Pioneer *sound.vision.soul*

DVD Player
DV-354

DVD VIDEO™

COMPACT disc DIGITAL AUDIO

COMPACT disc DIGITAL VIDEO

Operating Instructions

IMPORTANT

A

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

CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN

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

AA

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

H002_En

-IMPORTANT SAFETY INSTRUCTIONS—

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

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

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

FOLLOW INSTRUCTIONS — All operating and use instructions should be followed

CLEANING — 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 to

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

LOCATION -The appliance should be installed in a stable location

NONUSE PERIODS -The power cord of the appliance should be unplugged from the outlet when left 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 fatal

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

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

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

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

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

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

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

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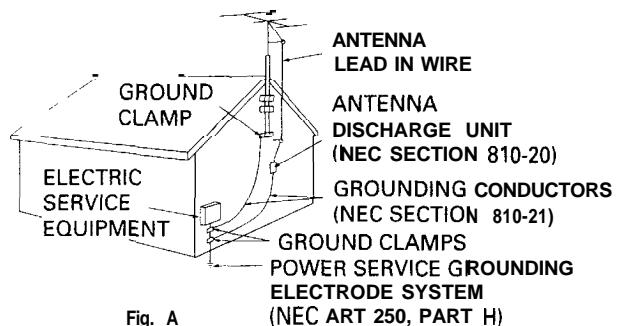

ANTENNA LEAD IN WIRE
GROUND CLAMP
ANTENNA DISCHARGE UNIT (NEC SECTION 810-20)
ELECTRIC SERVICE EQUIPMENT
GROUNDING CONDUCTORS (NEC SECTION 810-21)
GROUND CLAMPS
POWER SERVICE GROUNDING ELECTRODE SYSTEM (NEC ART 250, PART H)

Fig. A

NEC — NATIONAL ELECTRICAL CODE

WARNING: TO PREVENTFIRE OR SHOCK [For U.S.

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   H011_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   H012_En

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 Canadienl
Cet appareil numérique de la classe B est conforme 8 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

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 you've just purchased is only the start of your 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 you 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 distortion-and, 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.

Decibel 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 disposals, alarm clock at two feet.

THE FOLLOWING NOISES CAN BE DANGEROUS UNDER CONSTANT EXPOSURE

90	Subway, motorcycle, truck traffic, lawn mower
100	Garbage truck, chain saw, pneumatic drill
120	Rock band concert in front of speakers, thunderclap
140	Gunshot blast, jet plane
180	Rocket launching pad

Information courtesy of the Deafness Research Foundation.

S001A_en

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.*

Contents

Features

24-bit/192kHz compatible DAC

This player is fully compatible with high
sampling-rate discs, capable of delivering
better-than-CD sound quality in terms of
dynamic range, low-level resolution and
high-frequency detail.

Excellent audio performance with Dolby*¹ Digital and DTS*² software

When connected to a suitable AV amplifier
or receiver, this player gives great surround
sound with Dolby Digital and DTS discs,

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

· Audio/video cable (red/white/yellow plugs)

• Power cable

• These operating instructions

• Warranty card

Putting the batteries in the remote control
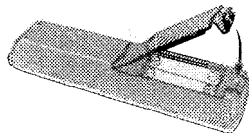
1   **Open the battery compartment cover on the back of the remote control.**

2   **Insert two AA/R6P batteries into the battery compartment following the indications ($\oplus$, $\ominus$) inside the compartment.**
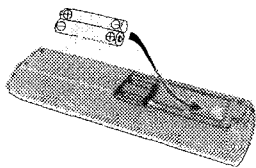
3 **Close the cover.**

Note

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

• Don't mix new and old batteries together.

• Don't use different kinds of 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,

H048 En

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 7 meters (23ft.)

• Remote operation may become unreliable if strong sunlight or fluorescent light is shining on the unit's remote sensor.

• Remote controllers for different devices can interfere with each other. Avoid using remotes for other equipment located close to this unit.

• Replace the batteries when you notice a fall off in the operating range of the remote.

Disc / Content Format Playback Compatibility

General Disc Compatibility

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

DVD-Video   Audio CD   Video CD

CD-R   CD-RW

FUJICOLOR CD

FUJICOLOR CD COMPATIBLE

* ⚑ is a trademark *of FUJI PHOTO FILM Co. Ltd.*

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

    DVD-Audio, SACD, DVD-RAM, DVD-ROM, CD-ROM*

    *Except those that contain MP3 files formatted as specified in the "Compressed *Audio Compatibility"* section, or JPEG files.

- 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. Thrs may be caused by a number of possibilities, including but not limited to: the type of disc used; the type of recording; damage, dirt or condensation on either the disc or the player's pick-up lens.
    See below for notes about particular software and formats.

CD-R/RW Compatibility

- This unit will play CD-R and CD-RW discs recorded in CD Audio or Video CD format, or as a CD-ROM containing MP3 audio or JPEG files. 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.
- Unfinalized CD-RIRW discs recorded as CD Audio can be played. but the full Table of Contents (playing time, etc.) will not 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 not play DVD-RW discs that were recorded using the Video Recording format.
- This unit cannot record DVD-R/RW discs
- Unfinalizcd DVD-R/RW discs cannot be played in this player

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- instances, check with the software publisher for more detailed information.
- Check the DVD-R/RW or CD-R/RW software disc boxes for additional compatibility information.

Compressed Audio Compatibility

- This unit will play CD-ROM discs containing files saved in the MPCG-1 Audio Layer 3 format (MP3) with a smapling rate of 32. *44.1* or 48kHz. Incompatible files will not play and "UNPLAYABLE" will be displayed on the unit.

- Fixed bit-rate files are recommended. Variable bit-rate (VBR) files are playable, but playing titne may not be shown correctly.

- The CD-ROM used to compile your MP3 files must be ISO 9660 I evel 2 compliant.

- CD physical format. Model, Mode2 XA Form1

- This player only plays tracks that are named with the file extension .mp3" or ".MP3".

- This player is not compatible with multi-session discs. If you try and play a multi-session disc, only the first session will be played.

- Use CD-R or CD-RW media for recording your MP3 files. The disc must be finalized in order to play in this unit.

- This player can recognize a combined total of up to 250 tracks and folders. If a disc containing over 250 tracks/folders is loaded only the first 350 tracks/folders recorded on the disc will be playable.

- Folder and track names (excluding the ".mp3" extension) are displayed.

- There are many different recording bit-rates 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.

JPEG file Compatibility

- This player is compatible with FUJICOLOR CD and Kodak Picture CD formats, as well as CD-R/RW/ROMs containing JPEG files (up to 999 files).

- Baseline JPEG and EXIF 2.1* still image files up to 8 mega-pixels are supported (maximum vertical and horizontal resolution is 5120 pixels). *File format* used *by digital still cameras*

- The CD-R/RW/ROM containing the JPEG files must be ISO 9660 Level 2 compliant.

- CD physical format: Model, Mode2 XA Form1

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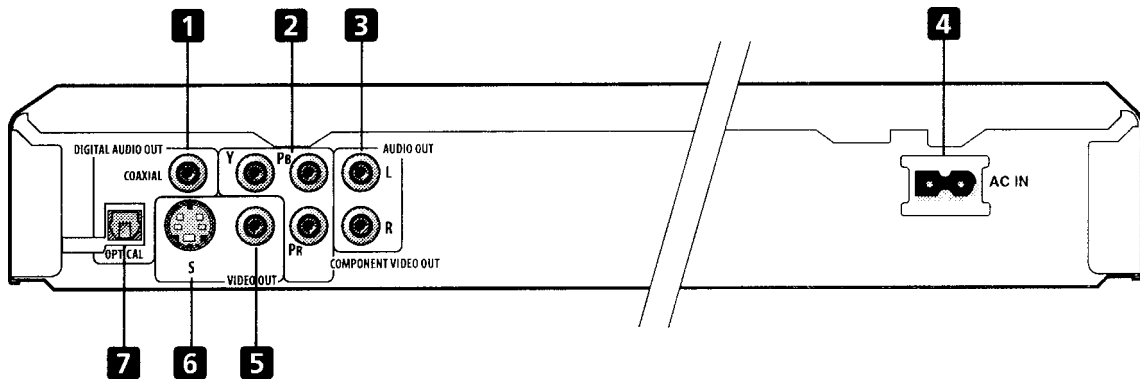
When connecting this player up to your TV, AV receiver or other components, make sure that all components are switched off and unplugged.

1 **DIGITAL AUDIO OUT – COAXIAL**
This is a digital audio output for connection to a PCM, Dolby Digital, DTS and/or MPEG-compatible AV receiver that has a coaxial digital input,

Connect using a commercially available coaxial digital audio cable.

2 COMPONENT VIDEO OUT
This is a 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.

3 **AUDIO OUT L / R**
This pair of analog audio outputs connects to your TV, AV receiver or stereo system, Even if you are connecting up one of the digital outputs, we still recommend you connect these jacks.

Use the supplied audio/video cable when connecting these jacks. Match the colors of the jacks and cables for correct stereo sound.

4 **AC IN**
Connect the supplied power cord here, then plug into a power outlet.

5 VIDEO OUT
This is a standard video output that you can connect to your TV or AV receiver using the supplied audio/video cable.

6 S (S-Video output)
This is an S-video output that you can use instead of the video output described in 5 above,

7 **DIGITAL AUDIO OUT – OPTICAL**
This is a digital audio output for connection to a PCM, Dolby Digital, DTS and/or MPEG-compatible AV receiver that has an optical digital input.
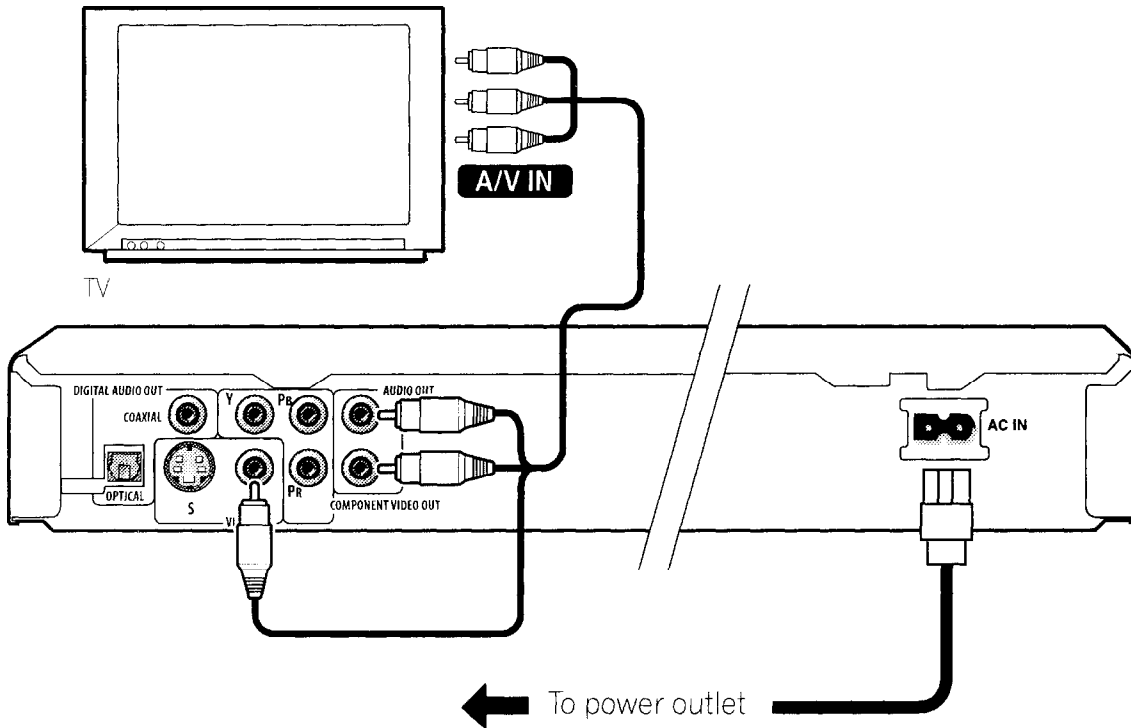
Connect using a commercially available optical digital audio cable.

