD-643HDS, SD-533HDS.

#### **Display**



#### 1 5.1CH

Lights when analog 5.1 channel output is selected (**page 64**)

#### 2 V-PART

Lights when playing a video part of a DVD disc

#### 3 PRGSVE

Lights when the video output is progressive scan (pages 18, 19)

#### 4 🖺

Lights during multi-angle scenes on a DVD disc (page 45)

#### 5 GUI (Graphical User Interface)

Lights when a menu is displayed on-screen

#### 6 GRP

Indicates that the character display is showing a DVD-Audio group number

#### 7 TITLE

Indicates that the character display is showing a DVD-Video title number

#### 8

Lights when DD V/TruSurround is active (page 48)

#### 9 TRK

Indicates that the character display is showing a track number

#### 10 CHP

Indicates that the character display is showing a DVD chapter number

#### 11 REMAIN

Lights when the character display is showing the time or number of tracks/titles/chapters remaining

#### 12 Character display

#### 13 II

Lights when a disc is paused

#### 14 ▶

Lights when a disc is playing

#### 15 DOD

Lights when a Dolby Digital soundtrack is playing

#### 16 DTS

Lights when a DTS soundtrack is playing

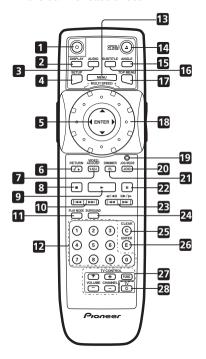
#### **Controls and Displays**

#### Remote control



#### Tip

• Buttons 6 to 9 and 20 to 22 glow slightly in the dark for ease of use.



#### 1 <sup>₺</sup> (STANDBY/ON)

Press to switch the player on or into standby

#### 2 DISPLAY

Press to display information about the disc playing (page 46)

#### 3 AUDIO

Press to select the audio channel or language (pages 44-45)

#### 4 SETUP

Press to display (or exit) the on-screen display

#### 5 ENTER & Joystick

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

#### 6 🏡 (RETURN)

Press to return to a previous menu screen

#### 7 V.ADJ (VIDEO ADJUST)

Press to display the Video Adjust menu (pages 51–52)

#### 8

Press to stop the disc (you can resume playback by pressing ► (play))

#### 9 ▶

Press to start or resume playback

#### 10 |◀◀ ▶▶|

Press to jump to the start of the previous / next chapter / track

#### 11 PLAY MODE

Press to display the Play Mode menu (pages 37–43) (You can also get to the Play Mode menu by pressing **SETUP** and selecting **Play Mode**)

#### 12 Number buttons

#### 13 MENU

Press to display a DVD disc menu, or the Disc Navigator if a DVD-RW, CD, Video CD or MP3 disc is loaded

#### 14 ▲ OPEN/CLOSE

Press to open or close the disc tray

#### 15 ANGLE

Press to change the camera angle during DVD multi-angle scene playback (**page 45**)

#### 16 SUBTITLE

Press to select a subtitle display (page 44)

#### 17 TOP MENU

Press to display the top menu of a DVD disc

#### **Controls and Displays**

#### 18 MULTI DIAL

Use for scanning and slow motion control (page 35)

#### 19 Jog indicator

Lights when multi dial is in jog mode (**page 35**)

#### 20 JOG (JOG MODE)

Press to put switch jog mode on/off. When on, use the **MULTI DIAL** to advance or reverse frames (**page 35**)

#### 21 FL (DIMMER)

Press to change the display brightness

#### 22 II

Press to pause playback; press again to restart

#### 23 ◀◀ and ◀I/◀II / ▶▶ and II▶/I▶

Use for reverse / forward slow motion playback, frame reverse / advance and reverse / forward scanning. See **page 36** 

#### 24 SURROUND

Press to activate/switch off DDV/TruSurround. See **page 48** 

#### 25 CLEAR

Press to clear a numeric entry

#### 26 ENTER

Press to select an option or execute a command

## 27 TV CONTROL buttons VOLUME

Use to adjust the volume

#### **CHANNEL**

Use to select TV channel

#### **FUNC**

Press FUNC to select the TV for remote control operation

#### 28 **め TV**

Press **b** TV to turn the TV's power on or put in to standby

# Setting up the Remote Control to TV

This most be set to use buttons 27 and 28.

#### 1. Input the Manufacturer code.

While holding down the **CLEAR** button, input the two digit code from the table next page that corresponds to the make of your TV.

For example, If you have a Pioneer TV, press and hold **CLEAR**, then press **0**, **0** on the remote control

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

On the remote, press the **b TV** 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** 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

00, PIONEER1 01, RCA1 02, SHARP3

**03**, ZENITH1 **04**. SONY

05, TOSHIBA1

06, HITACHI1 07. PHILIPS

**08**, PANASONIC1 **09**. MITSUBISHI

**10**, GOLDSTAR1

**11**, GE1

12, MAGNAVOX1

**13**, JVC1

**14**, SANYO2 **15**. RCA2

**16**, RCA3

17, RCA4

**18**. RCA5

**19**, SHARP1

**20**, ZENITH12 **21**, SANYO1

22, PANASONIC2 23. GOLDSTAR2

**24**, HITACHI2

**25**, HITACHI3 **26**, TOSHIBA2

**27**, SHARP2 **28**. GE2

29, MAGNAVOX2

**30**, TOSHIBA3 **31**, HITACHI4

**32**, JVC2 **33**, FUJITSU

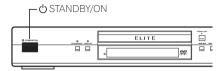
**33**, FUJITSU **34**, PIONEER2

35, GRANDIENTE

#### **Switching on**

After making sure that everything is connected properly and that the player is plugged in, press **b STANDBY/ON** on the front panel, or on the remote control to switch the player on.

Also, switch on your TV and make sure that it is set to the input you connected the DVD player to.





- My DVD player switches on but there is nothing displayed on my TV.
  - Make sure that the TV is set to the correct video input (not a TV channel). For example, if you connected this player to the **VIDEO 1** inputs on your TV, switch your TV to **VIDEO 1**.
- If you connected this player to an AV receiver, make sure that the receiver is switched on and set to the correct input.

#### Note

- You can also use the ▲ OPEN/CLOSE button to switch on the player and open the disc tray at the same time.
- This player features a screen saver.
   If the player is stopped or paused and no button is pressed for five minutes, the screen saver starts.

#### Let's Get Started

When you switch on the player for the first time, you should see a welcome screen displayed on your TV. From here you can set up the player to work with the kind of TV you have, then either use the Setup Navigator to make more settings, or jump right in and start playing some discs.

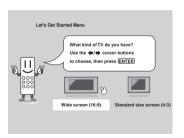
Before continuing, make sure that you've loaded the batteries in the remote control.



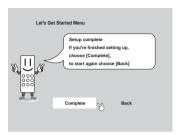
1 Press ENTER to move on to the next screen.



2 Use the Joystick (left/right) to select either 'Wide screen (16:9)' or 'Standard size screen (4:3)' according to the kind of TV you have, then press ENTER.



3 Press ENTER again to finish setting up.



 Select Back then press ENTER if you want to go back and change the setting you just made.

#### Using the on-screen displays

For ease of use, 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, such as program play, 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.



#### Important

 Throughout this manual, 'Select' means use the Joystick to highlight an item onscreen, then press ENTER.



Button	What it does
SETUP	Display/exit the on-screen display
(Joystick)	Changes the highlighted menu item
ENTER	Selects the highlighted menu item (both <b>ENTER</b> buttons work in exactly the same way)
ে (RETURN)	Returns to the previous menu without saving changes



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

# Setting up with the Setup Navigator

Using the Setup Navigator you can make a number of other initial settings for this player. We recommend using the Setup Navigator, especially if you connected this player to an AV receiver for playing surround sound. To answer some of the questions about digital audio formats you may need to look at the instructions that came with your AV receiver.

#### 1 If a disc is playing, press ■ (stop).

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

#### 2 Press SETUP.

The on-screen display (OSD) appears.



#### 3 Select 'Setup Navigator'.



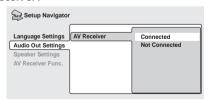
#### 4 Select a DVD language.

Some DVD discs feature on-screen menus, soundtracks and subtitles in several languages. Set your preferred language here.



- Note that the language you choose here may not be available on all discs.
- If you want to select a language other than those listed, select Other Language. See Selecting languages using the language code list on page 73 for detailed information.

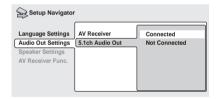
## 5 Did you connect this player to an AV receiver?



 If you selected Not Connected here, that completes the setup. Press ENTER to leave the Setup Navigator.

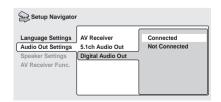
# 6 Did you connect the 5.1 channel analog audio outputs to your AV receiver?

Select Connected or Not Connected.



# 7 Did you connect a digital output to your AV receiver?

Select Connected or Not Connected.

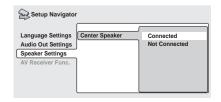


 If you selected Not Connected in both steps 6 and 7, that completes the setup. Press ENTER to leave the Setup Navigator.

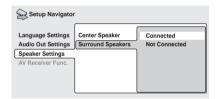
If you selected Connected in step 6, then answer the following questions about the speakers in your system, otherwise jump to step 11.

# 8 Do you have a center speaker connected to your AV receiver?

Select Connected or Not Connected.

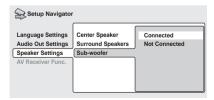


# 9 Do you have surround speakers connected to your AV receiver? Select Connected or Not Connected.



# 10 Do you have a sub-woofer connected to your AV receiver?

Select Connected or Not Connected.

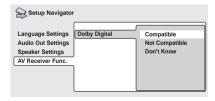


 If you selected Not Connected in step 7, that completes the setup. Press ENTER to leave the Setup Navigator.

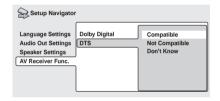
Questions 11 through 14 are concerned with the digital decoding capabilities of your AV receiver.

## 11 Is your AV receiver Dolby Digital compatible?

Select Compatible, Not Compatible or **Don't Know**.



# 12 Is your AV receiver DTS compatible? Select Compatible, Not Compatible or Don't Know.

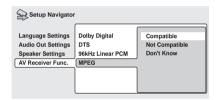


#### 13 Is your AV receiver compatible with 96kHz Linear PCM audio?

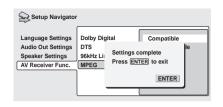
Select Compatible, Not Compatible or **Don't Know**.

Setup Navigator		
Language Settings Audio Out Settings Speaker Settings AV Receiver Func.	Dolby Digital DTS  96kHz Linear PCM	Compatible Not Compatible Don't Know

# 14 Is your AV receiver MPEG compatible? Select Compatible, Not Compatible or Don't Know.



15 Press ENTER to complete the setup, or press SETUP to quit the Setup Navigator without making any changes.



Congratulations, setup is complete!

#### **Playing discs**

The basic playback controls for playing DVD, CD, SACD, Video CD and MP3 discs are covered here. Further functions are detailed in the next chapter.



#### **Important**

Throughout this manual, the term 'DVD' means DVD-Video, DVD-Audio and DVD-R/RW. If a function is specific to a particular kind of DVD disc, it is specified.



