PIONEER®
The Art of Entertainment

LaserDisc

DVD VIDEO LASERDISC COMPACT disc DIGITAL AUDIO COMPACT disc DIGITAL VIDEO

DVD LD PLAYER
DVL-909

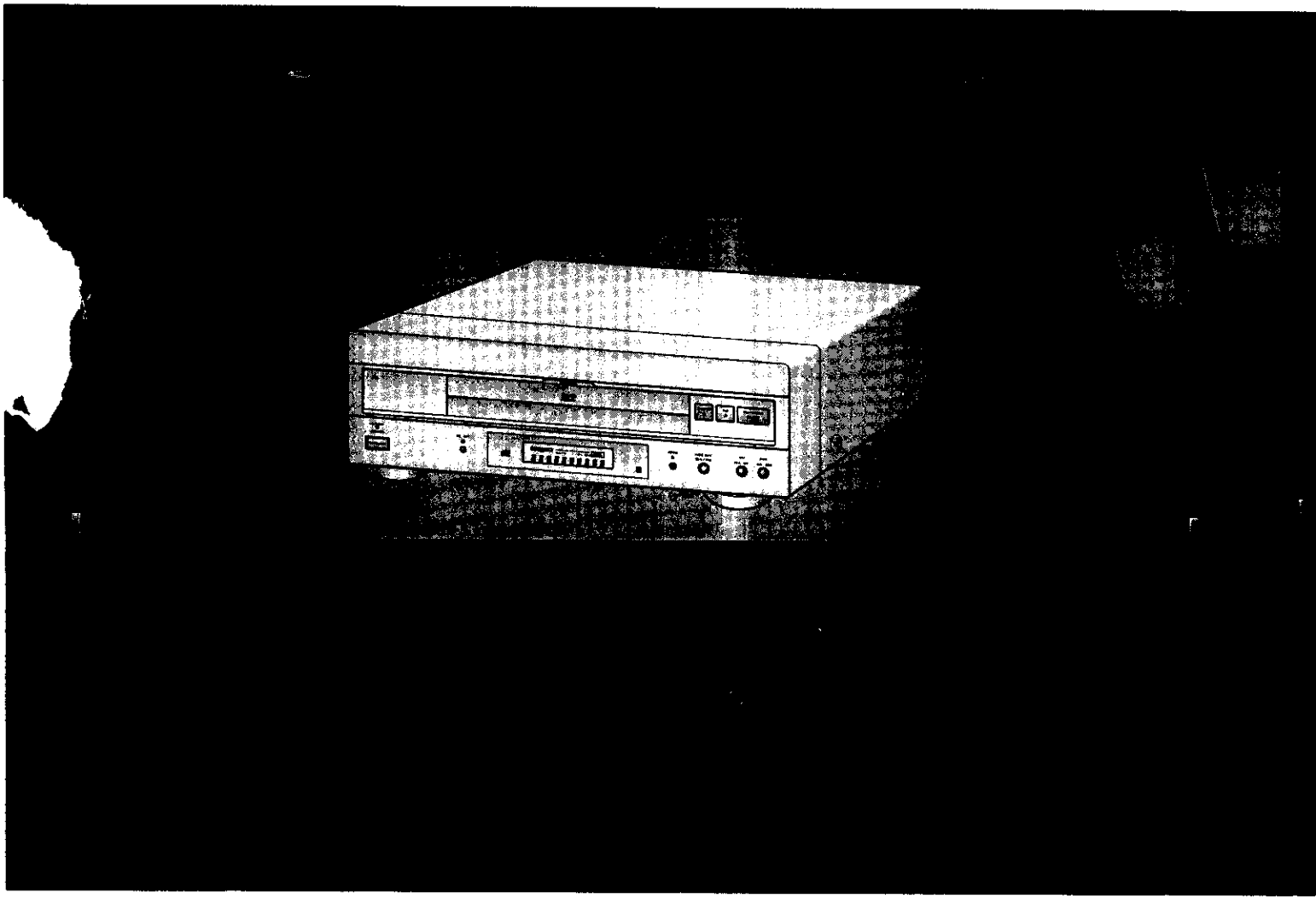
Operating Instructions

NTSC

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.