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 staring on **page 57.**

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 the speakers in your TV.

 Important

• This player is equipped with copy protection technology. Do not connect this player to your TV via a VCR (or your VCR via this player) 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 jacks to a set of A/V inputs on your TV.**
Use the supplied audio/video cable, connecting the red and white plugs to the audio outputs and the yellow plug to the video output. Make sure you match up the left and right audio outputs with their corresponding inputs for correct stereo sound.

See below if you want to use S-Video or component video cables for the video connection.

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

⚠ Important

ı Before unplugging the player from the power outlet, make sure you first switch it into standby using either the front panel ⏻ **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).

1 **Use an S-Video cable (not supplied) to connect the S-VIDEO OUT to an S-Video input on your TV, monitor or AV receiver.**
Line up the small triangle above the jack with the same mark on the plug before plugging in.
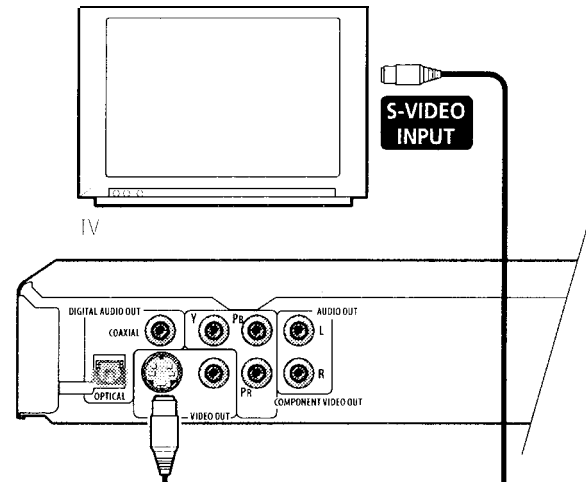
Connecting using the component video output

You can use the component video output instead of the **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.**
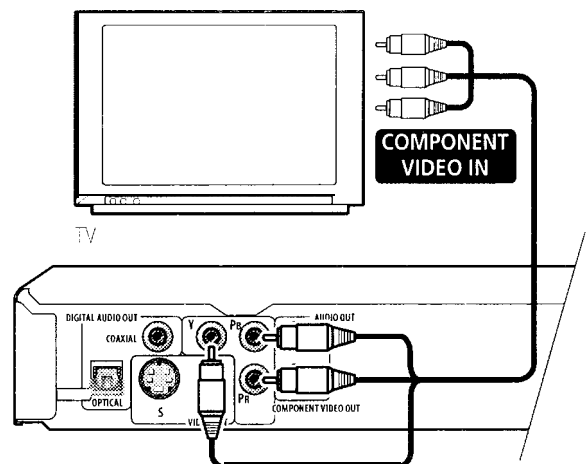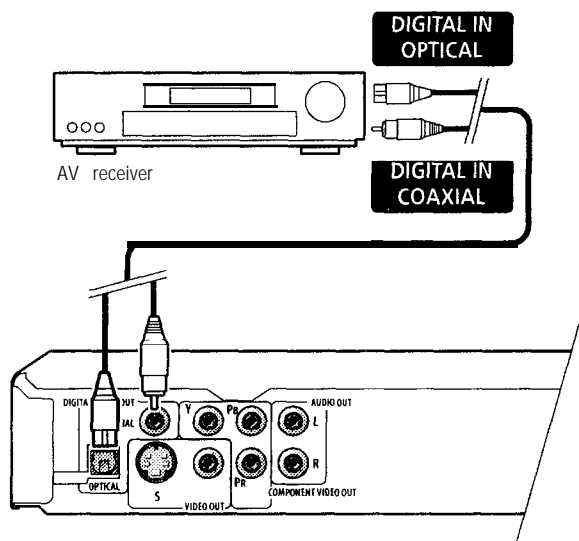
Connecting to an AV receiver

To enjoy multichannel surround sound you need to connect this player to an AV receiver using a digital output. There are both coaxial and optical digital jacks; use whichever is convenient,

In addition to a digital connection, we recommend also connecting using the stereo analog connection.

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).

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.

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 OUT jacks on this player to a set of analog audio and video inputs on your AV receiver.**
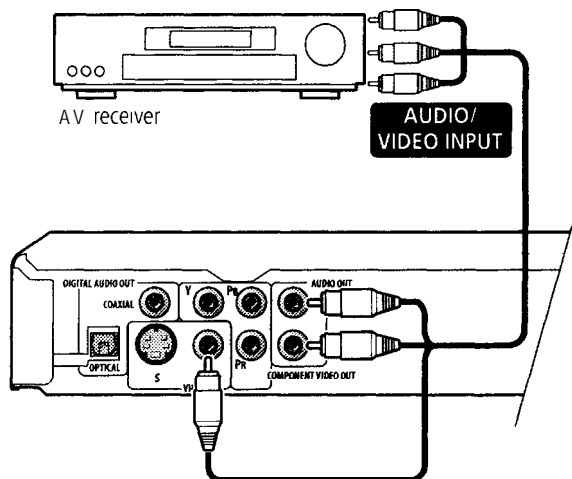
The diagram shows standard video connections, but you can alternatively use the S-Video or component video connections if they're available.

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

⚡ FAQ

- *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
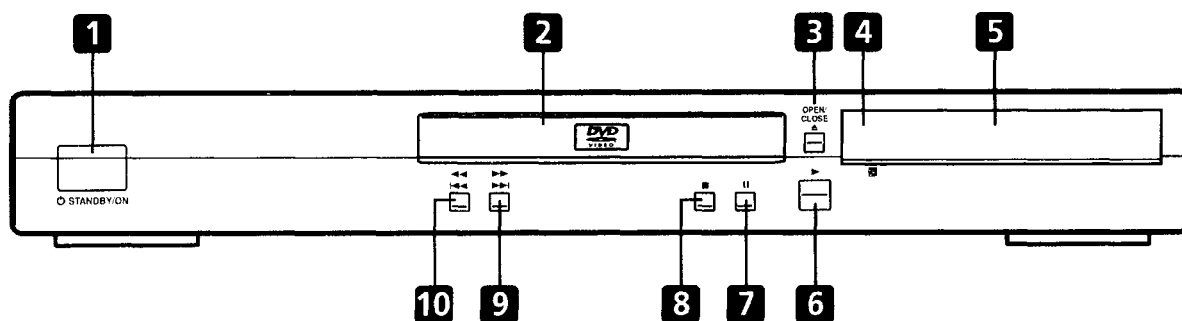
1 ⏻ STANDBY/ON
Press to switch the player on or into standby

2 Disc tray

3 ⏏ OPEN/CLOSE
Press to open or close the disc tray

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

5 Display
See **page 18** for a description of the display

6 ►
Press to start or resume playback

7 ‖
Press to pause playback, Press again to restart

8 ■
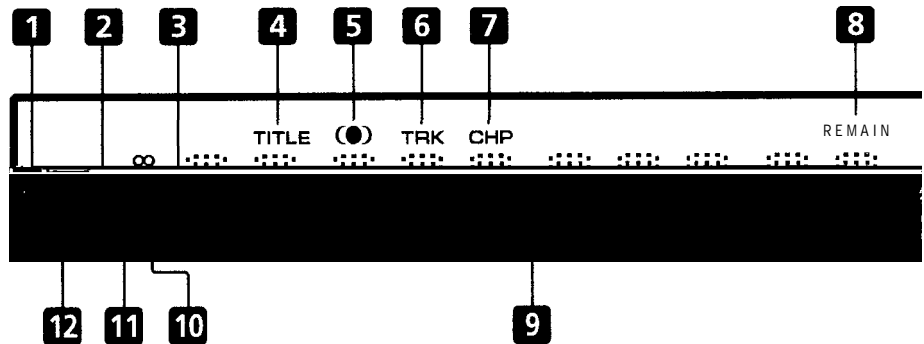Press to stop the disc (you can resume playback by pressing ► (play))

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

Display

1 DTS
Lights when a DTS soundtrack is playing

2
Lights during multi-angle scenes on a DVD disc

3 GUI (Graphical User Interface)
Lights when a menu is displayed on-screen

4 TITLE
Indicates that the character display is showing a DVD title number

5
Lights when ￼V/TruSurround is selected

6 TRK
Indicates that the character display is showing a CD or Video CD track number

7 **CHP**
Indicates that the character display is showing a DVD chapter number

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

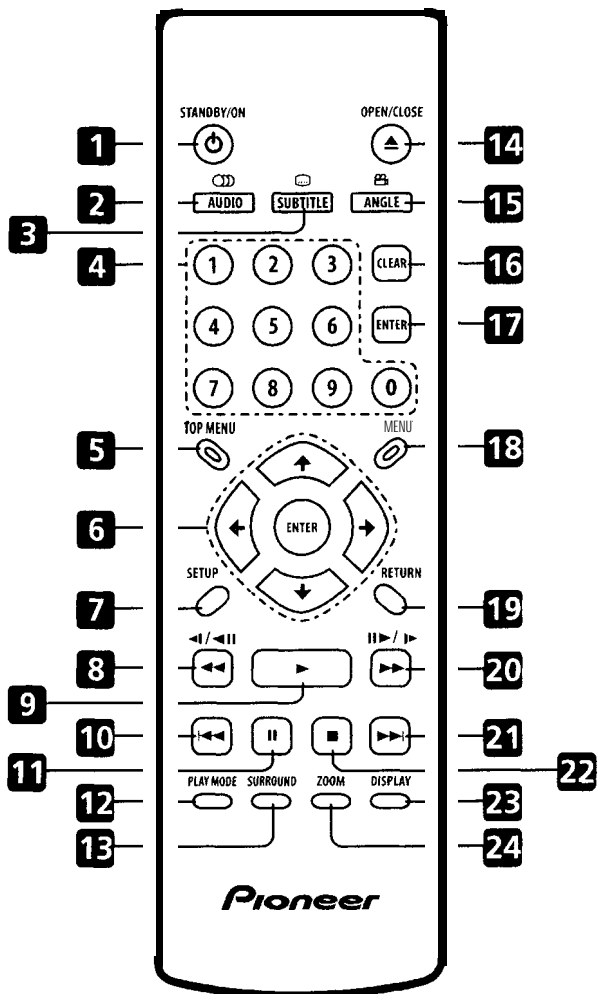**9 Character display**

10 II
Lights when a disc is paused

11 ►
Lights when a disc is playing

12 ￼D
Lights when a Dolby Digital soundtrack is playing

Remote control

1 ⏻ STANDBY/ON
Press to switch the player on or into standby

2 AUDIO
Press to select the audio channel or language **(pages 36-37)**

3 SUBTITLE
Press to select a subtitle display **(page 36)**

4 Number buttons

5 TOP MENU
Press to display the top menu of a DVD disc

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

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

8 ◄◄ and ◄I/◄II
Use for reverse slow motion playback, frame reverse and reverse scanning. See **page 30**

9 ►
Press to start or resume playback

10 I◄◄
Press to jump to the beginning of the current chapter or track, then to previous chapters/ tracks

11 II
Press to pause playback; press again to restart

12 PLAY MODE
Press to display the Play Mode menu
(pages 31-36) (You can also get to the Play
Mode menu by pressing **SETUP** and select-
ing **Play Mode)**

13 SURROUND
Press to activate/switch off ◻V/TruSurround

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 37)**

16 CLEAR
Press to clear a numeric entry

17 ENTER
Use to select menu options, etc. (works
exactly the same as the **ENTER** button in 6
above)

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

19 RETURN
Press to return to a previous menu screen

20 ▶▶ and ‖▶/|▶
Use for forward slow motion playback, frame
advance and forward scanning. See **page 30**

21 ▶▶|
Press to jump to the next chapter or track

22 ◻
Press to stop the disc (you can resume
playback by pressing ▶ (play))

23 DISPLAY
Press to display information about the disc
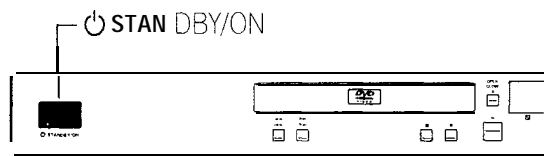playing **(page 38)**

24 ZOOM
Press to change the zoom level **(page 37)**

Switching on

After making sure that everything is connected properly and that the player is plugged in, press ⏻ **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.