## 1 If the player isn't already on, press $\circ$ STANDBY/ON to switch it on.

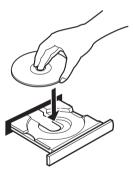
If you're playing a DVD or Video CD, also turn on your TV and make sure that it is set to the correct video input.

#### 

#### 3 Load a disc.

Load a disc with the label side facing up, using the disc tray guide to align the disc.

Never load more than one disc at a time.



#### 4 Press ► (play) to start playback.

If you're playing a DVD or Video CD, a menu may appear. See **pages 29-30** for how to navigate these.

If you're playing an MP3 disc, it may take a few seconds before playback starts, depending on the complexity of the file structure on the disc.

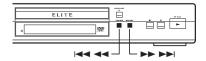
#### **Basic playback controls**

The table below shows the basic controls on the remote for playing discs. The following chapter covers more playback features in more detail.

Button	What it does
<b>-</b>	Starts playback. DVD and Video CD: if the display shows <b>RESUME</b> , playback starts from the resume point.
	Pauses a disc that's playing, or restarts a paused disc.
	Stops playback. DVD and Video CD: Display shows <b>RESUME</b> . Press ■ (stop) again to cancel the resume function (The resume function is also cancelled when you eject the disc tray.).
44	Press to start fast reverse scanning. Press ► (play) to resume normal playback.
<b>&gt;&gt;</b>	Press to start fast forward scanning. Press ► (play) to resume normal playback.
<b>44</b>	Skips to the start of the current track or chapter, then to previous tracks/chapters.
<b>▶▶</b>	Skips to the next track or chapter.
Numbers	Use to enter a title/group/track number. Press ENTER to select (or wait a few seconds).  • If the disc is stopped, playback starts from the selected title/group (for DVD) or track number (for CD/SACD/Video CD/MP3).  • If the disc is playing, playback jumps to the start of the selected chapter or track (within the current group for DVD-Audio).

#### Front panel controls

The  $\blacktriangleright$  (play),  $\blacksquare$  (stop), and  $\blacksquare$  (pause) buttons on the front panel work in exactly the same way as their remote control equivalents. The combined scan/skip buttons on the front panel ( $\blacksquare \blacktriangleleft \blacktriangleleft \blacktriangleleft$  and  $\blacktriangleright \blacktriangleright \blacktriangleright \blacksquare$ ) work slightly differently from the remote buttons.



Press and hold for fast scan; press for track/chapter skip.



#### Important

 You may find with some DVD discs that some playback controls don't work in certain parts of the disc. This is not a malfunction.

#### **DVD** disc menus

Many DVD-Video and DVD-Audio discs contain menus from which you can select what you want to watch or listen to. They may give access to additional features, such as subtitle and audio language selection, or special features such as slideshows. See the disc packaging for details.

Sometimes menus are displayed automatically when you start playback; others only appear when you press **MENU** or **TOP MENU**.



#### Important

 Some DVD-Audio discs feature a 'bonus group'. To access this group you have to input a password, which you can find on the disc's packaging. See page 62 for more information.



	• • • • • • • • • • • • • • • • • • • •
Button	What it does
TOP MENU	Displays the 'top menu' of a disc—this varies with the disc.
MENU	Displays a disc menu—this varies with the disc and may be the same as the 'top menu'.
<b>4▲▼</b> ▶ (Joystick)	Moves the cursor around the screen.
ENTER	Selects the current menu option.
ℰԴ (RETURN)	Returns to the previously displayed menu screen. On some DVD-Audio discs featuring browsable pictures, press to display the browser screen.
Numbers	Highlights a numbered menu option (some discs only).

Press ENTER to select (or wait

a few seconds).

#### Video CD PBC menus

Some Video CDs have menus from which you can choose what you want to watch. These are called PBC (Playback control) menus.

You can play a PBC Video CD without having to navigate the PBC menu by starting playback using a number button or track skip button (►►) to select a track, rather than the ► (play) button.



Button	What it does
ক (RETURN)	Displays the PBC menu.
Numbers	Use to enter a numbered menu option. Press <b>ENTER</b> to select (or wait a few seconds).
<b>44</b>	Displays the previous menu page (if there is one).
<b>▶▶</b>	Displays the next menu page (if there is one).

## FAQ

 After I load a DVD disc, it ejects automatically after a few seconds!

Most likely, the disc is the wrong region for your player. The region number should be printed on the disc; check it against the region number of the player (which you can find on the rear panel). See also **page 11**.

If the region number is OK, it may be that the disc is damaged or dirty. Clean the disc and look for signs of damage. See also **page 68**. Check also that the disc is aligned properly in the disc tray and that it's loaded label-side up.

- 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 page 68 for information on cleaning discs.
  - If a disc loaded correctly won't play, it's probably an incompatible format or disc type, such as DVD-ROM. See **page 10** for more on disc compatibility.
- There's no picture!

Check the front panel and make sure that the **VIDEO OFF** indicator isn't lit. If it is, press the **VIDEO OFF** button to switch the video output back on. See also **page 18.** 

Also make sure that if your TV isn't compatible with progressive scan video, that the **PROGRESSIVE** indicator isn't lit. If it is, press the **PROGRESSIVE** button to switch the video output back to interlace. See also **page 18**.

 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 are necessary at the top and bottom of the screen. This is not a

malfunction

- I have a standard (4:3) TV and set the player to show widescreen DVDs in pan & scan format, so why do I still get black bars top and bottom with some discs?

  Some discs override the display preferences of the player, so even if you have 4:3 (Pan & Scan) selected, those discs will still be shown in letterbox format. This is not a malfunction.
- My AV receiver is definitely compatible with 96/88.2kHz Linear PCM audio, but it doesn't seem to work with this player. What's wrong?
  - For digital copy-protection purposes, some 96/88.2kHz DVD discs only output digital audio downsampled to 48/44.1kHz. This is not a malfunction. To fully take advantage of the high sampling rate audio, connect the analog audio outputs to your amplifier/receiver.
- Why can't I hear SACD audio through the digital outputs?
  - SACD audio is only available through the analog outputs. This is not a malfunction. Some DVD-Audio discs too only output audio through the analog outputs.

• Is it better to listen to DVD-Audio discs through the analog outputs?

Some DVD-Audio discs do not output anything through the digital outputs, and multichannel discs are downmixed to stereo for the digital output. In addition, high sampling rate DVD-Audio discs (higher than 96kHz) automatically downsample audio output from the digital outputs.

Using the multichannel analog audio outputs for DVD-Audio have none of these limitations.

- My DVD-Audio disc starts playing, but then suddenly stops!
  - The disc may have been illegally copied.
- My CD with MP3 tracks won't play!
   Also make sure that the tracks are encoded in MPEG1 audio layer 3 format.

   See also page 10.
- Some MP3 tracks don't show up. Where are thev?

Filenames that don't end with the extension ".mp3" won't be recognized by this player. Also, if there are more than 250 folders or tracks on the disc, only the first 250 are recognized. See also page 11.

#### Introduction

Most of the features described in this chapter make use of on-screen displays. For an explanation of how to navigate these, see *Using the on-screen displays* on **page 25**.

Many of the functions covered in this chapter apply to DVD and SACD discs, Video CDs, CDs and MP3 discs, although the exact operation of some varies slightly with the kind of disc loaded.

Some DVD discs restrict the use of some functions (random or repeat, for example). This is not a malfunction.

When playing Video CDs, some of the functions are not available during PBC playback. If you want to use them, start the disc playing using a number button to select a track

# Using the Disc Navigator to browse the contents of a disc

Use the Disc Navigator to browse through the contents of a disc to find the part 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 when playing a Video CD in PBC mode, or when a DVD disc menu is displayed.

## 1 Press SETUP and select 'Disc Navigator' from the on-screen display.

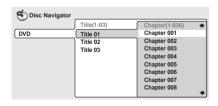
Alternatively, if a DVD-RW, CD, Video CD or MP3 disc is loaded, you can press **MENU**, which takes you straight to the Disc Navigator screen.



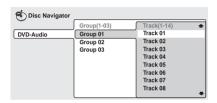
#### 2 Select what you want to play.

Depending on the type of disc you have loaded, the Disc Navigator looks slightly different.

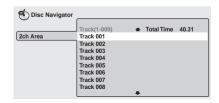
For DVD-Video discs select a title, or a chapter within a title.



For DVD-Audio discs select a group, or a track within a group.



For SACD discs select a track within the current playback area.

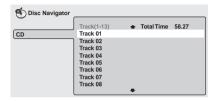


For a VR mode DVD-RW disc select between the Playlist and Original areas of the disc, or a title. Move the joystick right to preview the title.

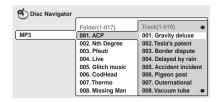
- It's not possible to switch between Original and Playlist during playback.
- Not all DVD-RW discs have a Playlist.



For CDs and Video CDs select a track.



For MP3 discs select a folder, or a track within a folder. (Note that if a folder or track name contains accented or non-roman characters, they may show up with generic names – F 033, T 035, etc.).



Playback starts after you press ENTER.



- The Disc Navigator is not available unless there is a disc loaded.
- Another way to find a particular place on a disc is to use one of the search modes. See Searching a disc on page 43.

#### **Scanning discs**

You can fast-scan discs forward or backward at various different speeds using the remote.

- 1 During playback, press **◄◄** or **▶▶** to start scanning.
- 2 Press repeatedly to increase the scanning speed.
  - MP3s can only be scanned at one speed.
  - The scanning speed is shown on-screen.
- 3 To resume normal playback, press ► (play).



#### Note

- Sound can be heard while scanning SACDs, audio CDs, and MP3 discs.
- There is no sound while scanning DVD-Videos and Video CDs, and no subtitles while scanning DVD-Video.
- Depending on the disc, normal playback may automatically resume when a new chapter is reached on a DVD-Video disc.

#### **Using the Multi Dial**

You can use the Multi Dial to control fast and slow motion scanning and frame advance of DVD-Video, DVD-R/RW and Video CDs.

When scanning, no audio is output, even when the scanning speed is 1/1 (normal playback speed).

To start scanning playback at 1/16 speed, turn the MULTI DIAL (clockwise for forward; anticlockwise for reverse) during playback.

- Turn the MULTI DIAL in the same direction to increase the scan speed the speed is indicated at the top left of the screen.
- Turn in the opposite direction to slow the scan speed/reverse direction.

To start high-speed scanning, turn the MULTI DIAL quickly (clockwise for forward; anticlockwise for reverse) during playback.

- Change the speed/direction in the same way as above.
- To resume normal playback, press ►.

To start manual scanning, press JOG (JOG MODE), then use the MULTI DIAL to advance frames in either direction.

To switch off jog mode, press JOG (JOG MODE) again. The picture remains paused until you restart playback.

• To resume normal playback, press ►.



#### Note

 You can scan Video CDs in the same way as DVD-Video discs (see above). However, reverse slow-motion scanning is not possible, and there are just two fast scanning speeds.

#### Playing in slow motion

You can play DVD-Videos, DVD-R/RW and Video CDs at four different forward slow motion speeds, and DVD-Videos, DVD-R/RW also at two reverse speeds.

- 1 During playback, press II (pause).
- 2 Press and hold ◀I/◀II or II►/I► until slow motion playback starts.
  - The slow motion speed is shown onscreen.
  - There is no sound during slow motion playback.