- This player is not suitable for commercial use.

- ☐ First refer to "Before using" on page 8 and "Connecting the Player" on pages 46 ~ 48.
- ☐ Refer to pages 9 ~ 14 for basic playback.



IMPORTANT

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

CAUTION
RISK OF ELECTRIC SHOCK DO NOT OPEN

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

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

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.

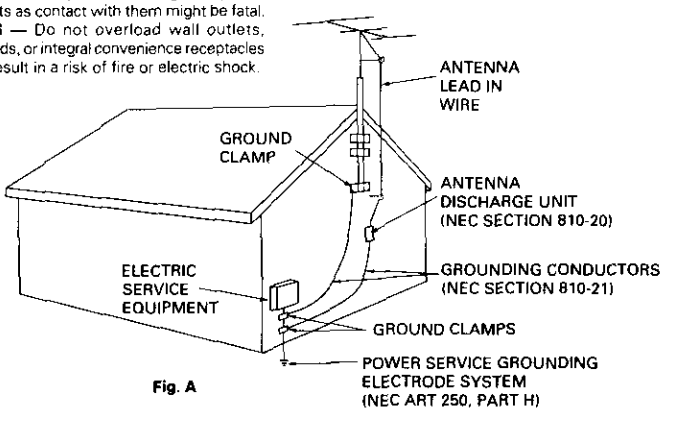


Fig. A

NEC — NATIONAL ELECTRICAL CODE

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

IMPORTANT NOTICE

[For U.S. and Canadian models]

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

[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.

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.

THE POWER SWITCH IS SECONDARY CONNECTED AND THEREFORE DOES NOT SEPARATE THE UNIT FROM MAINS POWER IN STANDBY POSITION.

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.

Information to User

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

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.

[For Canadian model]

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

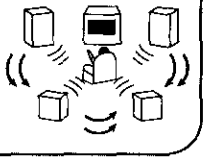
[Pour le modèle Canadien]

Cet appareil numérique de la Classe B respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

See What You Can Do

Dolby Digital*

Connect to a Digital Surround Amp and Surround Processor for 5.1ch Dolby Digital Surround entertainment.



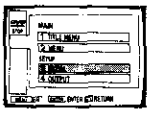
Virtual Dolby Surround** P.31

With Virtual Dolby Surround you can enjoy a virtual sound presence that is three dimensional, even on the stereo system you are presently using. There may be no effect (or little effect) in some cases.

TruSurround with SRS

GUI Operation P.33

While viewing Pioneer's original GUI on-screen displays, you can perform operations by remote control. Even if there is no menu recorded on a disc, you can still perform GUI operation with the menu provided by the player.



Continuous Play of Both Sides of LDs*

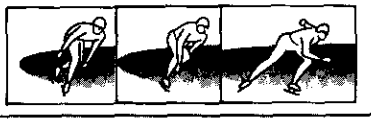
You can enjoy continuous playback of both sides of a laserdisc. P.10

Last Memory Play* P.14

If you stop video playback, this lets you resume play back from where it was stopped.

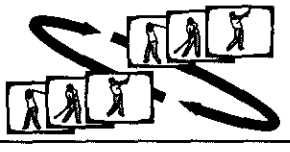
Still Frame, Single Frame Advance*

You can view still frames, and advance one frame at a time. P.21



Repeat Play* P.20

Wide range of Repeat Play possibilities.



Random Play* P.22

You can enjoy playback of tracks (or chapters) in random order.

Program Play* P.19

Lets you play back selected titles and chapters in any desired order.

Multi-Aspect* P.24

You can select between Regular Wide and Letter Box display formats.