⏻ STAN DBY/ON

❔ FAQ

- *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**.

✏️ Note

- This player features a screen saver and an auto power off function. If the player is stopped and no button is pressed for five minutes, the screen saver starts, If the disc tray is closed but no disc is playing and no control is pressed for 30 minutes, the player automatically goes into standby.

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.
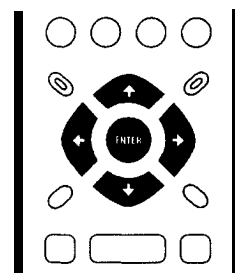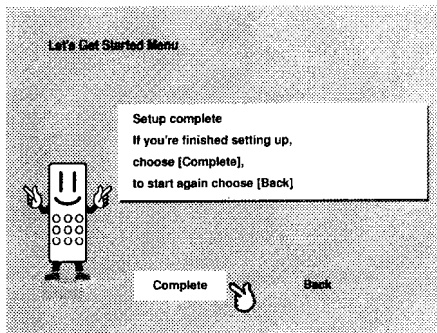

1 **Press ENTER to move on to the next screen.**
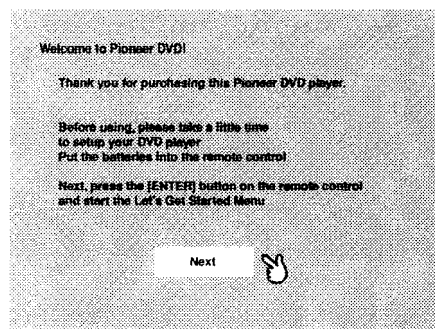
2   Use the ← / → (cursor left/right) buttons to select either 'Wide screen (16:9)' or 'Standard size screen (4:3)' according to the kind of TV you have, then press ENTER.
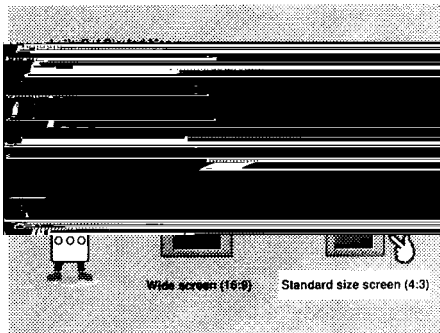
3   Press ENTER again to finish setting up.

- Select **Back** then press **ENTER** if you want to go back and change the setting you just made.
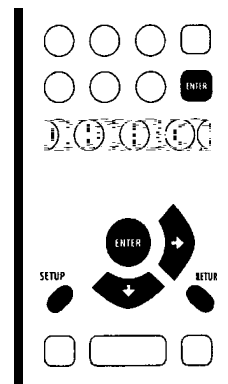
Using the on-screen displays

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 cursor buttons to highlight an item on-screen, then press **ENTER.**

Button	What it does
SETUP	Display/exit the on-screen display
← ↑ ↓ →	Changes the highlighted menu item
ENTER	Selects the highlighted menu item (both ENTER buttons work in exactly the same way)
RETURN	Returns to the main menu without saving changes

Tip

• The button guide at the bottom of every OSD screen shows you which buttons you'll need to use 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.
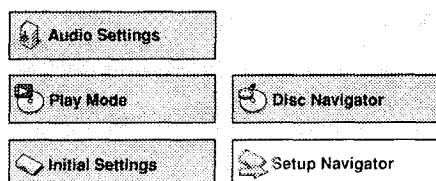
1 **If a disc is playing, press ■ (stop).**
Also turn on your TV and make sure that it is set to the correct video input.

2 Press SETUP.
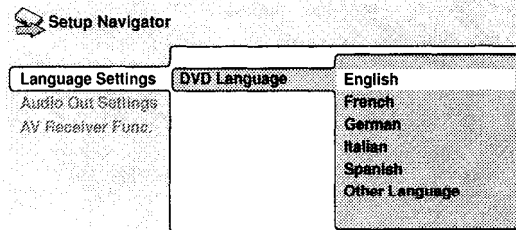The on-screen display (OSD) appears,

Audio Settings

Play Mode   Disc Navigator

Initial Settings   Setup Navigator
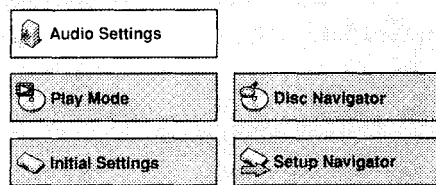
3 Select 'Setup Navigator'.

Audio Settings

Play Mode   Disc Navigator

Initial Settings   Setup Navigator
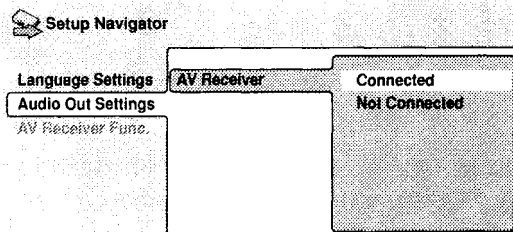
4 Select a DVD language.
Some DVD discs feature on-screen menus, soundtracks and subtitles in several languages. Set your preferred language here.

Setup Navigator

Language Settings	DVD Language	English
Audio Out Settings		French
AV Receiver Func.		German
		Italian
		Spanish
		Other Language

• 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 57** for detailed information.

5 Did you connect this player to an amplifier or AV receiver?
Select **Connected** or **Not Connected.**

Setup Navigator

| Language Settings | AV Receiver | Connected |
| Audio Out Settings | | Not Connected |
| AV Receiver Func. | | |

• If you selected **Not Connected** here, that completes setup using the Setup Navigator. Press **ENTER** to exit.

6 Did you connect this player to an AV receiver using a digital output?
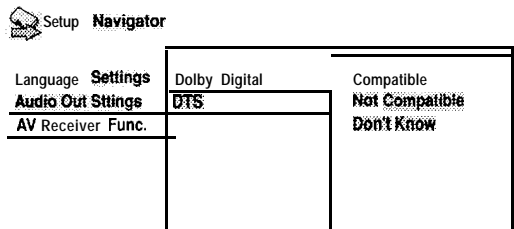Select **Connected** or **Not Connected,**
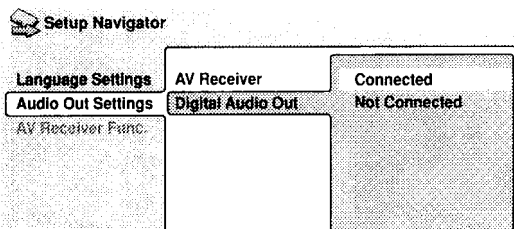
- If **you** selected **Not Connected** here, that completes setup using the Setup Navigator. Press **ENTER to** exit.
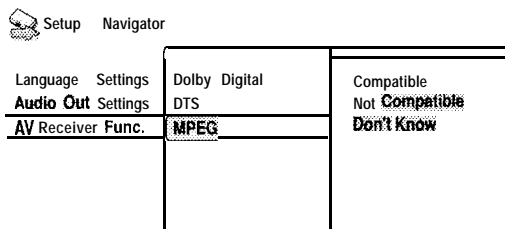
7 Is your AV receiver Dolby Digital compatible?
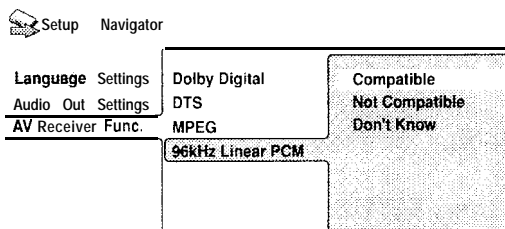Select **Compatible, Not Compatible** or **Don't Know.**
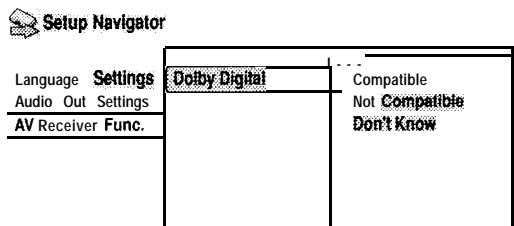
8 Is your AV receiver DTS compatible?
Select **Compatible, Not Compatible** or **Don't Know.**
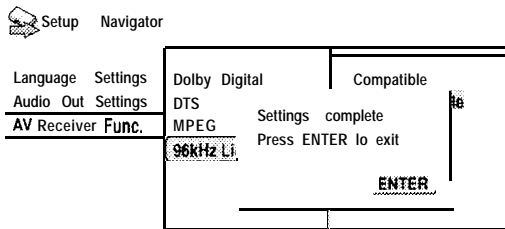

9 Is your AV receiver MPEG compatible?
Select **Compatible, Not Compatible** or **Don't Know,**

10 Is your AV receiver compatible with 96kHz Linear PCM audio?
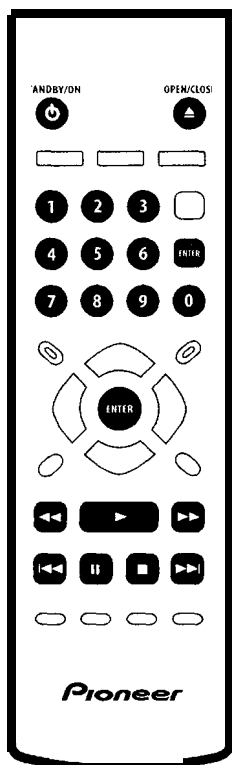Select **Compatible, Not Compatible** or **Don't Know.**

11 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, Video CD and MP3 discs are covered here. Further functions are detailed in the next chapter,


1 **If the player isn't already on, press Φ 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.

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

3 Load a disc.
Load a disc with the label side facing up, using the disc tray guide to align the disc (if you're loading a double-sided DVD disc, load it with the side you want to play face down),
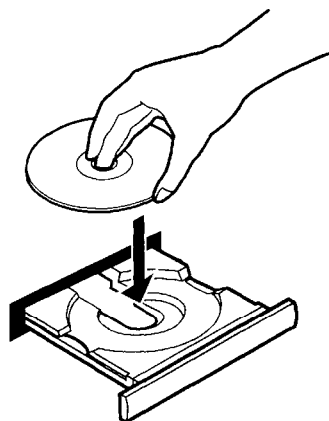
4 Press ▶ (play) to start playback.
If you're playing a DVD or Video CD, a menu may appear. See **pages 27, 28** for how to navigate these.

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,

If you loaded a CD/CD-R/RW containing JPEGs, a slideshow will start. See **page 50** for more on playing these discs.

🔖 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 55.**

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 52.**

- *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 52** 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-Audio or DVD-ROM. See **page 10** for more on disc compatibility.

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

  For digital copy-protection purposes, some 96kHz DVD discs are automatically downsampled to 48kHz. This is not a malfunction, With these kinds of discs, if you want to enjoy high-quality analog audio, set **Digital Out to Off (page 41)**, and **96kHz PCM Out to 96kHz (page 42).**

Basic playback controls

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

Button	What it does
►	Starts playback. DVD and Video CD: if the display shows **RESUME,** 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 **RESUME.** Press ■ (stop) again to cancel the resume function.
◄◄	Press to start fast reverse scanning. Press ► (play) to resume normal playback.
►►	Press to start fast forward scanning. Press) (play) to resume normal playback
I◄◄	Skips to the start of the current track or chapter, then to previous tracks/chapters.
►►I	Skips to the next track or chapter.
Numbers	Use to enter a title/track number. Press **ENTER to select** (or wait a few seconds). • If the disc is stopped, playback starts from the selected title (for DVD) or track number (for CD/Video CD/MP3). • If the disc is playing, playback jumps to the start of the selected chapter or track.

Front panel controls

The ▶ (play), ■ (stop), and II (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 (I◄◄ ◄◄ and ▶▶ ▶▶I) work slightly differently from the remote buttons.
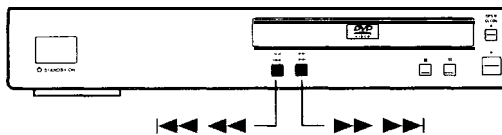
Press and hold for fast scan; press for track/chapter skip,

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.