# 3 Press repeatedly to change the slow motion speed.

- The slow motion speed is displayed onscreen.
- 4 To resume normal playback, press ► (play).



#### Note

- You can't use slow motion playback with some titles on some DVDs.
- Video CD only supports forward slow motion playback.
- The picture quality during slow motion playback is not as good as during normal playback.
- Depending on the disc, normal playback may automatically resume when a new chapter is reached.
- For DVD-Audio discs featuring browsable pictures (page 73), press
   ◄I/◄II/II►/I► to view the previous/next picture.

#### Frame advance/frame reverse

You can advance or back up DVD-Video or DVD-RW discs frame-by-frame. With Video CDs, you can only use frame advance.

- 1 During playback, press II (pause).
- 2 Press ◀/◀II or II►/I► to reverse or advance a frame at a time.
- 3 To resume normal playback, press ► (play).



#### Note

- The picture quality when using frame reverse is not as good as frame advance.
- Depending on the disc, normal playback may automatically resume when a new chapter is reached.
- When changing direction of a DVD-Video disc, the picture may 'move' in an unexpected way. This is not a malfunction.
- For DVD-Audio discs featuring browsable pictures (page 73), press
   ◄I/◄II/II►/I► to view the previous/next picture.

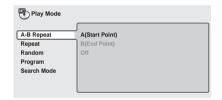
## Looping a section of a disc

The A-B Repeat function allows you to specify two points (A and B) within a track (DVD-Audio, CD and Video CD) or title (DVD-Video and DVD-RW) that form a loop which is played over and over.

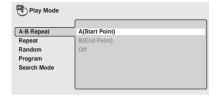


#### Important

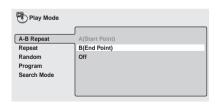
- A-B Repeat is not available with SACDs, MP3s, Video CD in PBC mode, or while a DVD disc menu is being displayed.
- 1 During playback, press PLAY MODE and select 'A-B Repeat' from the list of functions on the left.



2 Press ENTER on 'A(Start Point)' to set the loop start point.



3 Press ENTER on 'B(End Point)' to set the loop end point.



After pressing **ENTER**, playback jumps back to the start point and plays the loop.

4 To resume normal playback, press CLEAR or select 'Off' from the menu.

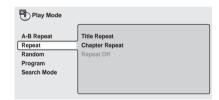
## **Using repeat play**

There are various repeat play options, depending on the kind of disc loaded. It's also possible to use repeat play together with program play to repeat the tracks/chapters in the program list (see *Creating a program list* on **page 40**).



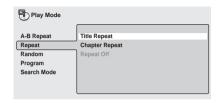
#### Important

- Repeat play is not available with Video CDs in PBC mode, or while a DVD disc menu is being displayed.
- 1 During playback, press PLAY MODE and select 'Repeat' from the list of functions on the left.



#### 2 Select a repeat play option.

The repeat play options available depend on the type of disc loaded. The screen below appears when a DVD-Video disc is loaded.



#### DVD-Video and DVD-RW discs

- Title Repeat
- Chapter Repeat
- Repeat Off

#### DVD-Audio discs

- Group Repeat
- Track Repeat
- Repeat Off

#### SACD, CD and Video CD discs

- Disc Repeat
- Track Repeat
- Repeat Off

#### MP3 discs

- Disc Repeat
- Folder Repeat
- Track Repeat
- Repeat Off



#### Tip

- If you've made a program list, the Program Repeat option also appears as a repeat option.
- To stop the disc and cancel repeat play, press ■ (stop).
- You can also cancel repeat play without stopping playback by pressing CLEAR.
   The disc will play to the end, then stop.



#### Note

- You can't use repeat and random play at the same time.
- If you switch camera angle during repeat play, repeat play is canceled.

## **Playing Discs**

## **Using random play**

Use the random play function to play titles or chapters (DVD-Video), groups or tracks (DVD-Audio), or tracks (CD, Video CD and MP3 discs) in a random order.

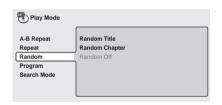
You can set the random play option when a disc is playing or stopped.



#### **Important**

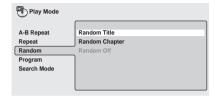
 You can't use random play with SACDs, DVD-RWs, Video CDs playing in PBC mode, or while a DVD disc menu is being displayed.

## 1 Press PLAY MODE and select 'Random' from the list of functions on the left.



#### 2 Select a random play option.

The random play options available depend on the type of disc loaded. The screen below appears when a DVD-Video disc is loaded.



#### DVD-Video discs

- Random Title
- Random Chapter
- Random Off

#### DVD-Audio discs

- Random Group
- Random Track
- Random Off

#### MP3, CD and Video CD discs

- On
- Off



#### **T**i

- To stop the disc and cancel random playback, press ■ (stop).
- You can also cancel random playback without stopping the disc by pressing CLEAR. The disc will play to the end, then stop.
- During random play, the I◄◄ and ►►I buttons function a little differently to normal: I◄◄ returns to the beginning of the current track/chapter. You can't go back further than this. ►►I selects another track/chapter at random from those remaining.
- You can't use random play together with program or repeat play.

## **Creating a program list**

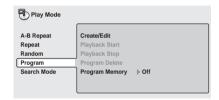
This feature lets you program the play order of titles/group/chapters/folders/tracks on a disc



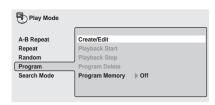
#### Important

 Program play is not available with DVD-RWs, Video CDs playing in PBC mode, or while a DVD disc menu is being displayed.

# 1 Press PLAY MODE and select 'Program' from the list of functions on the left



## 2 Select 'Create/Edit' from the list of program options.



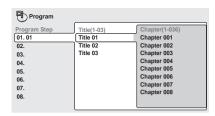
The Program edit screen that appears depends on the kind of disc loaded.

On the left side is the program list, then to the right is a list of titles (if a DVD-Video disc is loaded), groups (for DVD-Audio), tracks (for SACDs, CDs and Video CDs), or folder names (for MP3 discs). On the far right is a list of chapters (for DVD-Video) or tracks (for DVD-Audio and MP3).

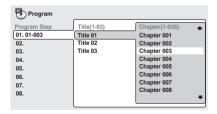
# 3 Select a title, chapter, group, folder or track for the current step in the program list.

For a DVD-Video disc, you can add a whole title, or a chapter within a title to the program list.

To add a title, select the title.

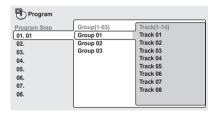


 To add a chapter, first highlight the title, then move the cursor right and select a chapter from the list.



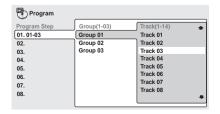
For a DVD-Audio disc, you can add a whole group, or a track within a group to the program list.

• To add a group, select the group.



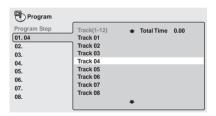
## **Playing Discs**

 To add a track, first highlight the group, then move the cursor right and select a track from the list



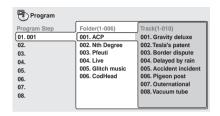
For SACD, CD or Video CD, select a track to add to the program list.

(The screen below shows a CD loaded.)

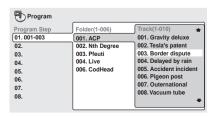


For an MP3 disc, you can add a whole folder, or a track within a folder to the program list.

To add a folder, select the folder.



 To add a track, first find the folder, then move the cursor right and select a track name from the list.



After pressing **ENTER** to select the title/ group/chapter/folder/track, the step number automatically moves down one.

## 4 Repeat step 3 to build up a program list.

A program list can contain up to 24 titles/chapters/groups/folders/tracks.

## 5 To play the program list, press ► (play).

Program play remains active until you turn off program play (see below), erase the program list (see below), eject the disc or switch off the player.



- To exit the program edit screen without starting playback, press PLAY MODE or SETUP. (Don't press RETURN—your program list will be lost.)
- During program play, press ►► to skip to the next program step.
- Press CLEAR during playback (though not if the program list OSD is displayed) to switch off program play. Press while stopped to erase the program list.

## **Editing a program list**

After creating a program list, you can add, delete and change steps.

- 1 Press PLAY MODE and select 'Program' from the list of functions on the left.
- 2 Select 'Create/Edit' from the list of program options.
- 3 To clear a step, highlight the step number and press CLEAR.
- 4 To insert a step in the middle of the program list, highlight the step where you want the new step to appear, then select a title/group/chapter/folder/track to add.

After pressing **ENTER**, the new step is inserted into the list.

5 To add a step to the end of the program list, highlight the next free step then select a title/group/chapter/folder/track to add.

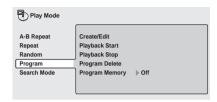
## **T**ip

- To exit the program edit screen without starting playback, press PLAY MODE or SETUP.
- If you want to exit the program edit screen without saving the changes you made, press RETURN.

## Other functions available from the program menu

As well as creating and editing a program list, you can start and stop program play, erase the program list, and memorize a DVD program list from the Program menu.

1 Press PLAY MODE and select 'Program' from the list of functions on the left.



- 2 Select a program play function.
  - Create/Edit See Creating a program list on page 37.
  - Playback Start Starts playback of the program list
  - Playback Stop Turns off program play, but does not erase the program list
  - **Program Delete** Erases the program list and turns off program play
  - Program Memory (DVD-Video only) Select On to save the program list for the disc loaded. (Select Off to cancel the program memory for the disc loaded)

## 📭 Tip

- After saving a program list using the Program Memory feature, whenever you load that disc, the program list is automatically recalled and program play switched on.
- You can save program lists for up to 24 discs. After that, the oldest one is replaced with the new one saved.

## Searching a disc

Using the search mode function from the Play Mode menu you can quickly jump to a particular part of the disc that you're watching or listening to.

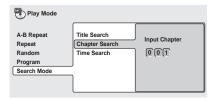
# 1 Press PLAY MODE and select 'Search Mode' from the list of functions on the left

The search options that appear depend on the kind of disc loaded. The screen below shows the DVD-Video search options.



#### Select a search mode.

# 3 Use the number buttons to enter a title, group, chapter, page, folder or track number, or a time.



- For a time search, enter the number of minutes and seconds into the currently playing title (DVD-Video/DVD-RW) or track (Video CD) you want playback to resume from. For example, press 4, 5, 0, 0 to have playback start from 45 minutes into the disc. For 1 hour, 20 minutes and 30 seconds, press 8, 0, 3, 0.
- Some DVD-Audio discs feature pages of browsable pictures. Enter the page number you want.

#### 4 Press ENTER to start playback.



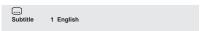
#### Note

- You can only use time search with DVD-Video and Video CD discs
- The disc must be playing in order to use time search.
- Search functions are not available with Video CDs in PBC mode (start non-PBC playback by stopping playback, then pressing ►►I, then ► (play)).
- You can often select what you want to watch from a DVD disc menu. See also pages 29–30.

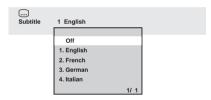
## **Switching subtitles**

Some DVD-Video discs have subtitles in one or more languages; the disc box will usually tell you which subtitle languages are available. You can switch subtitle language during playback.