Cinema Mode & Animation Mode* P.29

Lets you select the ideal picture quality for watching movies and animation movies.

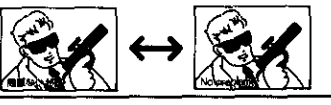
Condition Memory P.25

Records and automatically recalls settings for DVDs you often watch.

- Multi-Aspect
- Cinema Mode/Animation Mode
- Multi-language Subtitles
- Multi-language
- Location

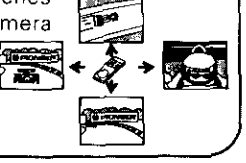
Multilingual Subtitles* P.27

You can select a desired subtitle language when watching movies and other videos.



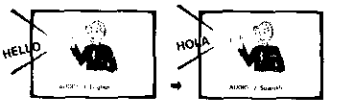
Multi-Angle* P.27

Lets you view scenes from different camera angles.



Multiple Languages* P.26

With discs that have multiple language soundtracks recorded on them, you can select the desired language.

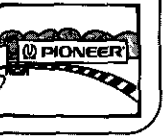


Parental Level* P.41

Lets you select a "parental level" (user restriction level) to prevent children from viewing undesirable material.

PBC Video CD Compatibility P.16

Ready to play Video CDs (Version 2.0) with PBC (Play Back Control). Two types of playback are possible depending on the disc.



Power On Demo Display

Switching ON the Power On Display provides a wide range of indications.

To switch to power ON demo indications, press the power switch while pressing the ▶▶▶▶| button.

Press any button to cancel the demo indications.

* This mark indicates this may not be possible with certain discs.

**SRS Labs, Inc.'s TruSurround system TruSurround with SRS has been adopted as virtual technology.

TruSurround is a trademark of SRS Labs, Inc. SRS and the SRS symbol are registered trademarks of SRS Labs, Inc. in the United States and selected foreign countries.

TruSurround is incorporated under license from SRS Labs, Inc.

Permission for use of TruSurround technology has been registered through SRS Labs, Inc.

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

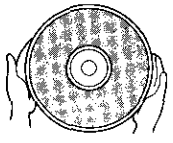
Disc Types Compatible with this Unit

This player is DVD, LD, CD and Video CD compatible.
The marks shown on the right are found on disc labels or on disc jackets.

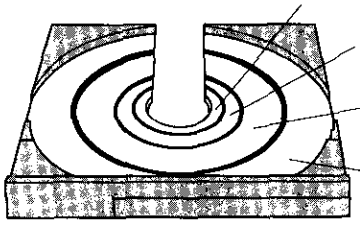
- This player can play all discs bearing the marks on the right without the need for an adaptor.
- To prevent malfunction, do not use an 8 cm (3 in.) adaptor (for CDs).

This unit is NTSC compatible (TV color system).
You cannot use discs other than those shown on the right.
* During DVD playback, data transfer is at 4.7 Mbit per second.

Handling the discs

	LD	DVD, CD, etc.
Holding with both hands		
Holding with one hand		

Disc Table



Note

◆ You cannot play DVDs that do not bear the Region No. (refer to terminology on page 56) indicated on the player.

Discs other than those mentioned at right cannot be played.
To prevent damage to the player, do not play a disc type other than those above.
(E.g.) DVD audio, CD-ROM, LD-ROM, DVD-ROM, High Definition LD etc.