• Track skip and number buttons for track selection do not work with unfinalized CD-R/RW discs.

DVD-Video disc menus

Many DVD-Video discs contain menus from which you can select what you want to watch. 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 DVD-Video menus are displayed automatically when you start playback; others only appear when you press **MENU** or **TOP MENU.**
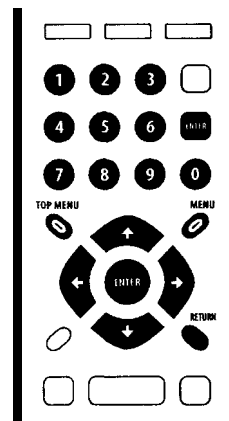
Button	What it does
TOP MENU	Displays the 'top menu' of a DVD disc-this varies with the disc.
MENU	Displays a DVD disc menu—this varies with the disc and may be the same as the 'top menu'.
← ↑ ↓ →	Moves the cursor around the screen.
ENTER	Selects the current menu option.
RETURN	Returns to the previously displayed menu screen.
Numbers	Highlights a numbered menu option (some discs only). Press **ENTER** to select.

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 to select a
track, rather than the ▶ (play) button.
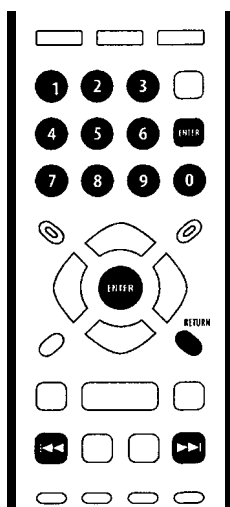
Button	What it does
RETURN	Displays the PBC menu
Numbers	Use to enter a numbered menu option. Press **ENTER to** select.
▐◀◀	Displays the previous menu page (if there is one).
▶▶▐	Displays the next menu page (if there is one).

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 22.**

Many of the functions covered in this chapter apply to DVD discs, Video CDs, CDs and MP3 discs, although the exact operation of some vanes 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.

1 **Press SETUP and select 'Disc Navigator' from the on-screen display.**
Alternatively, if a CD, Video CD or MP3 disc is loaded, **you** can press **MENU,** which takes you straight to the Disc Navigator screen.
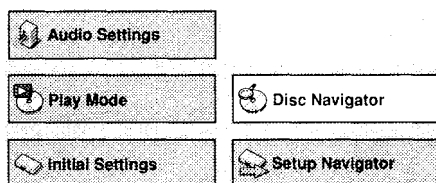
2 Select what you want to play.
Depending on the type of disc you have loaded, the Disc Navigator looks slightly different.

The screen for DVD discs shows the titles on the left and the chapters on the right. Select a title, or a chapter within a title.
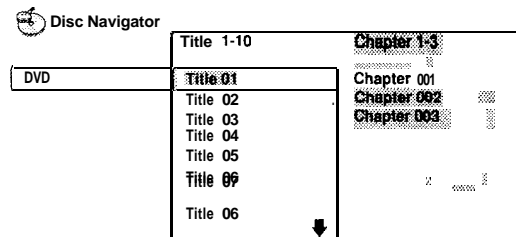
The screen for CDs and Video CDs shows a list of tracks,
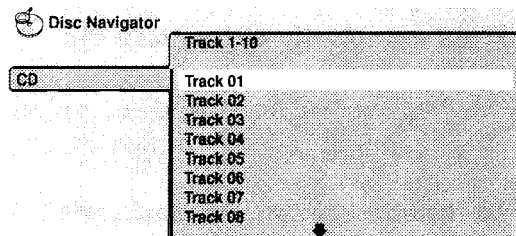
The screen for an MP3 disc shows the folder names on the left and the track names on the right (note that if there are more than 16 folders or names that contain accented or non-roman characters, tracks and folders may show up with generic names ~ F-033, T-035, etc.).
Select a folder, or a track within a folder.
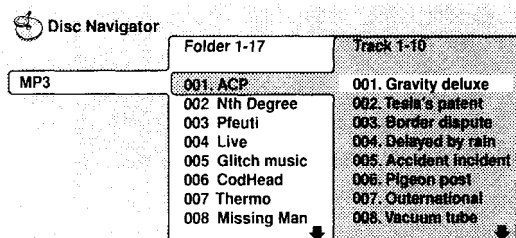
Playback starts after **you** press **ENTER.**

29
En

Tip

- The Disc Navigator is not available unless there is a disc loaded.

- It's not possible to use the Disc Navigator when playing a Video CD in PBC mode, or an unfinalized CD-R/RW disc.

- Another way to find a particular place on a disc is to use one of the search modes, See Searching a disc on **page 36.**

Scanning discs

You can fast-scan discs forward or backward at various different speeds,

1   **During playback, press u 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 audio CDs and MP3 discs.

- When scanning a Video CD or MP3 track, playback automatically resumes at the end or beginning of the track.

- There is no sound while scanning DVDs and Video CDs, and no subtitles while scanning DVDs.

. Depending on the disc, normal playback may automatically resume when a new chapter is reached on a DVD disc.

Playing in slow motion

You can play DVDs and Video CDs at four different forward slow motion speeds, and DVDs 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 on-screen.
- There is no sound during slow motion playback.

3   **Press repeatedly to change the slow motion speed.**
- The slow motion speed is displayed on-screen.

4   **To resume normal playback, press ► (play).**

Note

- 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.

Frame advance/frame reverse

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

1   **During playback, press II (pause).**

2   **Press ◄I/◄II or II►/I► to reverse or advance a frame at a time.**

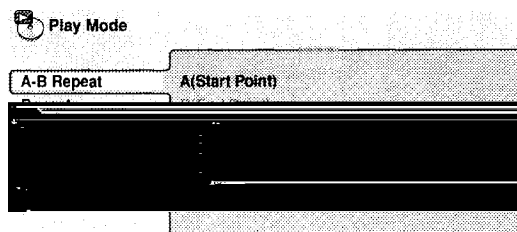3   **To resume normal playback, press ► (play).**

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 with a DVD disc, the picture may 'move' in an unexpected way. This is not a malfunction.

Looping a section of a disc

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

A-B Repeat is not available with MP3 discs, Video CDs in PBC mode, or unfinalized CD-R/RW discs.

1   **During playback, press PLAY MODE and select 'A-B Repeat' from the list of functions on the left.**

Play Mode

| A-B Repeat | A(Start Point) |

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

Play Mode

A-B Repeat	A(Start Point)
Repeat	B(End Point)
Random	Off
Program	
Search Mode	
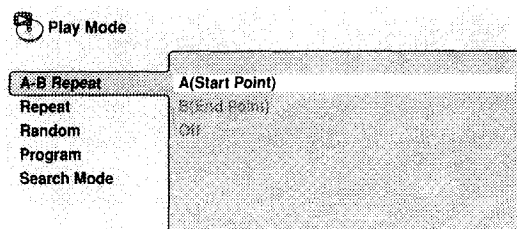
3   **Press ENTER on 'B(End Point)' to set the loop end point.**

Play Mode

A-B Repeat	A(Start Point)
Repeat	B(End Point)
Random	Off
Program	
Search Mode	
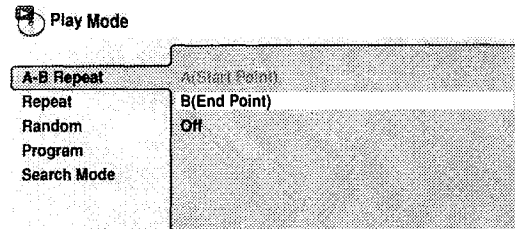
After pressing **ENTER,** playback jumps back to the start point and plays the loop.

  ı The minimum loop time is 2 seconds,

4   **To resume normal playback, 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 33).**

Repeat play is not available with Video CDs in PBC mode, or unfinalized CD-R/RW discs.

1   **During playback, press PLAY MODE and select 'Repeat' from the list of functions on the left.**

Play Mode

A-B Repeat	Title Repeat
Repeat	Chapter Repeat
Random	Repeat Off
Program	
Search Mode	
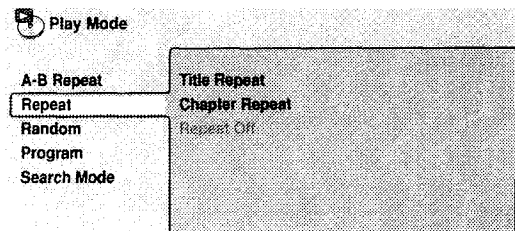
2 Select a repeat play option.

If program play is active, select **Program Repeat** to repeat the program list, or **Repeat** Off to cancel.

For DVD discs, select **Title Repeat** or **Chapter Repeat** (or **Repeat Off).**
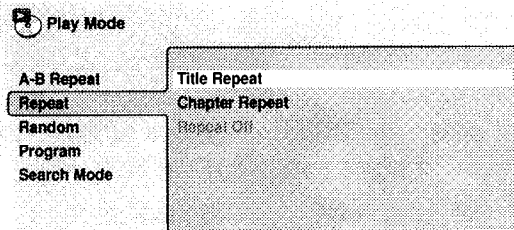
For CDs and Video CDs, select **Disc Repeat** or **Track Repeat** (or **Repeat Off),**

For MP3 discs, select **Disc Repeat, Folder Repeat** or **Track Repeat** (or **Repeat Off).**
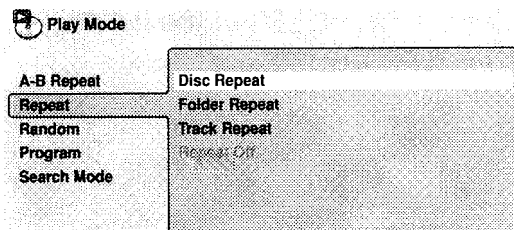
Note

• You can't use repeat and random play at the same time.

. If you switch camera angle during repeat play, repeat play is canceled.

Using random play

Use the random play function to play titles or chapters (DVD) 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.

1 **Press PLAY MODE and select 'Random' from the list of functions on the left.**
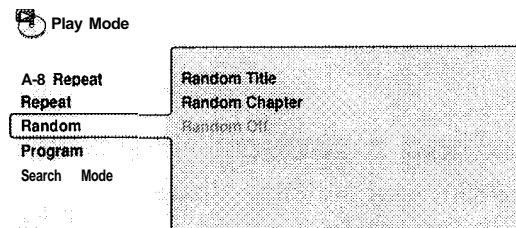
2 Select a random play option.

For DVD discs, select **Random Title** or **Random Chapter** (or **Random Off)**
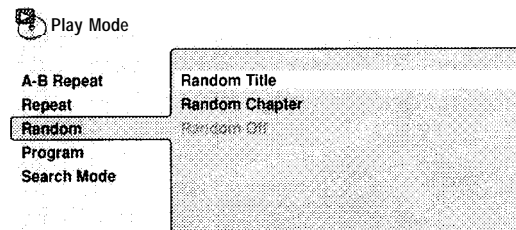
For CDs, Video CDs and MP3 discs, select **On** or Off to switch random play on or off. (Note that when used with MP3 discs, only tracks from the curent folder are played.)
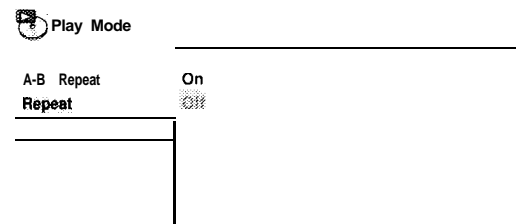
Tip

• To stop the disc and cancel random playback, press ■ (stop),

. To cancel random playback without stopping playback, press **CLEAR,** The disc will play to the end, then stop.

. During random play, the ◄◄ and ►► buttons function a little differently to normal: ◄◄ returns to the beginning of the current track/chapter, You can't go back further than this. ►► selects another track/chapter at random from those remaining.

. You can't use random play together with program or repeat play.

Note

. You can't use random play with Video CDs playing in PBC mode, or unfinalized CD-R/RW discs.

Creating a program list

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

Program play is not available with Video CDs playing in PBC mode, or unfinalized CD-R/RW discs.