## 1 Press SUBTITLE repeatedly to select a subtitle option.



 While the above display is showing, you can also use the joystick (up/down) and ENTER to select a subtitle language from a drop-down menu.





- Some discs only allow you to change subtitle language from the disc menu.
   Press TOP MENU to access.
- To set subtitle preferences, see *Subtitle Language* on **page 57**.

# Switching DVD-Video audio language

When playing a DVD-Video disc recorded with dialog in two or more languages, you can switch audio language during playback.

## 1 Press AUDIO repeatedly to select an audio language option.



 With some discs, while the above display is showing, you can also use the joystick (up/down) and ENTER to select an audio language from a drop-down menu.



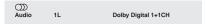


- Some discs only allow you to change audio language from the disc menu.
   Press TOP MENU to access.
- To set audio language preferences, see *Audio Language* on **page 56**.

# Switching DVD-RW audio channel

When playing a DVD-RW disc recorded with dual-mono audio, you can switch between the main, sub, and mixed channels during playback.

1 Press AUDIO repeatedly to select an audio channel option.



# Switching DVD-Audio audio channel

Depending on the disc, you may be able to switch channels when playing DVD-Audio discs—see the disc box for details.

1 Press AUDIO repeatedly to select an audio channel option.



When you change the audio channel, playback restarts from the beginning of the current track.



#### Note

- Some discs only allow you to change audio channel from the disc menu.
   Press TOP MENU to access.
- To set audio language preferences, see Audio Language on page 56.

# Switching CD/MP3/Video CD audio channel

You can switch between stereo, just the left channel or just the right channel of a CD/MP3/Video CD. (To change the audio channel of a CD it must be playing.)

1 Press AUDIO repeatedly to select an audio channel option.



## Switching camera angles

Some DVD-Video discs 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 page 59).

 During playback press ANGLE to switch angle.

## **Displaying disc information**

Various track, chapter and title information, as well as the video transmission rate for DVD discs, can be displayed on-screen.

1 During playback, press DISPLAY to show/switch the information displayed. Keep pressing **DISPLAY** to change the

DVD-Video displays

displayed information.



Play	▶	DVD		
Curi	ent / Total	Elapsed	Remain	Total
Chapter	2/36	0.06	1.40	1.46
# Tr.	Rate:			6.0Mbps

The # mark displayed with some DVD-Video discs means that the video is playing at 24 frames/second, progressive.



When the disc is paused, the display also shows the frame number.

DVD-Audio displays





· DVD-RW displays



Play	<b>&gt;</b>	DVD-RW	Original
	Current / To	otal	
Chapter	1/1		
Tr. Rate			4.3Mbps

· SACD displays

Play	► SAC	CD			
Track	Current / Total 1/9	Elapsed 0.22	Remain 3.38	Total 4.00	

(During multichannel playback only)



Play	▶	SACD			
		Elapsed	Remain	Total	
Disc		0.24	40.07	40.31	

• CD and Video CD displays



(During PBC playback only)



MP3 disc displays

Folder Name ACP





You can see disc information (number of titles/chapters, groups, tracks, folders and so on) from the Disc Navigator screen. See Using the Disc Navigator to browse the contents of a disc on page

33.

### **Audio DRC**

· Default setting: Off

When watching Dolby Digital DVDs 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.

1 Press SETUP and select 'Audio Settings' from the on-screen display.



2 Highlight Audio DRC, then use the Joystick (left/right) to change to 'On' or 'Off', as required.



3 Press ENTER to make the setting and exit the Audio Settings screen.



#### Note

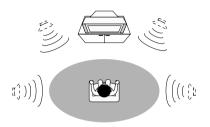
- Audio DRC is only effective with Dolby Digital audio sources.
- Audio DRC is only effective through the digital output when **Digital Out** is set to **On**, and **Dolby Digital Out** is set to **Dolby Digital > PCM**. See **page 53**.
- The effect of Audio DRC depends on your speakers and AV receiver settings.

### Virtual Surround

· Default setting: Off

Switch on Virtual surround to enjoy surround sound effects from just two speakers.

When you play a Dolby Digital soundtrack, Virtual Dolby Digital, which uses TruSurround technology from SRS, produces a deep, realistic 3D sound space from a pair of stereo speakers.

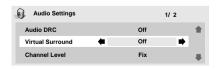


## TruSurround by SRS (\*)\*

1 Press SETUP and select 'Audio Settings' from the on-screen display.



2 Highlight TruSurround, then use the Joystick (left/right) to change to 'DOV/ TruSurround' or 'Off', as required.



3 Press ENTER to make the setting and exit the Audio Settings screen.



 You can also use the SURROUND button on the remote control to switch Virtual Surround on (DDV/ TruSurround)/Off.



#### Note

- Virtual Surround does not work with CD, MP3, DVD-Audio or SACD discs, or 96kHz Linear PCM soundtracks.
- The Virtual Surround effect is output only through the analog AUDIO OUT (2ch) jacks.
- Make sure that Audio Output Mode is set to 2 Channel (page 64).
- How good the surround effect is varies with the disc.

### **Channel Level**

• Default setting: Fix / all speakers 10 ft.

This setting allows you to set the level of each channel sent to the 5.1 channel analog outputs, and to set the distance of the speakers from your listening position so that the player can optimize the surround sound.

## 1 Press SETUP and select 'Audio Settings' from the on-screen display.



# 2 Highlight Channel Level, then use the Joystick (left/right) to change to 'Fix' or 'Variable', as required.

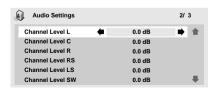


- Fix Channel levels are fixed, but you can set the speaker distances
- Variable You can specify variable channel levels as well as speaker distances

# 3 If you chose Variable, move the joystick down to proceed to the next screen.



## 4 Variable setting only: Set the channel levels for each speaker.

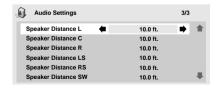


- Use the Joystick (up/down) to select a speaker.
- Use the Joystick (left/right) to adjust the channel level for that speaker.

Channel levels can be set from –6 dB to +6 dB in 0.5 dB increments.

After setting up all the channel levels, move the Joystick down until you reach the speaker distance setting screen.

## 5 Fix and Variable settings: Set the distance for each speaker.



- Use the joystick (up/down) to select a speaker.
- Use the joystick (left/right) to adjust the distance from your listening position to that speaker.

Front left/right (**L/R**) speakers can be set from 1.0 ft. to 30 ft. in 0.5 ft. increments.

Center speaker ( $\mathbf{C}$ ) and subwoofer ( $\mathbf{SW}$ ) can be set from -6.5 ft. to +6.5 ft. relative to the front left/right speakers

Surround left/right (**LS/RS**) speakers can be set from -20 ft. to +6.5 ft. relative to the front left/right speakers.

When you adjust the front left (L) or front right (R) speaker, all the other speaker distances are adjusted relative to that speaker.

## 6 Press ENTER to make the settings and exit the audio settings screen.



#### Note

- The speaker distance settings have no effect on SACD playback. The channel level settings, however, do apply.
- You can't adjust the channel level for any speakers that are set to Off in the Speaker Installation menu screen (page 64).
- The Fix setting is equivalent to setting all the channel levels to +6 dB. Therefore, the Variable setting will usually sound quieter than the Fix setting.

## The Video Settings Menu

## Video Adjust

• Default setting: Standard

From the Video Adjust screen you can select the standard video presentation or define presets of your own.

## 1 Press SETUP and select 'Video Adjust' from the on-screen display.

You can also access these settings by pressing **V.ADJ (VIDEO ADJUST)**.



## 2 Use the joystick (left/right) to select a preset.



- Standard Normal
- I. Memory1-2 / P. Memory1-2 Use for making your own interlaced / progressive presets (see below)

## 3 Press ENTER to make the setting and exit the Video Adjust screen.



#### Note

 Depending on the disc and the TV/ monitor, you may not see the effect clearly.

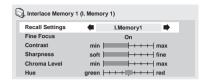
## Creating your own interlace output presets

These presets are available when the video output is set to interlace. (Use the front panel **PROGRESSIVE** button to switch between interlace and progressive video output. See also **page 18**).

- 1 Select one of the Memory presets (see above).
- 2 Move the joystick down to select 'Detailed Settings' then press ENTER.



3 Adjust the picture quality settings.



- Use the joystick (up/down) to select a setting.
- Use the joystick (left/right) to adjust the current setting.
- Press **DISPLAY** to switch between full and single view.
- You can change the preset number from the **Recall Settings** menu item.

You can adjust any or all of the following picture quality settings:

- Fine Focus Switch On to reveal greater detail (high resolution) in the picture.
- Contrast Adjusts the contrast between light and dark elements in the picture.
- Sharpness Adjusts the sharpness of the mid-frequency (less detailed) elements in the picture. (This setting is only effective when **Fine Focus** is **On**.)
- **Chroma Level** Adjusts how saturated colors appear.
- Hue Adjusts the overall color balance between red and green. (This is only effective when the player is connected using the VIDEO OUT or S-VIDEO OUT jacks.)

## The Video Settings Menu

4 Press ENTER to save the preset and exit the Video Adjust screen.

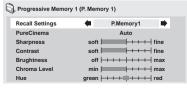
## Creating your own progressive output presets

These presets are available when the video output is set to progressive. (Use the front panel **PROGRESSIVE** button to switch between interlace and progressive video output. See also **page 18**)

- 1 Select one of the Memory presets (see above).
- 2 Move the joystick down to select 'Detailed Settings' then press ENTER.



3 Adjust the picture quality settings.



- Use the joystick (up/down) to select a setting.
- Use the joystick (left/right) to adjust the current setting.
- Press **DISPLAY** to switch between full and single view.
- You can change the preset number from the **Recall Settings** menu item.

You can adjust any or all of the following picture quality settings:

- PureCinema When watching DVD movies, PureCinema optimizes the picture quality. The default setting is Auto, but if the picture appears unnatural, then set to On or Off, as appropriate.
- **Sharpness** Adjusts the sharpness of the mid-frequency (less detailed) elements in the picture.
- Contrast Adjusts the contrast between light and dark elements in the nicture
- **Brightness** Adjusts the overall brightness of the picture.
- Chroma Level Adjusts how saturated colors appear.
- **Hue** Adjusts the overall color balance between red and green.
- 3 Press ENTER to save the preset and exit the Video Adjust screen.



#### Note

Video on a DVD discs may be either video material (originally shot on video) or film material (originally shot on film). Video material has a frame rate of 30 frames/sec. (NTSC), compared with 24 frames/sec. for film. This player converts film material to 60 frames/sec. (in progressive scan mode). PureCinema adjusts the picture so that it matches more closely the picture quality of a cinema screen.

You can see whether video on a DVD disc is film or video material by displaying the video transmission rate (see page 46). If a hash mark (#) appears next to the transmission rate display, it is film material.

# Using the Initial Settings menu

The Initial Settings menu is where you can set preferences for language, audio and video output, and so on.

If a menu option is grayed out it means that it cannot be changed at the current time. This is usually because a disc is playing. Stop the disc, then change the setting.