Types of playable discs and their marks	Diameter/Playable sides		Playback time	
DVD VIDEO	DVD VIDEO		Digital audio Digital video (MPEG 2)	
	12 cm (5 in.)/ single-sided	1 layer	133 min.*	
		2 layers	242 min.*	
	12 cm (5 in.)/ double-sided	1 layer	266 min.*	
		2 layers	484 min.*	
	DVD VIDEO		Digital audio Digital video (MPEG 2)	
	8 cm (3 in.)/ single-sided	1 layer	41 min.*	
		2 layers	75 min.*	
	8 cm (3 in.)/ double-sided	1 layer	82 min.*	
		2 layers	150 min.*	
VIDEO CD	VIDEO CD 12 cm (5 in.)/single-sided		Digital audio Digital video (MPEG 1) Max. 74 minutes	
	VIDEO CD single 8 cm (3 in.)/single-sided		Digital audio Digital video (MPEG 1) Max. 20 minutes	
CD	CD 12 cm (5 in.)/ single-sided		Max. 74 minutes	
	CD single 8 cm (3 in.)/ single-sided		Max. 20 minutes	
CDV	CDV 12 cm (5 in.)/ single-sided		Digital audio (max. 20 min.) (Audio part) Digital audio + video (max. 5 min.) (Video part)	
VSD (Video Single Disc)	VSD 12 cm (5 in.)/ single-sided		Digital audio + video (max. 5 min.) (Video part) In these operating instructions, the VSD is treated as a kind of CDV.	
LD	LD 30 cm (12 in.)		CAV	1 hour on a double-sided disc
			CLV	2 hours on a double-sided disc
	LD 20 cm (8 in.)		CAV	28 min. on a double-sided disc
			CLV	40 min. on a double-sided disc
	LD Single 20 cm (8 in.)		CAV	14 min. on a single-sided disc
			CLV	20 min. on a single-sided disc

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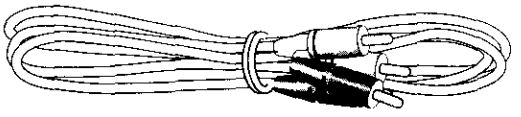
* Does not operate with certain disc functions.

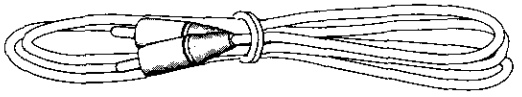
Before Using

Checking accessories

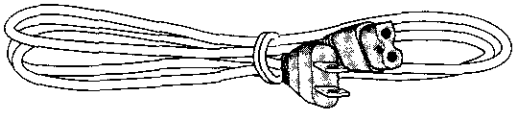
Audio cord



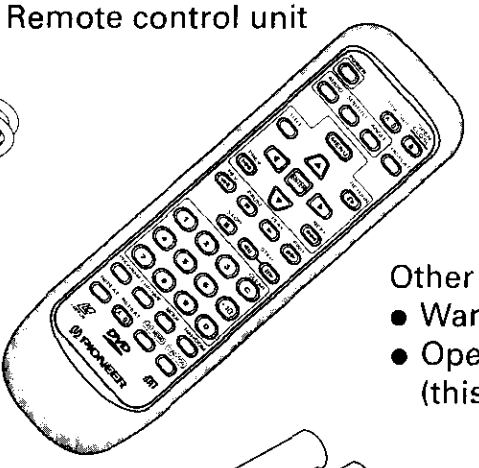
Video cord



Power cord

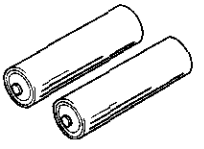


Remote control unit



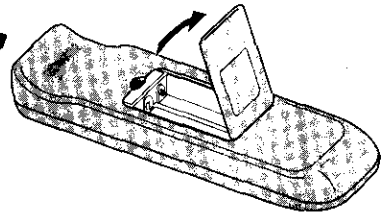
Other included items
- Warranty card
- Operating Instructions (this manual)

Batteries ... 2



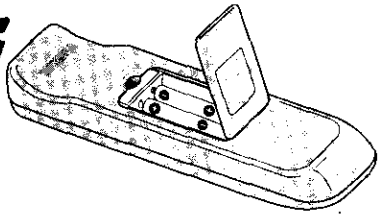
Inserting batteries into the remote control

1.



While pressing the back cover, pull out in the direction indicated by the arrow.