1   **Press PLAY MODE and select 'Program' from the list of functions on the left.**
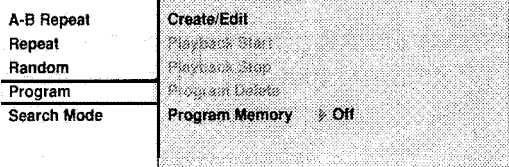
2   Select 'Create/Edit' from the list of program options.
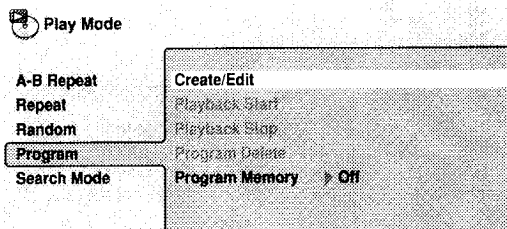
The Program edit screen that appears depends on the kind of disc loaded.

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

3   Select a title, chapter, folder or track for the current step in the program list.
For a DVD disc, you can add a whole title, or a chapter within a title to the program list.

. To add a title, select the title.
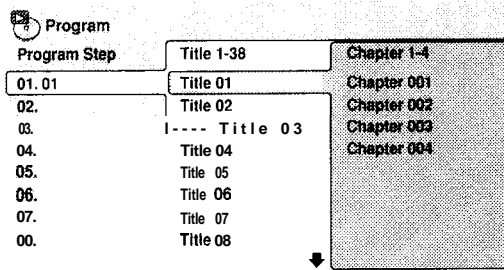
- To add a chapter, first highlight the title, then press ⊕
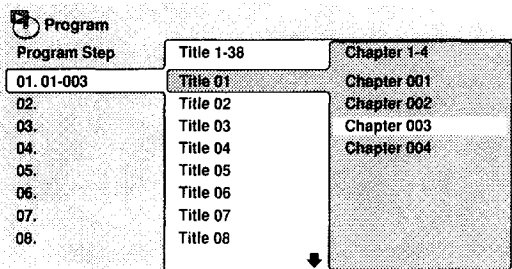
- To add a track, first find the folder, then
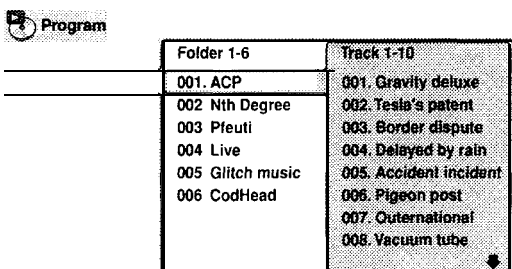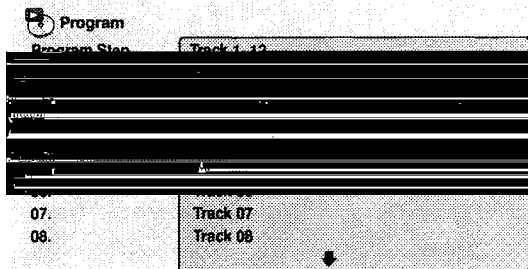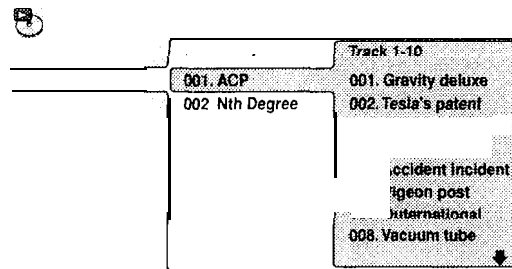
Editing a program list

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/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/chapter/folder/track to add.**

> ☼ Tip
>
> - To save your program list and 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 program play, cancel program play, erase the program list, and memorize a program list from the Play Mode menu.

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

```
🎮 Play Mode

A-B Repeat        Create/Edit
Repeat            Playback Start
Random            Playback Stop
Program           Program Delete
Search Mode       Program Memory  ▸ Off
```
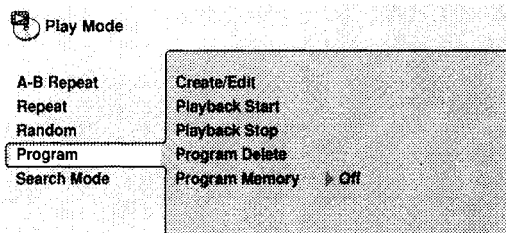
2 **Select a program play function.**
- **Create/Edit-See** above
- **Playback Start**   Starts playback of a saved program ist
- **Playback Stop** -Turns off program play, but does not erase the program list
- **Program Delete**   Erases the program list and turns off program play
- **Program Memory** (DVD only) – Select **On** to save the program list for the disc loaded. (Select Off to cancel the program memory for the disc loaded)

> ☼ **Tip**
>
> - Program lists are saved for the disc loaded. When you load a disc with a saved program list, program play is automatically turned 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

You can search DVD discs by title or chapter number, or by time. CDs can be searched by track number, and Video CDs by track number or time. MP3 discs can be searched by folder or track number,

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 search options,
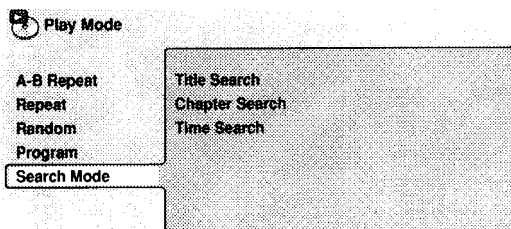
2 **Select a search mode.**

3 **Use the number buttons to enter a title, chapter, folder or track number, or a time.**
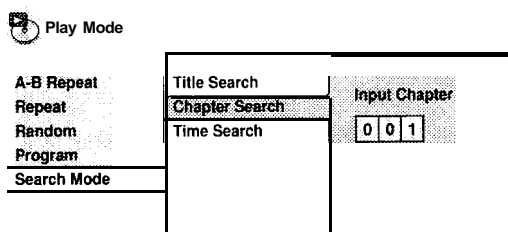
- For a time search, enter the number of minutes and seconds into the currently playing title (DVD) or track (Video CD) you want playback to resume from. For example, press 4, 5, 0, 0 to have playback start from 45 minutes into the disc, For 1 hour, 20 minutes and 30 seconds, press 8, 0, 3, 0.

4 **Press ENTER to start playback.**

📝 **Note**
- The disc must be playing in order to use time search.
- Search functions are not available with Video CDs in PBC mode, or unfinalized CD-R/RW discs.

Switching subtitles

Some DVD 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.**

Current /Total
Subtitle 1/2 English

- To set subtitle preferences, see *Subtitle* Language on **page 44.**

Switching DVD audio language

When playing a DVD 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.**

Current /Total
Audio 1/2 French Dolby Digital 3/2.1CH

- To set audio language preferences, see *Audio Language* on **page 44.**

Switching audio channel when playing a Video CD

When playing a Video CD, you can switch between stereo, just the left channel or just the right channel.

1   **Press AUDIO repeatly to select an audio channel option.**

$$\text{Audio} \qquad\qquad \text{Stereo}$$

Zooming the screen

Using the zoom feature you can magnify a part of the screen by a factor of 2 or 4, while watching a DVD or Video CD.

1   **During playback, use the ZOOM button to select the zoom factor.**
   - **Normal**
   - **2x**
   - **4x**

Normal

Zoom 2x

Zoom 4x
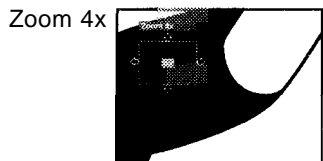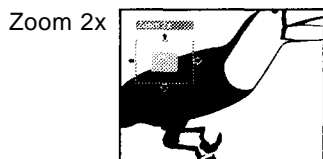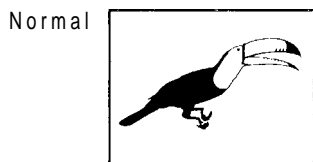
- Since DVD and Video CD have a fixed resolution, picture quality will deteriorate, especially at 4x zoom. This is not a malfunction,

2   Use the cursor buttons to change the zoomed area.
You can change the zoom factor and the zoomed area freely during playback.

- If the navigation square at the top of the screen disappears, press **ZOOM** again to display it.

📝 Note

- We do not recommend using DVD disc menus when the screen is zoomed as menu options will not be highlighted.
- If you are displaying subtitles, these will disappear when the screen is zoomed. They will reappear when you return the screen to normal.

Switching camera angles

Some DVD 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 46).**

1   **During playback (or when paused), 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 while a disc is playing.

1 **To show/switch the information displayed, press DISPLAY.**

When a disc is playing, the information appears at the top of the screen. Keep pressing **DISPLAY** to change the displayed information.

- DVD displays

- CD and Video CD displays

- MP3 disc displays

🔅 Tip

- You can see disc information (number of titles/chapters, tracks, folders and so on) from the Disc Navigator screen. See *Using the Disc Navigator to browse the contents of a disc* on **page 29.**

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.**

🗒 **Audio Settings**	
🗒 **Play Mode**	🗒 **Disc Navigator**
🗒 **Initial Settings**	🗒 **Setup Navigator**
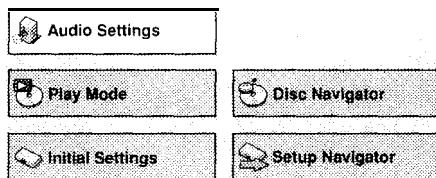
2   **Highlight Audio DRC, then use the t / → buttons (cursor left/right) to change to 'On' or 'Off', as required.**

🗒 **Audio Settings**		
Audio DRC	⬅ Off	➡
Virtual Surround	Off	

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 41.**
- 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 soundspace from a pair of stereo speakers.
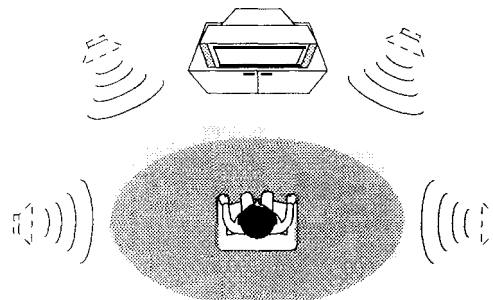
TruSurround™
by SRS(●)·

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

Audio Settings

Play Mode   Disc Navigator

Initial Settings   Setup Navigator
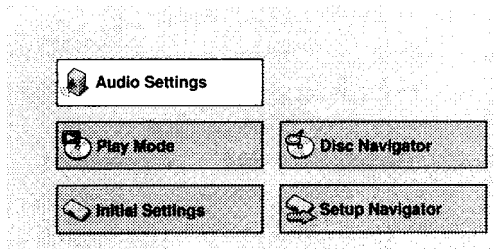
2   **Highlight Virtual Surround, then use the ← / → buttons (cursor left/right) to change to 'DᴏV/TruSurround' or 'Off', as required.**

Audio Settings

Audio DRC   Off

Virtual Surround   ←   Off   →

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

Tip

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

Note

• Virtual Surround doesn't work with DTS or 96kHz linear PCM audio, or during MP3 playback, through either the analog or digital outputs.

• If the player is outputting Dolby Digital or MPEG bitstream audio (in other words, no conversion to PCM), Virtual Surround has no effect on the audio from the digital output. See **pages 41-42** for how to set up the digital output formats.

• How good the surround effect is varies with the disc.

Using the Initial Settings menu

The Initial Settings menu gives you complete control in setting up your DVD player, including audio, and video output settings, audience limitation settings, among others.

If an 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.**
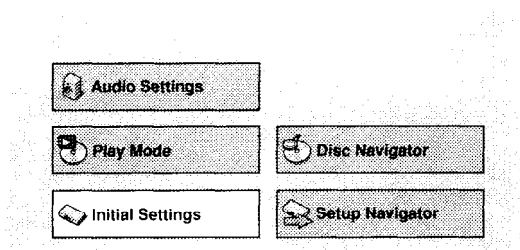
2   **Select the setup category from the list on the left, then select an item from the menu list to the right.**

3   **Make the setting you want.**

🖉 Note

• The language options shown in the on-screen display illustrations on the following pages may not correspond to those available in your country or region.