1 Press SETUP and select 'Initial Settings' from the on-screen display.



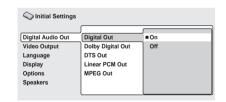
- 2 Select the setup category from the list on the left, then select an item from the menu list to the right.
- 3 Make the setting you want.

## **Digital Audio Out settings**

## **Digital Out**

Default setting: On

You only need to make this setting if you connected this system to an AV receiver (or other component) using one of the digital outputs.



If at any time you need to switch off the digital audio output, set this to **Off**, otherwise leave it **On**.



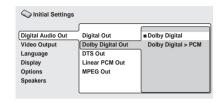
#### Note

- You can't switch on/off the optical and coaxial outputs individually.
- There is no digital output when playing SACDs and some DVD-Audio discs regardless of this setting.

## **Dolby Digital Out**

• Default setting: Dolby Digital

You only need to make this setting if you connected this system to an AV receiver (or other component) using one of the digital outputs.

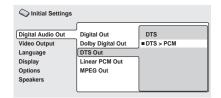


If your AV receiver (or other connected component) is Dolby Digital compatible, set to **Dolby Digital**, otherwise set to **Dolby Digital** > **PCM**.

#### **DTS Out**

• Default setting: DTS > PCM

You only need to make this setting if you connected this system to an AV receiver (or other component) using one of the digital outputs.



If your AV receiver (or other connected component) has a built-in DTS decoder, set this to **DTS**, otherwise set to **DTS > PCM** (DTS audio is converted to more compatible PCM audio). Check the manual that came with the other component if you're unsure whether it is DTS compatible.

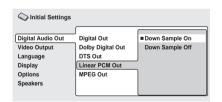


- If you set to DTS with a non-DTS compatible amplifier, noise will be output when you play a DTS disc.
- This setting applies only to DTS audio on DVDs. DTS-CD always output DTS digital audio as-is regardless of this setting.

#### **Linear PCM Out**

Default setting: Down Sample On

You only need to make this setting if you connected this system to an AV receiver (or other component) using one of the digital outputs.



If your AV receiver (or other connected component) is compatible with high sampling rates (96 kHz), set this to **Down Sample Off**, otherwise set it to **Down Sample On** (96 kHz audio is converted to a more compatible 48 kHz). Check the manual that came with the other component if you're unsure whether it is 96 kHz compatible.



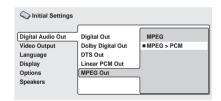
#### Note

- Even when set to Down Sample Off, some discs will still output downsampled audio through the digital outputs (you only get full sampling rate audio through the analog outputs).
- High sampling rate DVD-Audio discs (192kHz or 176.2kHz) automatically output down-sampled audio through the digital outputs.

#### MPEG Out

Default setting: MPEG > PCM

You only need to make this setting if you connected this system to an AV receiver (or other component) using one of the digital outputs.

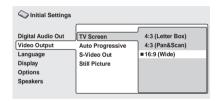


If your AV receiver (or other connected component) is compatible with MPEG audio, set this to **MPEG**, otherwise set it to **MPEG** > **PCM** (MPEG audio is converted to more compatible PCM audio). Check the manual that came with the other component if you're unsure whether it is MPEG audio compatible

## **Video Output settings**

#### **TV Screen**

Default setting: 16:9 (Wide)



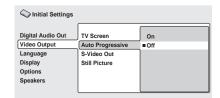
If you have a widescreen TV, select the **16:9** (**Wide**) setting—widescreen DVD software is then shown using the full screen area. When playing software recorded in conventional (4:3) format, the settings on your TV will determine how the material is presented—see the manual that came with your TV for details on what options are available.

If you have a conventional TV, select either 4:3 (Letter Box) or 4:3 (Pan & Scan). In Letter Box mode, widescreen software is shown with black bars at the top and bottom of the screen. Pan & Scan chops the sides off widescreen material to make it fit the 4:3 screen (so even though the image looks larger on the screen, you're actually seeing less of the picture). See also page 70.

## **Auto Progressive**

· Default setting: Off

You only need to make this setting if you connected this player to your TV using the component video outputs.

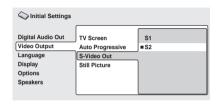


When set to **On**, 16:9 format DVD-Video discs are output as progressive video, while 4:3 format discs are output as interlaced video. DVD-RW, DVD-Audio and Video CD discs are always output as 4:3 interlace video. This corrects a problem with some TVs that display 4:3 material stretched when fed a progressive scan signal. If you do not experience this problem you can leave this setting as **Off**.

#### S-Video Out

• Default setting: **S2** 

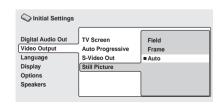
You only need to make this setting if you connected this player to your TV using an S-Video cord.



If you find that the picture is stretched or distorted on the default **S2** setting, try changing it to **S1**. (See also S1 and S2 in the *Glossary* on **page 74**.)

#### **Still Picture**

· Default setting: Auto



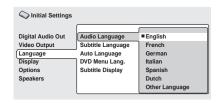
This player uses one of two processes when displaying a still frame from a DVD disc. The default **Auto** setting automatically chooses the best setting each time.

- **Field** produces a stable, generally shake-free image
- Frame produces a sharper image, but more prone to shake than field stills

## Language settings

### **Audio Language**

· Default setting: English



This setting is your preferred audio language for DVD-Video discs. If the language you specify here is recorded on a disc, the system automatically plays the disc in that language.

The DVD-Video format recognizes 136 different languages. Select **Other Language** if you want to specify a language other than those listed. See also *Selecting languages* using the language code list on **page 73**.

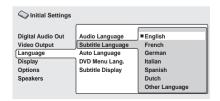


#### Tip

- You can switch between the languages recorded on a DVD disc during playback using the AUDIO button. (This does not affect this setting.) See page 44.
- Some DVD discs set the audio language automatically when loaded, overriding the audio language you set in the Initial Settings menu.
- Discs with two or more audio languages usually allow you to select the audio language from the disc menu. Press
   TOP MENU to access the disc menu.

## **Subtitle Language**

• Default setting: English



This setting is your preferred subtitle language for DVD-Video discs. If the language you specify here is recorded on a disc, the system automatically plays the disc with those subtitles.

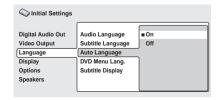
The DVD-Video format recognizes 136 different languages. Select **Other Language** if you want to specify a language other than those listed. See also *Selecting languages using the language code list* on **page 73**.



- You can change or switch off the subtitles on a DVD disc during playback using the SUBTITLE button. (This does not affect this setting.) See page 44.
- Some DVD discs set the subtitle language automatically when loaded, overriding the subtitle language you set in the Initial Settings menu.
- Discs with two or more subtitle languages usually allow you to select the subtitle language from the disc menu. Press TOP MENU to access the disc menu.

### **Auto Language**

• Default setting: On



When set to **On**, the player always selects the default audio language on a DVD-Video disc (French dialog for a French movie, for example), and displays subtitles in your preferred subtitle language only if that is set to something different. In other words, movies in your native language won't have any subtitles, while foreign language movies will be shown with subtitles.

Set to **Off** to have the player play discs strictly according to your **Audio Language** and **Subtitle Language** settings.

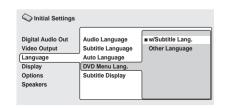
For Auto Language to work, the Audio Language and Subtitle Language settings must be the same (see also **pages 56–57**).



 You can still switch audio and subtitle language on playback using the AUDIO and SUBTITLE buttons.

### **DVD Menu Language**

• Default setting: w/Subtitle Lang.

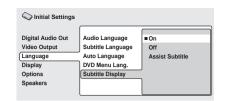


Some multilingual discs have disc menus in several languages. This setting specifies in which language the disc menus should appear. Leave on the default setting for menus to appear in the same language as your Subtitle Language—see page 57.

The DVD-Video format recognizes 136 different languages. Select **Other Language** if you want to specify a language other than those listed. See also *Selecting languages* using the language code list on page 73.

## **Subtitle Display**

Default setting: On

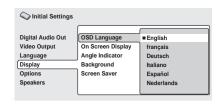


When set to **On**, the player displays subtitles according to the Subtitle Language and Auto Language settings. Set to **Assist Subtitle** to have the player display the extra assistive subtitles recorded on to some DVD discs. Set to **Off** to switch subtitles off altogether.

## **Display settings**

### **OSD Language**

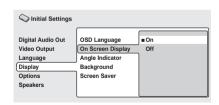
· Default setting: English



This sets the language of this player's onscreen displays.

## **On Screen Display**

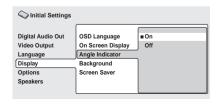
· Default setting: On



This sets whether operation displays are shown on-screen (**Play**, **Resume**, **Scan** and so on.)

## **Angle Indicator**

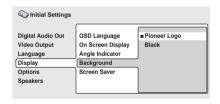
• Default setting: On



If you prefer not to see the camera icon onscreen during multi-angle scenes on DVD discs, change this setting to **Off**.

## **Background**

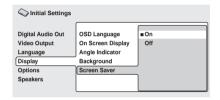
• Default setting: Pioneer Logo



This specifies what is displayed on-screen when the player is stopped.

#### **Screen Saver**

• Default setting: On



If a constant image is displayed on a conventional CRT-type TV, it can 'burn in' leaving a ghost image on the screen. Switch to **On** to make sure that a constant image is not displayed for a dangerously long time.

## **Options**

#### Parental Lock

· Default level: Off

• Default password: none

• Default country code: us (2119)

Some DVD Video discs feature a Parental Lock level. If your player is set to a lower level than the disc, the disc won't play. This gives you some control about what your children watch on your DVD player.

Some discs also support the Country Code feature. The player does not play certain scenes on these discs, depending on the country code you set.

Before you can set the Parental Lock level or the Country Code you must register a password. As the password owner, you can change the Parental Lock level or Country Code whenever you like. You can also change the password.



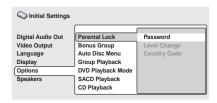
#### Note

- Not all discs that you may consider inappropriate for your children use the Parental Lock feature. These discs will always play without requiring the password first.
- If you forget your password, you'll need to reset the player to it's factory settings (page 70), then register a new password.

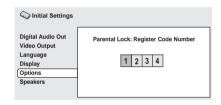
#### Registering a new password

You must register a password before you can change the Parental Lock level or enter a Country Code.

#### 1 Select 'Password'.



## 2 Use the number buttons to enter a 4-digit password.



The numbers you enter show up as asterisks (\*) on-screen.

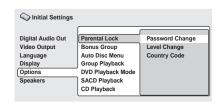
## 3 Press ENTER to register the password and return to the Options menu screen.

If you forget your password, you can reset the system then register a new one. See page 70 for how to reset the player.

#### Changing your password

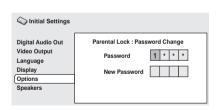
To change your password, confirm your existing password then enter a new one.

#### 1 Select 'Password Change'.

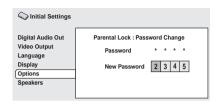


## 2 Use the number buttons to enter your existing password, then press ENTER.

The numbers appear as asterisks as you enter them.



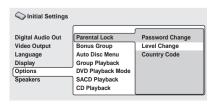
### 3 Enter a new password.



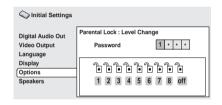
4 Press ENTER to register the new password and return to the Options menu screen.