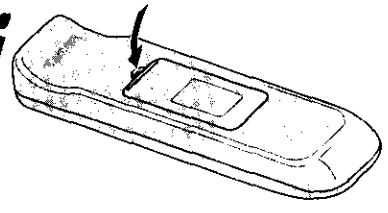
2.



Insert batteries.

Make sure to match the plus (+) and minus (–) polarity guides on the batteries with the marks inside the battery compartment.

3.



Close the cover.

Notes

- Do not mix old and new batteries.
- Even batteries of the same type will differ in voltage. Do not mix old batteries with new batteries.
- When not using the remote control for a long period of time (over 1 month), remove the batteries to avoid possible damage from battery corrosion. If battery leakage occurs, wipe the battery liquid from the battery compartment, then insert new batteries.

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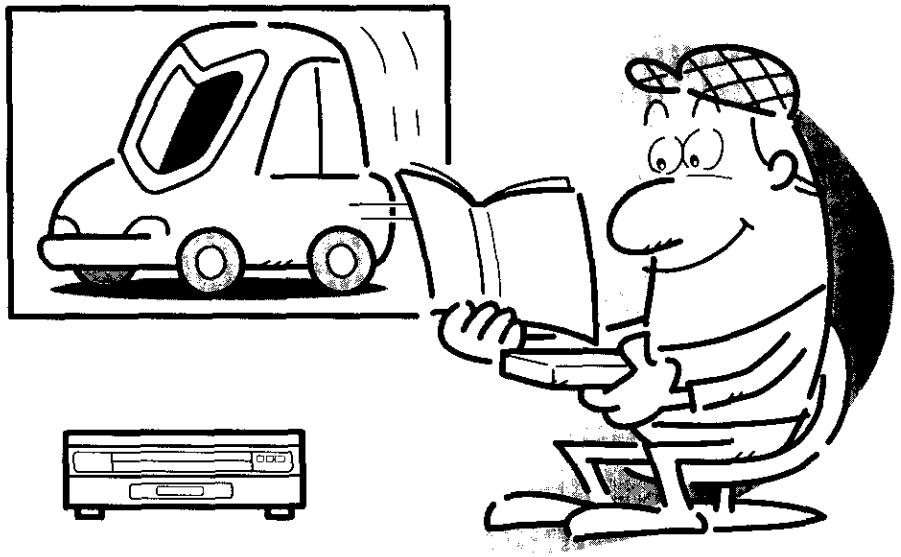
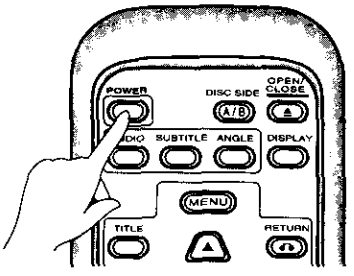


Playing LDs

1. Press the POWER button.

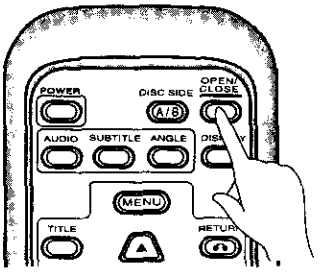


- The STANDBY indicator goes out.

- You can switch the display OFF by pressing the FL OFF button. If you do this, the indicator above the button lights.

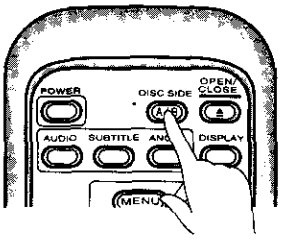
FL OFF

2. Press the OPEN/CLOSE ⏏ button.



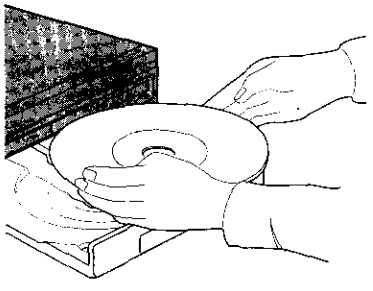
- Press the LD ⏏ button on the player.
- The disc table comes out.