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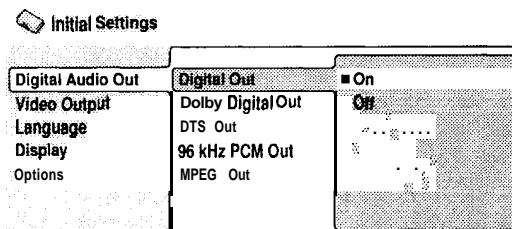
If at any time you need to switch off the digital audio output, set this to Off, otherwise leave it **On.**

Note that you can't switch on/off the optical and coaxial outputs individually.

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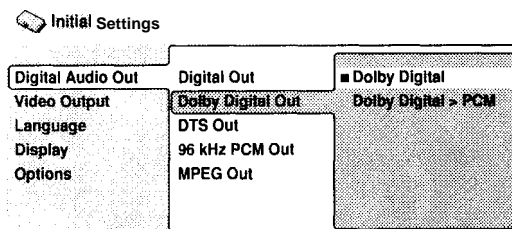
If your AV receiver (or other connected component) is Dolby Digital compatible, set to **Dolby Digital,** otherwise set to **Dolby Digital > PCM.**

DTS Out

ı Default setting: Off

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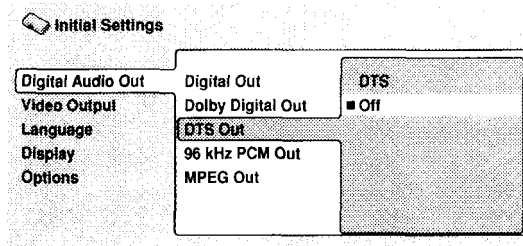
If your AV receiver (or other connected component) has a built-in DTS decoder, set this to DTS, otherwise set to Off. Check the manual that came with the other component if you're unsure whether it is DTS compatible.

✎ Note

ı If you set to DTS with a non-DTS compatible amplifier, noise will be output when you play a DTS disc.

96kHz PCM Out

ı Default setting: 96kHz > 48kHz

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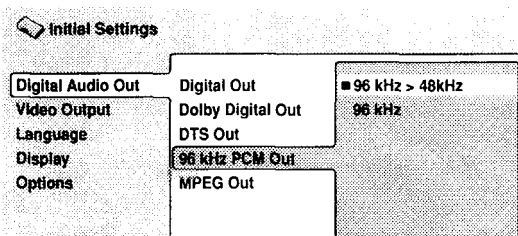
If your AV receiver (or other connected component) is compatible with high sampling rates (96 kHz), set this to **96kHz**, otherwise set it to 96kHz > 48kHz (96 kHz audio is converted to a more compatible 48 kHz). Check the manual that came with the other component if you're unsure whether it is 96 kHz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

MPEG Out

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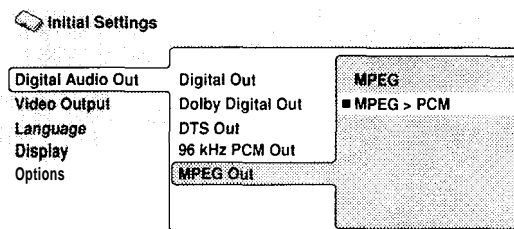
If your AV receiver (or other connected component) is compatible with MPEG audio, set this to MPEG, otherwise set it to MPEG > PCM (MPEG audio is converted to more compatible PCM audio), Check the manual that came with the other component if you're unsure whether it is MPEG audio compatible.

Video Output settings

TV Screen

- Default setting: **4:3 (Letter Box)**
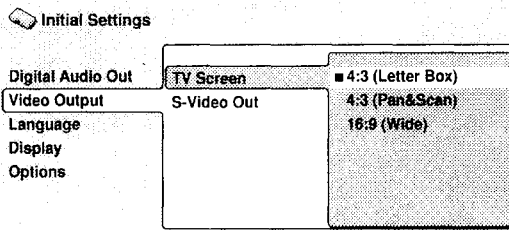
If you have a widescreen TV, select the **16:9 (Wide)** setting-widescreen DVD software is then shown using the full screen area. When playing software recorded in conventional (4:3) format, the settings on your TV will determine how the material is presented— see the manual that came with your TV for 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 54.**

S-Video Out

- Default setting: **S2**

You only need fo make this setting if you connected this player to your TV using an S-Video cord,
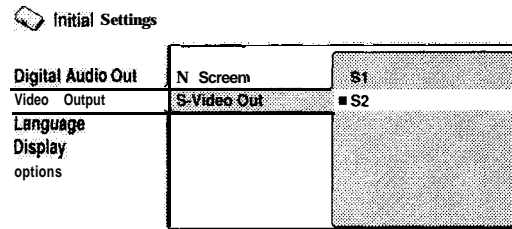
If you find that the picture is stretched or distorted on the default **S2** setting, try changing it to **S1**.

Language settings

Audio Language
ı Default setting: **English**
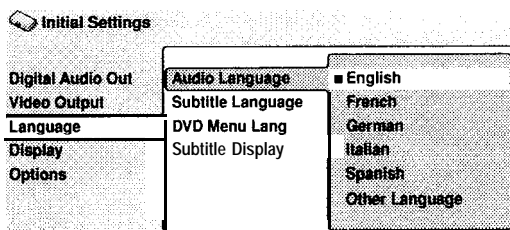
This setting is your preferred audio language for DVD discs. If the language you specify here is recorded on a disc, the system automatically plays the disc in that language.

The DVD 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 57.**

✪ Tip

ı 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 36.**

ı Some DVD discs set the audio language automatically when loaded, overriding the audio language you set in the Initial Settings menu.

ı Discs with two or more audio languages usually allow you to select the audio language from the disc menu. Press **MENU** to access the disc menu.

Subtitle Language
ı Default setting: **English**
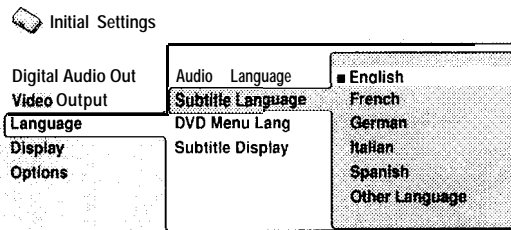
This setting is your preferred subtitle language for DVD discs. If the language you specify here is recorded on a disc, the system automatically plays the disc with those subtitles.

The DVD 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 57.**

✪ Tip

ı 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 36.**

ı Some DVD discs set the subtitle language automatically when loaded, overriding the subtitle language you set in the Initial Settings menu.

ı Discs with two or more subtitle languages usually allow you to select the subtitle language from the disc menu. Press **MENU to** access the disc menu.

DVD Menu Language

- Default setting: **w/Subtitle Lang.**

Initial Settings

Digital Audio Out	Audio Language	• w/Subtitle Lang.
Video Output	Subtitle Language	English
Language	DVD Menu Lang.	French
Display	Subtitle Display	German
Options		Italian
		Spanish
		Other Language
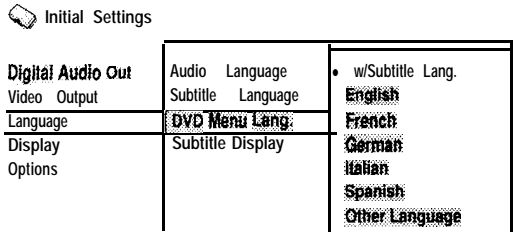
Some multilingual discs have disc menus in several languages. This setting specifies in which language the disc menus should appear. Leave on the default setting for menus to appear in the same language as your Subtitle Language-see **page 44.**

The DVD 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 languagecodelist* on **page 57.**

Subtitle Display

- Default setting: **On**

Initial Settings

Digital Audio Out	Audio Language	
Video Output	Subtitle Language	Off
Language	DVD Menu Lang.	
Display	Subtitle Display	
Options		
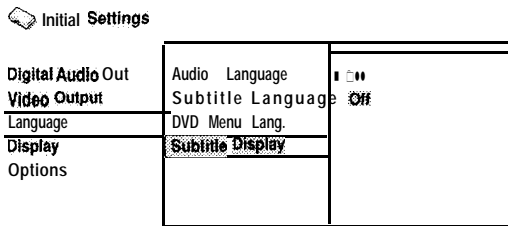
When set to **On,** the player displays subtitles according to the Subtitle Language setting. Set to Off to switch subtitles off altogether.

Display settings

OSD Language

- Default setting: **English**

Initial Settings

Digital Audio Out	OSD Language	■ English
Video Output	On Screen Display	français
Language	Angle Indicator	Deutsch
Display		Italiano
Options		Español
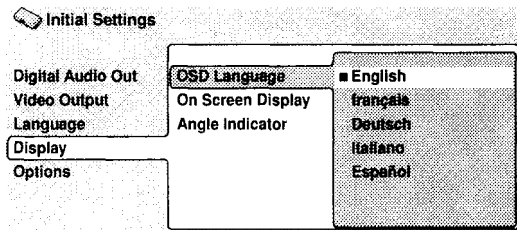
This sets the language of this player's on-screen displays.

On Screen Display

- Default setting: **On**

Initial Settings

Digital Audio Out	OSD Language	■ On
Video Output	On Screen Display	Off
Language	Angle Indicator	
Display		
Options		
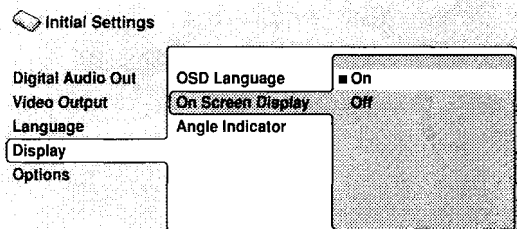
This sets whether operation displays are shown on-screen **(Play, Resume, Scan** and so on.)

Angle Indicator

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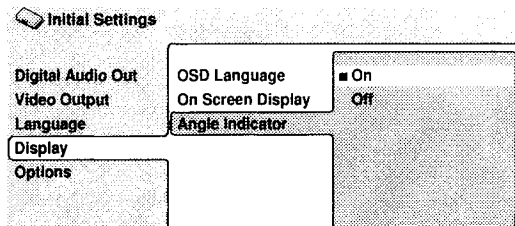
If you prefer not to see the camera icon on-screen during multi-angle scenes on DVD discs, change this setting to Off.

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 54)**, then register a new pass-word.

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'.
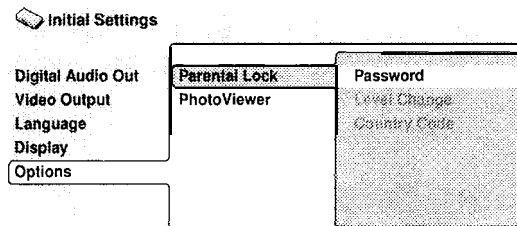
2   Use the number buttons to enter a 4-digit password.
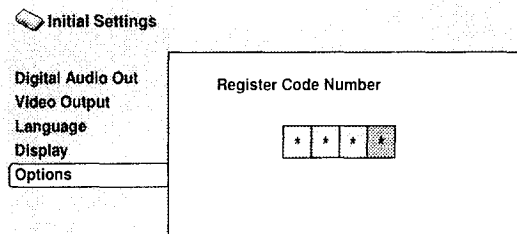
The numbers you enter show up as asterisks (*) on-screen,

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 54** 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'.
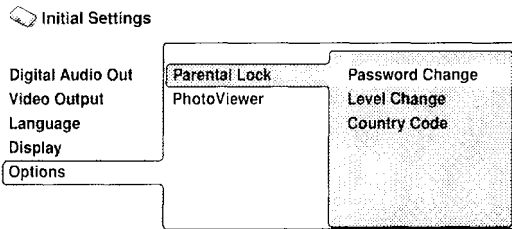
2 Use the number buttons to enter your existing password, then press ENTER.
. The numbers appear as asterisks as you enter them.
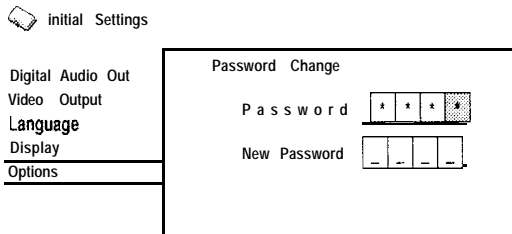
3 Enter a new password.
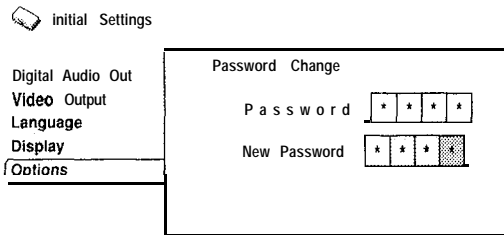
4 Press ENTER to register the new password and return to the Options menu screen.