## Setting/changing the Parental Lock level

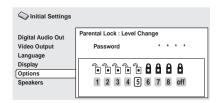
1 Select 'Level Change'.



2 Use number buttons to enter your password, then press ENTER.



3 Select a new level.



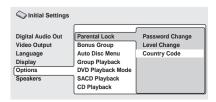
Move the joystick left to lock more levels (more discs will require the password); move right to unlock levels. You can't lock level 1.

4 Press ENTER to set the new level and return to the Options menu screen.

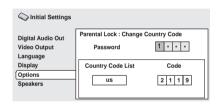
### **Setting/changing the Country Code**

You may also want to refer to the Country code list on **page 72**.

1 Select 'Country Code'.



2 Use number buttons to enter your password, then press ENTER.



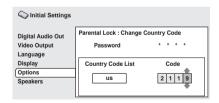
#### 3 Select a country code.

There are two ways you can do this.

• Select by code letter: Use the joystick (up/down) to change the country code.



 Select by code number: Move the joystick right then use the number buttons to enter the 4-digit country code (you can find the Country code list on page 72).



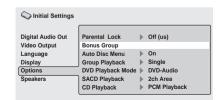
# 4 Press ENTER to set the new Country Code and return to the Options menu screen.



#### Note

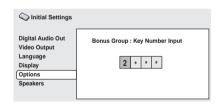
 Changing the country code does not take effect until the next disc is loaded (or the current disc is reloaded).

## **Bonus Group**



Some DVD-Audio discs have an extra 'bonus' group that requires a 4-digit key number to access. See the disc packaging for details and the key number.

When you play a DVD-Audio disc that has a bonus group, the key number input screen appears automatically. You can also access the same screen here.



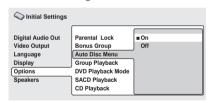


#### Note

 If you eject the disc, switch the power off, or unplug the player, you will need to re-enter the key number.

#### **Auto Disc Menu**

• Default setting: On



This specifies whether the menu (Top menu) is automatically displayed after loading a disc. Set to **On** if you want the menu displayed automatically, or **Off** if you don't want it displayed.

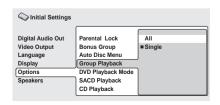


#### Note

 Some DVD discs display a menu automatically regardless of this setting.
 If you press > while a disc is loading, this setting is ignored.

## **Group Playback**

• Default setting: Single



DVD-Audio discs can have up to 9 groups of tracks. When set to **Single**, the selected group plays and then the disc stops, or returns to the menu screen. Use Group Search (**page 43**) to select the group to play. (You cannot use the track skip ◄◄ / ▶►I or scan buttons ◄◄ / ▶► in this mode.)

Set to **All** if you want to play all the groups on a disc consecutively.

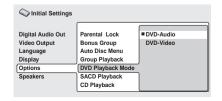


## Note

 Even if the players is set to All but you select a group to play from the disc menu, only that group will play. If you stop playback, all groups will play again when you restart playback.

### **DVD Playback Mode**

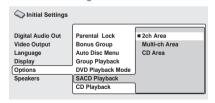
• Default setting: DVD-Audio



Some DVD-Audio discs contain DVD-Video content in addition to the DVD-Audio. Set to **DVD-Video** to play a DVD-Audio disc as if it were a DVD-Video disc. Note that in this case only the DVD-Video part of the disc will play.

## **SACD Playback**

• Default setting: 2ch Area



SACD discs can be divided up into several different areas — stereo audio (**2ch Area**), multi-channel audio (**Multi-ch Area**) and, for hybrid SACDs, standard CD audio (**CD Area**). Select which you want to listen to.

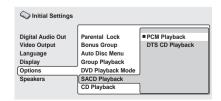


#### Note

 If you select an area that isn't on the disc loaded, a different area of the disc will play. For example, if you choose standard CD audio but the disc loaded is not a hybrid SACD, the stereo SACD audio will play.

## **CD Playback**

• Default setting: PCM Playback



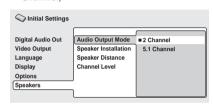
When set to **PCM Playback**, playback is optimized for standard audio CDs. You can also play DTS CDs, however you may notice some noise when a DTS CD starts playing. Also, speakers which were set to **Small** in the Speaker Installation screen are automatically set to **Large**. This is not a malfunction.

When set to **DTS CD Playback**, playback is optimized for DTS CDs. In this mode you cannot play standard audio CDs through the analog outputs. Change the setting back to **PCM Playback** to play standard CDs.

## **Speakers**

## **Audio Output Mode**

 Set in Setup Navigator (Default: 2 Channel)



If you connected this player to your amplifier using the 5.1 channel analog outputs (front, surround, center and subwoofer outs), set this to **5.1 Channel**; if you connected only the stereo outs, set to **2 Channel**.



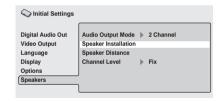
- Even if you set Audio Output Mode to 5.1 Channel, you'll only get sound from all speakers when playing a multichannel DVD-Audio disc, SACD, or Dolby Digital or DTS encoded DVD disc.
- When set to 5.1 Channel, only the front left/right channels are output from the AUDIO OUT (2ch) jacks. Change to 2 Channel if you want to listen to downmixed stereo audio (for example, because you are listening through the TV's built-in speakers).
- When set to 5.1 Channel there is no digital output when playing DVD-Audio.
- If you set to 2 Channel, Dolby Digital, DTS and MPEG audio is mixed down to two channels so you still hear all the audio recorded on the disc.
- Some DVD-Audio discs don't allow down-mixing of audio. These discs always output multi-channel audio regardless of the setting made here.

## **Speaker Installation**

 Set in Setup Navigator (default: L/R: Large | C: Large | LS/RS: Large | SW: On )

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

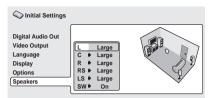
This setting does not affect digital audio output.



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

## 1 Use the joystick to move the cursor up/down to select a speaker.

 The L and R, and RS and LS speakers are paired; you can't set them differently.



## 2 Move the cursor right to modify the selected speaker.

## 3 Use the joystick (up/down) to change the current setting.

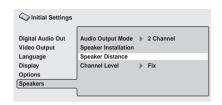
- You can see the effect of your changes in the room graphic on the right of the screen.
- Except for the subwoofer, you can set speaker size to **Large** or **Small**. If the main speaker cone in the speaker is 12cm or more, set to **Large**, otherwise set to **Small** (or **Off** if you don't have that speaker).
- If you set the front L and R speakers to Small, the center and surround speakers are automatically set to Small and the subwoofer to On.
- The subwoofer can only be set to On or Off.
- 4 Move the joystick left to go back to the speaker list if you want to modify another speaker, or press ENTER to exit the Speaker Installation screen.

## **Speaker Distance**

• Default setting: all speakers 10 ft.

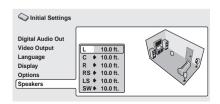
You only need to make this setting if you connected this player to your amplifier using the 5.1 channel analog outputs.

To get the best surround sound from your system, you should set up the speaker distances from your listening position.



## 1 Use the joystick to move the cursor up/down to select a speaker.

 The L and R speakers are paired; you can't set them differently.



2 Move the cursor right to change the speaker distance for the highlighted speaker.

## 3 Use the joystick (up/down) to change the distance.

- When you change the distance settings of the front left (L) or front right (R) speakers, all the other speaker distances change relative to it.
- Front left/right (L/R) speakers can be set from 1 ft. to 30 ft. in 0.5 ft. increments.
- Center speaker (C) and subwoofer (SW)
  can be set from 6.5 ft. to +6.5 ft.
  relative to the front left/right speakers
- Surround left/right (**LS/RS**) speakers can be set from –20 ft. to +6.5 ft. relative to the front left/right speakers.
- 4 Move the cursor left to go back to the speaker list if you want to modify another speaker, or press ENTER to exit the Speaker Distance screen.



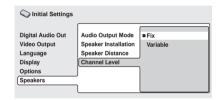
 Speaker Distance settings do not affect SACD playback.

## **Channel Level**

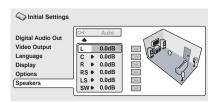
Default setting: Fix

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 digital audio output.

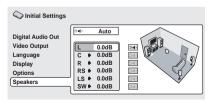


When set to **Fix**, the level of each of the 5.1 channel analog outputs is fixed. Choose **Variable** if you want to adjust the relative levels to balance the surround sound better for your listening room.



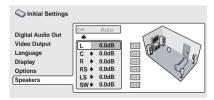
You can set the individual channel levels between –6dB and +6dB using the test tone output as a guide to set the correct levels. Adjust the levels until the output level from all channels sounds the same from your usual listening position.

Automatic: Select **Auto** to start the test tone output.

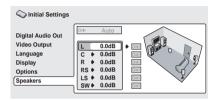


As the test tone plays through each speaker in turn, it is highlighted on-screen. Use the joystick (up/down) to adjust the channel output level of the current speaker. Note that the test tone is not output from the subwoofer. Move the joystick left to exit the test tone sequence, or **ENTER** to save the settings and exit the channel level setting screen.

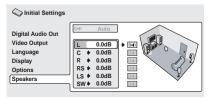
Manual: Move the cursor up/down to select a speaker.



Move the joystick right then use the joystick (up/down) to set the channel output level.



To turn the test tone on/off for an individual speaker, press → (Joystick right). The test tone continues playing even when you select a different speaker.



Press **ENTER** to save the settings and exit the channel level setting screen.

# 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 CD/DVD 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 CDs 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.

#### Discs to avoid

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 the unit.



This unit 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.

## Cleaning the pickup lens

The DVD 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 CD players are commercially available, we do not recommend 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 unit 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...

- X Use in a place exposed to high temperatures or humidity, including near radiators and other heat-generating appliances.
- X Place on a window sill or other place where the player will be exposed to direct sunlight.
- **X** Use in an excessively dusty or damp environment.

- X Place directly on top of an amplifier, or other component in your stereo system that becomes hot in use.
- X Use near a television or monitor as you may experience interference—especially if the television uses an indoor antenna.
- X Use in a kitchen or other room where the player may be exposed to smoke or steam.
- X Use on a thick rug or carpet, or cover with cloth—this may prevent proper cooling of the unit.
- X 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 the player, first press **& STANDBY/ON** on the front panel to turn the player off. Wait for **--OFF--** to disappear from the display, then unplug the power cord. Never lift or move the unit during playback—discs rotate at a high speed and may be damaged.

#### Power cord caution

Handle the power cord by the plug part. 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, or other object on the power cord or pinch the cord in any other way. Never make a knot in the cord or tie it with other cords. The power cords should be routed so that they are not likely to be stepped on. A damaged power cord can cause a fire or give you an electric shock. Check the power cord once in a while. If you find it damaged, ask your nearest Pioneer authorized service center or your dealer for a replacement.

## Screen sizes and disc formats

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 Screen** setting (**page 55**) of this player should be set to **16:9(Wide)**.

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 'letterbox' style with black bars at the top and bottom of the screen.

#### Standard TV users

If you have a standard TV, the TV Screen setting (page 55) of this player should be set to 4:3 (Letter Box) or 4:3 (Pan&Scan), depending on which you prefer.