Setting/changing the Parental lock level

1 Select 'Level Change'.
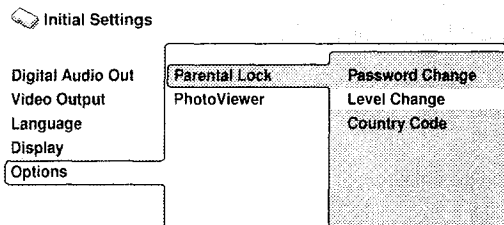
2 Use number buttons to enter your password, then press ENTER.
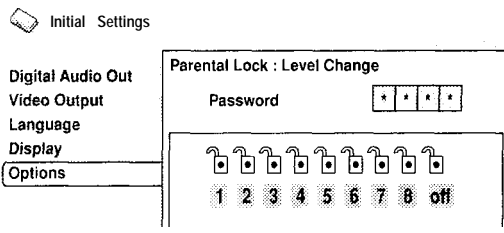
3 **Select a new level.**
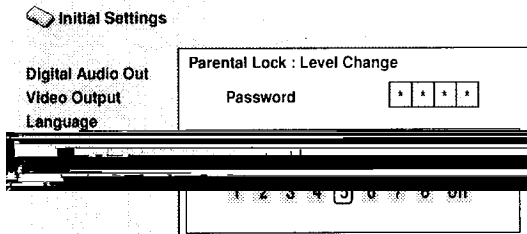
Press ← (cursor left) repeatedly to lock more levels (more discs will require the password): press → (cursor right) to unlock levels. You can't lock level 1.

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 56.**

1 **Select 'Country Code'.**
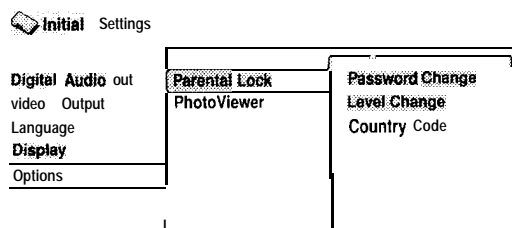
2 Use number buttons to enter your password, then press ENTER.
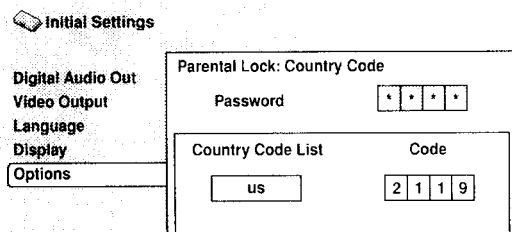
3 **Select a country code.**
There are two ways you can do this.

ı Select by code letter: Use ↑/↓ (cursor up/down) to change the country code.
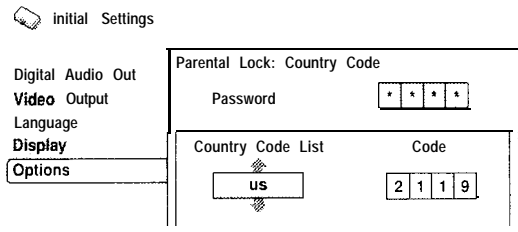
ı Select by code number: Press → (cursor right) then use the number buttons to enter the 4-digit country code (you can find the Country code list on **page 56).**
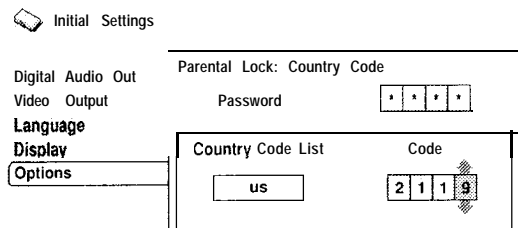
4 Press ENTER to set the new Country Code and return to the Options menu screen.

📝 **Note**

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

PhotoViewer (Photo Viewer)

• Default setting: On

💬 Initial Settings

Digital Audio Out	Parental Lock	■ On
Video Output	PhotoViewer	Off
Language		
Display		
Options		
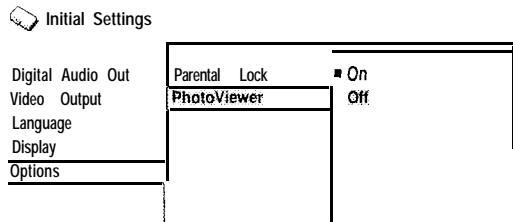
If you load a FUJICOLOR CD, Kodak Picture CD, or a CD/CD-R/RW containing JPEG picture files, set this to On. If you load a disc without JPEG picture files, or want to play MP3s on a CD/CD-R/RW that contains both JPEG picture files and MP3 music files, set this to **Off.**

🖉 **Note**

• Changes you make to this setting do not take effect until you load another disc (or reload the current disc by opening the disc tray once then closing it again).

Playing JPEG discs

After loading a CD/CD-R/RW containing JPEG pictures, press ▶ to start a slideshow from the first folder/picture on the disc. The player displays the pictures in each folder in alphabetical order.

Pictures are automatically adjusted so that they fill as much of the screen as possible (if the aspect ratio of the picture is different to your TV screen you may notice black bars at the sides, or at the top and bottom of the screen).

While the slideshow is running:

Button	What it does
II	Pauses the slideshow; press again to restart
I◄◄	Displays the previous picture.
►►I	Displays the next picture.
ANGLE	Pauses the slideshow and rotates the currently displayed picture 90° clockwise. Press ▶ (play) to restart slideshow).
ZOOM	Pauses the slideshow and zooms the screen (see also the following page). Press ▶ (play) to restart slideshow).
MENU	Displays the JPEG Photo Browser screen (see the also following page)

Note

- The **II, ANGLE** and **ZOOM** buttons do not work while the display shows **LOADING.**

- The time it takes for the player to load a file increases with large file sizes.

- Folders and folder names are not visible.

- Up to 999 files are viewable on a disc. If there are more files than this on a disc, oniy the first 999 files are viewable.

Using the JPEG Photo Browser

The JPEG Photo Browser displays nine thumbnail pictures on your TV at a time, from which you can select what to view.

1   **Press MENU to display the Photo Browser screen.**
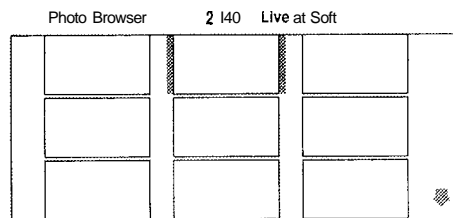
2   **Use the cursor buttons (← ↑ ↓ →) to highlight a thumbnail picture.**
    . Use the track skip buttons (I◄◄ and ►►I) to see the previous / next page of thumbnails. Keep the button pressed if you want to skip several pages; release when you reach the page you want.

3   **Press ENTER to display the selected thumbnail full size on screen.**
The slideshow resumes from the selected picture,

Zooming the screen

Using the zoom feature you can magnify a par-t of the screen by a factor of 2 or 4, while viewing pictures from a JPEG disc.

1 During sldeshow playback, use the ZOOM button to select the zoom factor.

- **Normal**
- **2x**
- **4x**

Normal

Zoom 2x

Zoom 4x
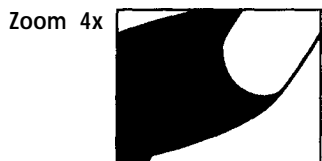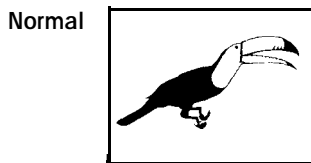
- The slideshow is paused when the screen is zoomed.
- Since JPEG pictures have a fixed resolution, picture quality may deteriorate, especially at 4x zoom. This is not a malfunction.

2 Use the cursor buttons (← ↑ ↓ →) to change the zoomed area.

You can change the zoom factor and the zoomed area freely.

. When you change the zoom area, this becomes the new 'default' zoom area for the disc loaded.

3 To resume the slideshow, press ▶ (play).

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. hese 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 shapecl discs is not recommended for this product. Pioneet disclaims all liability arising in connection with the use of shapecl discs

Cleaning the unit's exterior

• Use a polishing cloth or dry cloth to wipe off dust and dirt. If the surfaces are very dirty, wipe with a soft cloth dipped in some neutral cleanser diluted five or six times with water and wrung out well. then wipe again with a dry cloth.

• Do not use furniture wax or cleaners. Never use thinners. benzine or insecticide sprays or

other chemicals on or near this unit since they will corrode the surfaces.

. If you use a chemical-impregnated cleaning cloth, read the instructions carefully before use. These cloths may leave smear marks on half-mirror finish surfaces, if this happens, finish with a dry cloth.

. Unplug the unit when cleaning.

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 perform-ance. 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...

✗ Use in a place exposed to high tempera-tures or humidity, including near radiators and other heat-generating appliances.

✗ Place on a window sill or other place where the player will be exposed to direct sunlight.

✗ Use in an excessively dusty or damp onmen:.envh

✗

✗

✗

✗

✗

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** 43) 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** 43) 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.**

2   **Using the front panel buttons, hold down the ■ (stop) button and press ⏻ STANDBY/ON to switch the player back on.**
All the player's settings are now reset, and you should see the 'Let's Get Started' screen.

Titles, chapters and tracks

DVD discs are generally divided rnto one or more titles. Titles may be further subdivided into chapters.
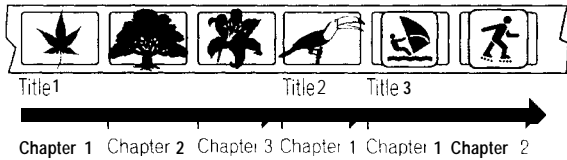
CDs and Video CDs are divided into tracks.
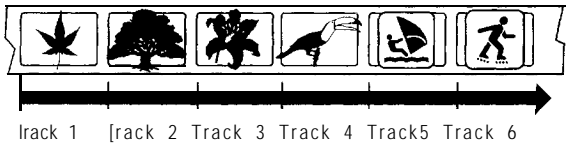
CD-ROMs containing MP3 files are divided into folders and tracks. Folders may also contain further subfolders.
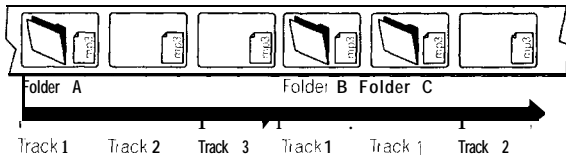
DVD-Video regions

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,
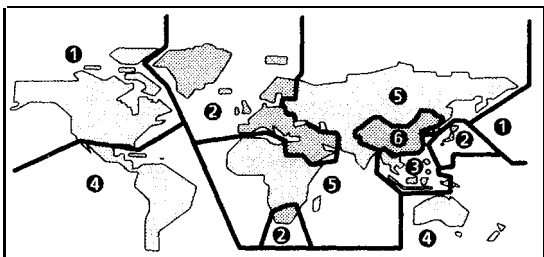
Language code list

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

Japanese (ja), **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**
Aymara (ay), 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 (cy), 0325
Danish (da), 0401

Bhutani (dz), 0426
Esperanto (eo), 0515
Estonian (et). 0520
Basque (eu), **0521**
Persian (fa), **0601**
Finnish (fi), 0609
Fiji (fj), **0610**
Faroese (fo), 0615
Frisian (fy), 0625
Irish (ga), **0701**
Scots-Gaelic (gd), 0704
Galician (gl), **0712**
Guarani (gn), **0714**
Gujarati (gu), 0721
Hausa (ha), 0801
Hindi (hi), 0809
Croatian (hr), **0818**
Hungarian (hu), **0821**
Armenian (hy), 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**
Cambodtan (km), **1113**
Kannada (kn), **1114**
Kashmiri (ks), **1119**
Kurdish (ku), **1121**

Kirghiz (ky), **1125**
Latin (la), **1201**
Lingala (ln), **1214**
Laothian (lo), **1215**
Lithuanian (lt), 1220
Latvian (lv), **1222**
Malagasy (mg), 1307
Maori (mi), **1309**
Macedonian (mk), **1311**
Malayalam (ml), **1312**
Mongolian (mn), **1314**
Moldavian (mo), **1315**
Marathi (mr). **1318**
Malay (ms), **1319**
Maltese (mt), 1320
Burmese (my), 1325
Nauru (na), 1401
Nepali (ne), **1405**
Norwegran (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**
Kirundi (rn), **1814**
Romanian (ro), **1815**
Kinyarwanda (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**
Telugu (te), 2005
Tajik (tg), 2007
Thai (th), 2008
Tigrrnya (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**
Urdu (ur), **2118**
Uzbek (uz), **2126**
Vietnamese (vi), 2209
Volapuk (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, **my**
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, sg**
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 prefered language from any of the 136 languages listed in the language code list on the previous page.

1 Select 'Other Language'.

2 Use the ←/→ (cursor left/right) buttons to select either a code letter or a code number.

3 Use the ↑/↓ (cursor up/down) buttons to select a code letter or a code number.
See the language code list on the previous page for a complete list of langauges 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).

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
D[][DOLBY]
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®
DIGITAL OUT

DTS stands for Digital Theater Systems, 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,

EXIF (Exchangeable Image File)
A file format developed by Fuji Photo Film for digital still cameras. Digital cameras from various manuafcturers use this compressed file format which carries date, time and thumbnail information, as well as the picture data.

File extension
A tag added to the end of a filename to indicate the type of file. For example, ".mp3" indicates an MP3 file.

JPEG
A file format used for still images, such as photographs and illustrations, JPEG files are identified by the file extension ".jpg" or ".JPG". Most digital cameras use this format,

MP3
MP3 (MPEG1 audio layer 3) is a compressed audio file format. Files are recognized by their file extension ".mp3" or ".MP3".

MPEG audio
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.

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.

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).

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 44.1 kHz, which means 44,100 samples (measurements) per second. See also *Digital audio.*

Specifications

General

System ,,,,,,,,,,,,,,, ,,,,, ,,,,,,,, ,,,, ,, DVD player
Power requirements ,,,,,,,,,,,,,, AC 120 V, 60 Hz
Power consumption ,,,,,,, ,, ... 1 3 w
Power consumption (standby) ,,,,,,, ,,,,,,,,,, 0.3 W
Weight ,,,,,,,,,,,,,,,,,,,,,,,,,,,,, 2.4 kg (5lb 5oz)
Dimensions ,,,,,, 420 (W) x 55 (H) x 278 (D) mm
　　　(16 $^9/_{16}$ (W) x 7 $^3/_{16}$ (H) × 10 $^{15}/_{16}$ (D) in.)
Operating temperature ,,,,,, ,,,,, +5°C to +35°C
　　　(t 41°F to +95°F)
Operating humidity ,,,,,,,, ,,,,,,,,, ,,,,, 5% to 85%
　　　(no condensation)

S-Video output

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

Video output

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

Component Video output (Y, PB, PR)

Output level ,,,,,,,,,,,,,,,,,,,,,,,,, Y. 1 .0 Vp-p (75Ω)
　　　PB, PR: 0.7 vp-p (75Ω)
Jacks ,,, ,,,,,,,, I,, ,,,,,,,,,,,,,,,,,,,,,,,, ,,,,, RCA jacks

Audio output (1 stereo pair)

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

Digital audio characteristics

Frequency response ,,,,,,,,,,,,,,,, 4 Hz to 44 kHz
　　　(DVD fs: 96 kHz)
S/N ratio ,,, 118dB
Dynamic range ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, 101 dB
Total harmonic distortion ,,,,,,,,,,,,,,,,, 0.0016 %
Wow and flutter ,,,,,,,,,,,,, Limit of measurement
　　　(±0.001% W. PEAK) or lower

Digital output

Optical digital output ,,,,,,,,,, Optical digital jack
Coaxial digital output ,,,,,,,,,,,,,,,,,,,,,,,, RCA jack

Accessories

Audio/video cable ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, 1
Power cable ,,, 1
Remote control ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, 1
AA/R6P dry cell batteries ,,,,,,,,,,,,,,,,,,,,,,,,, 2
Operating Instructions ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, 1
Warranty card ,, 1

> ✍ **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

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

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

Pioneer Electronics (USA) Inc
Customer Support Division
P 0 BOX 1760, Long Beach,
CA 90801-I 760, 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 a 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 a la clientele de Pioneer:

Pioneer Electroniques du Canada, Inc
Service à la clientele
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   S018D_enfr

PIONEER CORPORATION

4-1, Meguro I-Chome, Meguro-ku, Tokyo 153-8654, Japan
PIONEER ELECTRONICS (USA) INC.
P.O BOX 1540, Long Beach, California 90801-I 540, U S A
PIONEER ELECTRONICS OF CANADA, INC.
300 Allstate Parkway, Markham, Ontario L3R OP2, Canada
PIONEER EUROPE NV
Haven 1087, Keetberglaan 1, B-9120 Melsele, Belgium TEL: 03/570 05 11
PIONEER ELECTRONICS AUSTRALIA PTY. LTD.
178-I 84 Boundary Road, Braeside, Victoria 3195, Australia, TEL: [03]9586-6300
PIONEER ELECTRONICS DE MEXICO S.A. DE C.V.
San Lorenzo 1009 3er Piso Desp 302 Col Del Valle Mexico D F C P 03100 TEL 55-5688-52-90   K002C_en

Pioneer

LIMITED WARRANTY
WARRANTY VALID ONLY IN THE U.S.A.

WARRANTY

Pioneer Electronics (USA) Inc (PUSA) warrants that products distributed by PUSA in the U S A that fail to function properly under normal use due to a manufacturing defect when installed and operated according to the owner's manual enclosed with the unit will be repaired or replaced with a unit of comparable value, at the option of PUSA, without charge to you for parts or actual repair work Parts supplied under this warranty may be new or rebuilt at the option of PUSA

THIS LIMITED WARRANTY APPLIES TO THE ORIGINAL OR ANY SUBSEQUENT OWNER OF THIS PIONEER PRODUCT DURING THE WARRANTY PERIOD PROVIDED THE PRODUCT WAS PURCHASED FROM AN AUTHORIZED PIONEER DISTRIBUTOR/DEALER IN THE U.S.A. YOU WILL BE REQUIRED TO PROVIDE A SALES RECEIPT OR OTHER VALID PROOF OF PURCHASE SHOWING THE DATE OF ORIGINAL PURCHASE OR, IF RENTED, YOUR RENTAL CONTRACT SHOWING THE PLACE AND DATE OF FIRST RENTAL. IN THE EVENT SERVICE IS REQUIRED, THE PRODUCT MUST BE DELIVERED WITHIN THE WARRANTY PERIOD, TRANSPORTATION PREPAID, ONLY FROM WITHIN THE U.S.A. AS EXPLAINED IN THIS DOCUMENT. YOU WILL BE RESPONSIBLE FOR REMOVAL AND INSTALLATION OF THE PRODUCT. PUSA WILL PAY TO RETURN THE REPAIRED OR REPLACEMENT PRODUCT TO YOU WITHIN THE U.S.A.

PRODUCT WARRANTY PERIOD

	Parts	Labor
DV-353-K, DV-353-S ...	1 Year	90 Days
DV-354, DV-C505	1 Year	90 Days
DV-250, DV-251	1 Year	90 Days

The warranty period for retail customers who rent the product commences upon the date product is first put into use (a) during the rental period or (b) retail sale, whichever occurs first

WHAT IS NOT COVERED

IF THIS PRODUCT WAS PURCHASED FROM AN UNAUTHORIZED DISTRIBUTOR, THERE ARE NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE IMPLIED WARRANTY OF MERCHANTABILITY AND THE IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE AND THIS PRODUCT IS SOLD STRICTLY "AS IS" AND "WITH ALL FAULTS"

PIONEER SHALL NOT BE LIABLE FOR ANY CONSEQUENTIAL AND/OR INCIDENTAL DAMAGES.

PIONEER DOES NOT WARRANT ANY PRODUCT LISTED ABOVE WHEN IT IS USED IN A TRADE OR BUSINESS OR IN ANY INDUSTRIAL OR COMMERCIAL APPLICATION.

THIS WARRANTY DOES NOT COVER THE CABINET OR ANY APPEARANCE ITEM, USER ATTACHED ANTENNA, ANY DAMAGE TO RECORDS OR RECORDING TAPES OR DISCS, ANY DAMAGE TO THE PRODUCT RESULTING FROM ALTERATIONS, MODIFICATIONS NOT AUTHORIZED IN WRITING BY PIONEER, ACCIDENT, MISUSE OR ABUSE, DAMAGE DUE TO LIGHTNING OR TO POWER SURGES, SUBSEQUENT DAMAGE FROM LEAKING, DAMAGED OR INOPERATIVE BATTERIES, OR THE USE OF BATTERIES NOT CONFORMING TO THOSE SPECIFIED IN THE OWNER'S MANUAL.

THIS WARRANTY DOES NOT COVER THE COST OF PARTS OR LABOR WHICH WOULD BE OTHERWISE PROVIDED WITHOUT CHARGE UNDER THIS WARRANTY OBTAINED FROM ANY SOURCE OTHER THAN A PIONEER AUTHORIZED SERVICE COMPANY OR OTHER DESIGNATED LOCATION. THIS WARRANTY DOES NOT COVER DEFECTS OR DAMAGE CAUSED BY THE USE OF UNAUTHORIZED PARTS OR LABOR OR FROM IMPROPER MAINTENANCE.

ALTERED, DEFACED, OR REMOVED SERIAL NUMBERS VOID THIS ENTIRE WARRANTY

NO OTHER WARRANTIES

PIONEER LIMITS ITS OBLIGATIONS UNDER ANY IMPLIED WARRANTIES INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, TO A PERIOD NOT TO EXCEED THE WARRANTY PERIOD. NO WARRANTIES SHALL APPLY AFTER THE WARRANTY PERIOD. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS AND SOME STATES DO NOT ALLOW THE EXCLUSIONS OR LIMITATIONS OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATIONS OR EXCLUSIONS MAY NOT APPLY TO YOU. THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS AND YOU MAY HAVE OTHER RIGHTS WHICH MAY VARY FROM STATE TO STATE.

TO OBTAIN SERVICE

PUSA has appointed a number of Authorized Service Companies throughout the U S A should your product require service To receive warranty service you need to present your sales receipt or, if rented, your rental contract showing place and date of original owner's transaction If shipping the unit you will need to package it carefully and send It, transportation prepaid, by a traceable, insured method, to an Authorized Service Company Package the product using adequate padding material to prevent damage in transit The original container is ideal for this purpose Include your name, address, telephone number where you can be reached during business hours and a detailed description of the problem

On all complaints and concerns in the U S A call Customer Support at 1-800-421-1404

For hook-up and operation of your unit or to locate an
Authorized Service Company, please call or write
CUSTOMER SUPPORT DIVISION
PIONEER ELECTRONICS (USA) INC
P.O. BOX 1760
LONG BEACH, CALIFORNIA 90801
I-800-42 I-I 404
http //www pioneerelectronics corn

DISPUTE RESOLUTION

Following our response to any initial request to Customer Support, should a dispute arise between you and Pioneer, Pioneer makes available its Complaint Resolution Program to resolve the dispute. The Complaint Resolution Program is available to you without charge You are required to use the Complaint Resolution Program before you exercise any rights under, or seek any remedies, created by Title I of the Magnuson-Moss Warranty-Federal Trade Commission Improvement Act, 15 U.S C 2301 et seq To use the Complaint Resolution Program call 1-800-421-1404