Set to **4:3 (Letter Box)**, widescreen discs are shown with black bars top and bottom.



Set to **4:3(Pan&Scan)**, widescreen discs are shown with the left and right sides cropped. Although the picture looks larger, you don't actually see the whole picture.



Please note that many widescreen discs override the player's settings so that the disc is shown in letterbox format regardless of the setting.



#### Tip

 Using the 16:9 (Wide) setting with a standard 4:3 TV, or either of the 4:3 settings with a widescreen TV, will result in a distorted picture.

## Resetting the player

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

- 1 Switch the player into standby.

All the player's settings are now reset, and you should see the 'Let's Get Started' screen.

## About the audio output settings

The table below shows how the audio settings you make in the Initial Settings menu (**pages 53-54, 64**) affect the output from the 2 channel and the 5.1 channel analog outputs, and from the digital outputs with various types of disc.

Dis	c audio format	Player setting		Surround L/R Center, LFE, outputs*1	Digital outputs PCM convert*2	Bitstream* <sup>3</sup>
	Dolby Digital	2 Ch	2ch downmix	-		
		5.1 Ch	Front L / R	Surround L/R, Center, LFE	2ch downmix	Dolby Digital
	Dolby Digital karaoke	2 Ch / 5.1 Ch	Left / Right	-	Left / Right	Dolby Digital
	Linear PCM	2 Ch / 5.1 Ch	Left / Right	-	Left / Right	Left / Right
DVD	DTS	2 Ch	2ch downmix	-		D.W.0
Δ		5.1 Ch	Front L / R	Surround L/R, Center, LFE	2ch downmix	DTS
	MPEG	2 Ch / 5.1 Ch	Left / Right	-	Left / Right	MPEG
	DVD-Audio	2 Ch	2ch downmix*4	-	2ch downmix*5	2ch downmix*5
		5.1 Ch	Front L / R	Surround L/R, Center, LFE	-	-
	DVD-RW	2 Ch / 5.1 Ch	Left / Right* <sup>6</sup>	-	Left / Right	Dolby Digital MPEG or PCM
Sup	er Audio CD	2 Ch	2ch downmix	-		
		5.1 Ch	Front L / R	Surround L/R, Center, LFE	-	-
CD		2 Ch / 5.1 Ch	Left / Right	-	Left / Right	Left / Right
DT:	S CD	2 Ch	2ch downmix	-	DTS	DTC
		5.1 Ch	Front L / R	Surround L/R, Center, LFE	צוט	DTS
	eo CD / per VCD	2 Ch / 5.1 Ch	Left / Right	-	Left / Right	Left / Right

<sup>\*1</sup> When Audio Output Mode is set to 2 Channel, the AUDIO OUT (5.1ch) FRONT L / R jacks act as a second pair of stereo audio outputs.

<sup>\*2</sup> Dolby Digital > PCM, MPEG > PCM or DTS > PCM setting (pages 53-54)

<sup>\*3</sup> Dolby Digital, MPEG or DTS setting (pages 53-54)

<sup>\*\*</sup> Discs that prohibit downmixing will be output as 5.1 channel even if **2 Channel** is selected as the **Audio Output Mode** setting (see **page 64**)

<sup>\*5</sup> Discs that prohibit downmixing also mute the digital output

<sup>\*6</sup> If the sound is mono, the **Left** and **Right** channels will be the same

## Language code list

Language (Language code letter), Language code

Japanese (ia), 1001 English (en), **0514** French (fr), 0618 German (de). 0405 Italian (it), 0920 Spanish (es), 0519 Chinese (zh), 2608 Dutch (nl), 1412 Portuguese (pt). 1620 Swedish (sv). 1922 Russian (ru) 1821 Korean (ko), 1115 Greek (el), 0512 Afar (aa), 0101 Abkhazian (ab) 0102 Afrikaans (af), 0106 Amharic (am), 0113 Arabic (ar), 0118 Assamese (as) 0119 Avmara (av), 0125 Azerbaijani (az), 0126 Bashkir (ba), 0201 Byelorussian (be), 0205 Bulgarian (bg), 0207 Bihari (bh), 0208 Bislama (bi), 0209 Bengali (bn), 0214 Tibetan (bo). 0215 Breton (br). 0218 Catalan (ca). 0301 Corsican (co), 0315 Czech (cs), 0319 Welsh (cv), 0325 Danish (da). 0401

Bhutani (dz) 0426 Esperanto (eo), 0515 Estonian (et). 0520 Basque (eu). 0521 Persian (fa) 0601 Finnish (fi). 0609 Fiii (fi). 0610 Faroese (fo), 0615 Frisian (fv). 0625 Irish (ga), 0701 Scots-Gaelic (gd), 0704 Galician (gl), 0712 Guarani (gn), 0714 Guiarati (qu). 0721 Hausa (ha) 0801 Hindi (hi). 0809 Croatian (hr), 0818 Hungarian (hu), 0821 Armenian (hv), 0825 Interlingua (ia), 0901 Interlingue (ie), 0905 Inupiak (ik), 0911 Indonesian (in), 0914 Icelandic (is). 0919 Hebrew (iw), 0923 Yiddish (ji), 1009 Javanese (jw), 1023 Georgian (ka), 1101 Kazakh (kk), 1111 Greenlandic (kl), 1112 Cambodian (km), 1113 Kannada (kn), 1114 Kashmiri (ks), 1119 Kurdish (ku). 1121

Kirahiz (kv). 1125 l atin (la), 1201 Lingala (In), 1214 Laothian (lo), 1215 Lithuanian (lt), 1220 Latvian (lv), 1222 Malagasy (mg), 1307 Maori (mi). 1309 Macedonian (mk) 1311 Malavalam (ml), 1312 Mongolian (mn), 1314 Moldavian (mo). 1315 Marathi (mr), 1318 Malay (ms), 1319 Maltese (mt) 1320 Burmese (mv). 1325 Nauru (na), 1401 Nepali (ne), 1405 Norwegian (no), 1415 Occitan (oc), 1503 Oromo (om), 1513 Oriya (or), 1518 Panjabi (pa), 1601 Polish (pl), 1612 Pashto, Pushto (ps), 1619 Quechua (qu), 1721 Rhaeto-Romance (rm), 1813 Urdu (ur), 2118 Kirundi (rn), 1814 Romanian (ro), 1815 Kinvarwanda (rw). 1823 Sanskrit (sa), 1901 Sindhi (sd), 1904 Sangho (sg), 1907 Serbo-Croatian (sh), 1908

Sinhalese (si) 1909 Slovak (sk), 1911 Slovenian (sl), 1912 Samoan (sm), 1913 Shona (sn), 1914 Somali (so), 1915 Albanian (sq), 1917 Serbian (sr), 1918 Siswati (ss) 1919 Sesotho (st), 1920 Sundanese (su) 1921 Swahili (sw), 1923 Tamil (ta), 2001 Teluau (te), 2005 Taiik (ta), 2007 Thai (th), 2008 Tigrinya (ti), 2009 Turkmen (tk), 2011 Tagalog (tl), 2012 Setswana (tn), 2014 Tonga (to), 2015 Turkish (tr), 2018 Tsonga (ts), 2019 Tatar (tt), 2020 Twi (tw), 2023 Ukrainian (uk). 2111 Uzbek (uz). 2126 Vietnamese (vi). 2209 Volapük (vo), 2215 Wolof (wo), 2315 Xhosa (xh), 2408 Yoruba (yo), 2515 Zulu (zu). 2621

## Country code list

#### Country, Country code, Country code letter

Argentina, 0118, ar Australia, 0121, au Austria, 0120, at Belgium, 0205, be Brazil, **0218**, **br** Canada, 0301, ca Chile. 0312. cl China. 0314. cn Denmark, 0411, dk Finland, 0609, fi France, **0618**, **fr** Germany, 0405, de

Hong Kong, 0811, hk India. 0914. in Indonesia, 0904, id Italy, 0920, it Japan, 1016, jp

Korea, Republic of, 1118, kr Malaysia, 1325, mv Mexico, 1324, mx Netherlands, 1412, nl New Zealand, 1426, nz Norway, 1415, no Pakistan, 1611, pk

Philippines, 1608, ph Portugal, 1620, pt Russian Federation, 1821, ru Singapore, 1907, sq Spain, 0519, es Sweden, 1905, se Switzerland, 0308, ch Taiwan, 2023, tw Thailand, 2008, th United Kingdom, 0702, gb United States of America, 2119, us

# Selecting languages using the language code list

Some of the language options (such as 'DVD Language' in the Setup Navigator) allow you to set your preferred language from any of the 136 languages listed in the language code list on the previous page.

- 1 Select 'Other Language'.
- 2 Use the joystick (left/right) to highlight either the language name or code number.
- 3 Use the joystick (up/down) to change the language or code number.
  - You can also use the number buttons if you're entering a language code.

See the language code list on the previous page for a complete list of languages and codes.

## **Glossary**

### Analog audio

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

#### Aspect ratio

The width of a TV screen relative to its height. Conventional TVs are 4:3 (in other words, the screen is almost square); widescreen models are 16:9 (the screen is almost twice as wide as it is high). See also **page 55**.

## Bonus Group (DVD-Audio only)

An 'extra' group on some DVD-Audio discs that requires a key number to access. See also *Group*. See also **page 62**.

### **Browsable pictures (DVD-Audio only)**

A feature of some DVD-Audio discs in which the user can browse still pictures recorded on the disc as the audio is played. See also *Slideshow*.

#### Digital audio

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

## Dolby Digital DIGITAL

Using a maximum of 5.1 channels of audio, this high quality surround system is used in many of the finer movie theaters around the world.

The on-screen display shows which channels are active, for example showing **3/2.1.** The **3** being the two front channels and the center channel; the **2** being the surround channels, and the **.1** being the LFE channel.

## DTS

DTS stands for Digital Theater System. DTS is a surround system different from Dolby Digital that has become a popular surround sound format for movies.

#### 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.

#### File extension

A tag added to the end of a filename to indicate the type of file. For example, ".mp3" indicates an MP3 file. See also **page 10**.

#### 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*.

#### MP3

MP3 (MPEG1 audio layer 3) is a compressed audio file format. Files are recognized by their file extension ".mp3" or ".MP3". See also **pages 10–11**.

### MPEG audio MPEG ) ( Multichannel

An audio format used on Video CDs and some DVD discs. This unit can convert MPEG audio to PCM format for wider compatibility with digital recorders and AV amplifiers. See also *PCM*.

#### MPEG video

The video format used for Video CDs and DVDs. Video CD uses the older MPEG-1 standard, while DVD uses the newer and much better quality MPEG-2 standard.

#### Packed PCM (DVD-Audio only)

A lossless compression system that enables more PCM audio to be stored on a DVD-Audio disc than would otherwise be possible.

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

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

### PBC (PlayBack Control) (Video CD only)

A system of navigating a Video CD through on-screen menus recorded onto the disc. Especially good for discs that you would normally not watch from beginning to end all at once—karaoke discs, for example.

#### 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*. See also **page 19**.

#### Regions (DVD-Video only)

These associate discs and players with particular areas of the world. This unit will only play discs that have compatible region codes. You can find the region code of your unit by looking on the rear panel. Some discs are compatible with more than one region (or all regions). See also page 11.

#### S1 S-video output

This S-video signal format includes aspect ratio information (4:3 or 16:9) within the video signal. TVs which are compatible with S1 S-video automatically switch aspect ratio according to the signal. See also **page 55**.

#### S2 S-video output

S2 is an enhanced version of S-video which, in addition to aspect ratio information, contains letterbox / pan & scan information. Widescreen TVs which are compatible with S2 S-video automatically switch aspect ratio according to the signal. See also **page 55**.

#### 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. Standard CD audio has a sampling frequency of 44.1kHz, which means 44,100 samples (measurements) per second. See also *Digital audio*.

#### Slidshow (DVD, Video CD)

A feature of some DVD discs in which still pictures recorded on the disc cycle automatically as the audio is played. See also *Browsable Picture*.

#### **Super Audio CD (SACD)**

Super Audio CD is a high quality audio disc format that can accommodate high sampling rate stereo and multi-channel audio, as well as conventional CD audio all on the same disc.

## **Troubleshooting**

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

Problem The disc won't play or is automatically ejected after loading.	<ul> <li>Cause / Remedy</li> <li>Make sure the disc is free from dirt and dust and is not damaged (page 68).</li> <li>Make sure the disc is loaded with the label side face-up and aligned properly in the disc tray guide.</li> <li>Incompatible region number: If the region number on a DVD-Video disc does not match the number on the player, the disc cannot be used (page 11).</li> <li>Condensation inside the player: Allow time for condensation to evaporate. Avoid using the player near an air-conditioning unit.</li> <li>Disc is loaded upside down: Reload the disc with the label side face up.</li> </ul>
DVD-Audio playback stops.	The disc may have been illegally copied.
Picture playback stops and the operation buttons cannot be used.	<ul> <li>Press ■, then start playback again (►).</li> <li>Switch the power off once, unplug from the wall socket, then plug back in and switch on again using the front panel <b>७</b></li> <li>STANDBY/ON button.</li> </ul>
New settings made in the Setup screen menus while a disc is playing are ineffective.	• Some settings can be changed while a disc is playing, but are not effective until the disc is stopped then restarted: Press ■, then start playback again (►).
Settings are canceled.	• When the power is cut due to power failure or by unplugging the power cord, settings will be canceled: Press <b>&amp; STANDBY/ON</b> on the front panel to turn the player off. Wait for <b>-OFF-</b> to disappear from the display, then unplug the power cord.
The remote control doesn't seem to work.	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 (page 9).  The batteries are exhausted: Put in new ones (page 9).

Problem	Cause / Remedy
No picture/No color.	Check that the VIDEO OFF indicator is not lit. If it is, press the VIDEO OFF button (page 18). 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. The video output is set to progressive but your TV/monitor is not compatible with progressive scan: Press the PROGRESSIVE button on the front panel to set to interlace (the indicator above the button should not be lit) (page 18). When set to progressive video output, there is no video output from the composite or S-video outputs.
Screen is stretched or aspect does not change.	<ul> <li>The TV Screen setting in the Initial Settings menu is incorrect (page 55). See page 70 for how to set it correctly for your TV/monitor.</li> <li>If your TV/monitor is connected using an S-video cable, try changing the S-Video Out setting (page 55).</li> </ul>
Picture disturbance during playback or the picture is dark.	This player is compatible with Macro-Vision 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 prevent recording or cause picture problems. This is not a malfunction.
No audio, or audio is distorted.	<ul> <li>No audio is output during slow motion playback or when scanning discs other than audio CDs</li> <li>Some DVD discs do not output digital audio: Switch your amplifier to the player's analog outputs.</li> <li>Check that the disc is free from dust and dirt, and that it is not damaged (page 68).</li> <li>Check that all interconnects are firmly inserted.</li> <li>Check that the plugs and terminals are free of dirt, oxide, etc. and clean if necessary. Also check the cable for damage.</li> <li>Make sure the player's output is not connected to the amplifier's phono (turntable) inputs.</li> <li>Check your amplifier/receiver's settings (volume, input function, speaker settings, etc.).</li> </ul>

Problem	Cause / Remedy
The analog audio is OK, but there appears to be no digital audio signal.	<ul> <li>Make sure that the <b>Digital Out</b> setting is set to <b>On</b> (page 53).</li> <li>Check that the Dolby Digital, DTS and MPEG out settings (pages 53-54) are suitable for your amplifier/receiver—check the instruction manual that came with your amplifier/receiver.</li> <li>SACDs and some DVD-Audio discs do not output digital audio. Listen through the player's analog audio outputs.</li> </ul>
Noticeable difference in DVD and CD volume.	This is due to differences in the audio format and is not a malfunction.
Cannot play multi-channel audio.	<ul> <li>Make sure that Audio Output Mode is set to 5.1 Channel (page 64).</li> <li>Check that the Dolby Digital, DTS and MPEG Out settings (pages 53-54) are suitable for your amplifier/receiver—check the instruction manual that came with your amplifier/receiver.</li> <li>DVD-Audio and SACDs do not output multichannel digital audio. Listen through the player's analog outputs.</li> <li>Check that the settings in the Speaker Installation screen are correct (page 64).</li> <li>Check the audio options available from the disc menu.</li> </ul>
Cannot listen to high-sampling rate audio through the digital output.	<ul> <li>Make sure that Linear PCM Out is set to Down Sample Off (page 54).</li> <li>As a copy-protection measure, some DVDs do not output 96kHz audio. In this case, even if set to Down Sample Off, the player automatically outputs the audio at 48 kHz. This is not a malfunction.</li> </ul>
Cannot output 192kHz or 176.4kHz digital audio.	The player does not output digital audio at these sampling rates. The digital output is automatically downsampled.
Cannot output 96kHz or 88.2kHz digital audio.	Check that Linear PCM Out is set to Down Sample Off (page 54).     Some discs are digital copy protected and do not output high sampling rate digital audio. In this case the output is automatically downsampled.
No DTS audio output.	<ul> <li>If this unit is connected to a non-DTS compatible amplifier or decoder using a digital audio cable, set DTS Out to DTS ➤ PCM. If you do not do this, noise will be output when you play a DTS disc.</li> <li>If this unit is connected to a DTS-compatible amplifier or decoder using a digital audio cable, check the amplifier settings, and that the cable is properly connected.</li> </ul>

Problem	Cause / Remedy
Audio mix does not sound right or sounds incomplete (for example, inaudible ).	Make sure that <b>Audio Output Mode</b> is set to <b>2 Channel</b> if you've connected to the stereo inputs on your amplifier or TV (page 62).
Disc containing the MP3 tracks won't play.	This player is compatible with multi-session discs, but only plays sessions that are closed.  If the message UNPLAYABLE MP3 FORMAT is displayed when you try to play a disc/track, check the audio file formats. For more information see pages 10-11.
Can't hear effect of TruSurround.	<ul> <li>TruSurround does not work with CD, MP3, DVD-Audio, SACD or 96kHz linear PCM DVD.</li> <li>The TruSurround effect is only output through the AUDIO OUT (2ch) analog audio outputs.</li> <li>Make sure that Audio Output Mode is set to 2 Channel (page 64).</li> <li>The effectiveness of TruSurround varies with the disc.</li> </ul>



• Static electricity or other external influences may cause malfunctioning of this unit. In this case, unplug the power cord and then plug back in. This will usually reset the unit for proper operation. If this does not correct the problem, please consult your nearest Pioneer service center.

## **Specifications**

General	
System DVD Player	
Power requirements AC 120 V, 60 Hz	
Power consumption	,
Power consumption (standby) 0.3 W Weight 2.6 kg (5lb 12oz)	
Dimensions 420 (W) x 69 (H) x 278 (D) mm	
(16 <sup>9</sup> / <sub>16</sub> (W) x 2 <sup>3</sup> / <sub>4</sub> (H) x 11 (D) in.)	
Operating temperature +5°C to +35°C	
(+36°F to +96°F)	
Operating humidity 5% to 85%	
(no condensation)	
Component Video output (Y, P <sub>B</sub> , P <sub>R</sub> )	
Output levelΥ: 1.0 Vp-p (75 Ω)	
P <sub>B</sub> , P <sub>R</sub> : 0.7 Vp-p (75 Ω)	
Jacks RCA jacks	i
S-Video output	
Y (luminance) - Output level 1 Vp-p (75 $\Omega$ ) C (color) - Output level 286 mVp-p (75 $\Omega$ )	
Jack S-Video jack	
	٠
<b>Video output</b> Output level 1 Vp-p (75 Ω)	
JackRCA jack	
Audio output (1 stereo pair)	
Output level	
200 mVrms (1 kHz, –20 dB)	
Number of channels	
Jacks RCA jack	i
Audio output (multi-channel / L, R, C,	
SW, LS, RS)	
Output level During audio output	
200 mVrms (1 kHz, –20 dB)	
Number of channels6	į

Jacks ...... RCA jack

## **Digital audio characteristics**

Frequency response	
4 Hz to 44 kH	Iz(DVD fs: 96 kHz)
4 Hz to 88 kHz (DVD-	Audio fs: 192 kHz)
S/N ratio	118 dB
Dynamic range	108 dB
Total harmonic distortion	
Wow and flutter Limi	
(0.001% \	N. PEAK) or lower
Digital output	
Optical digital output	Optical digital jack
Coaxial digital output	RCA jack
Othor torminals	
Other terminals	Miniinal (2 E a)
Control in	
Control in Control out	
Control in Control out  Accessories	Minijack (3.5 ø)
Control in Control out  Accessories Stereo audio cable	Minijack (3.5 ø)
Control in Control out  Accessories Stereo audio cable Video cable	Minijack (3.5 ø) 1
Control in	Minijack (3.5 ø) 1 1
Control in	Minijack (3.5 ø) 1 1 1
Control in	Minijack (3.5 ø) 1 1 1 1
Control in	Minijack (3.5 ø)11111



## Note

• The specifications and design of this product are subject to change without notice, due to improvement.

Should this product require service in the U.S.A. and you wish to locate the nearest Pioneer Authorized Independent Service Company, or if you wish to purchase replacement parts, operating instructions, service manuals, or accessories, please call the number shown below.

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.

For warranty information please see the Limited Warranty sheet included with your product.

Should this product require service in Canada, please contact a Pioneer Canadian Authorized Dealer to locate the nearest Pioneer Authorized Service Company in Canada.

Alternatively, please contact the Customer Satisfaction Department at the following address:

Pioneer Electronics of Canada, Inc. Customer Satisfaction Department 300 Allstate Parkway, Markham, Ontario L3R OP2 (905)479-4411 1(877)283-5901

For warranty information please see the Limited Warranty sheet included with your product.

Si ce produit doit être réparé au Canada, veuillez vous adresser à un distributeur autorisé Pioneer du Canada pour obtenir le nom du Centre de Service Autorisé Pioneer le plus près de chez-vous. Vous pouvez aussi contacter le Service à la clientèle de Pioneer:

Pioneer Electroniques du Canada, Inc. Service à la clientèle 300, Allstate Parkway, Markham, Ontario L3R OP2 (905)479-4411 1(877)283-5901

Pour obtenir des renseignements sur la garantie, veuillez vous reporter au feuillet sur la garantie restreinte qui accompagne le produit.

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