- With a double-sided LD, load with the A side facing up and the B side facing down. Recorded A and B sides are on opposite sides of the disc itself.



Pressing the remote control's DISC SIDE A/B button switches between sides A and B. The A side or B side indicator lights on the player to confirm the selected side.

3. Load a disc.

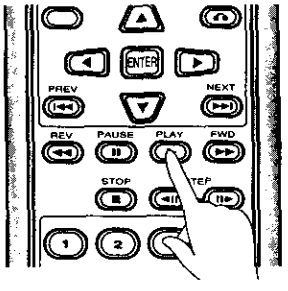


- Load a single-sided disc with the label facing up, or load a double-sided disc with the label for the desired side facing up, using the disc table guide to align the disc.

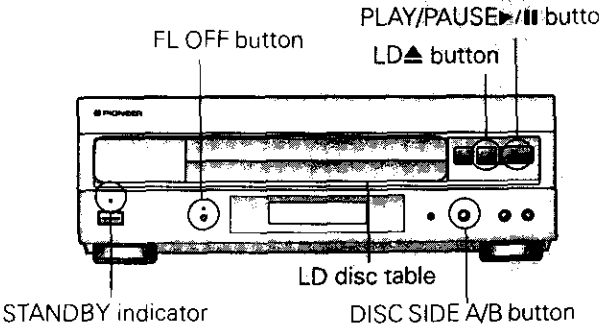
Note

- ◆ Not aligning a disc with the disc guide, or loading two discs at once will result in damage to the disc(s) and player.

4. Press the PLAY ► button.

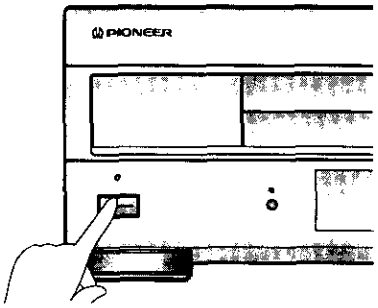


- Press the PLAY/PAUSE ►/II button on the player.
- When the A side of a double-sided disc has finished playing, playback of the B side automatically starts.



Playing DVDs, CDs and Video CDs

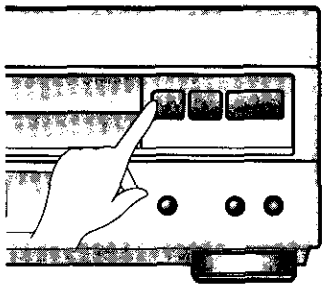
1. Press the POWER button.



- The STANDBY indicator goes out.

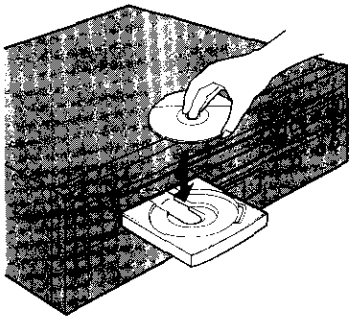
> - So as not to spoil the atmosphere of a video, you can switch the display OFF by pressing the FL OFF button. If you do this, the indicator above the button lights.
>
> FL OFF
> ☼
> ○

2. Press the DVD/CD ▲ button.



- The DVD/CD disc table comes out.
- The LD disc table and the DVD/CD disc table come out if you press the remote controls OPEN/CLOSE ▲ button.

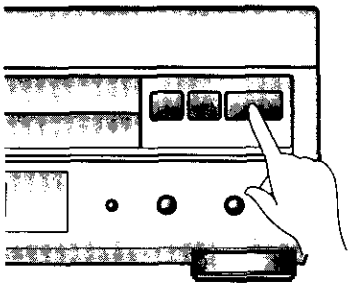
3. Load a disc.



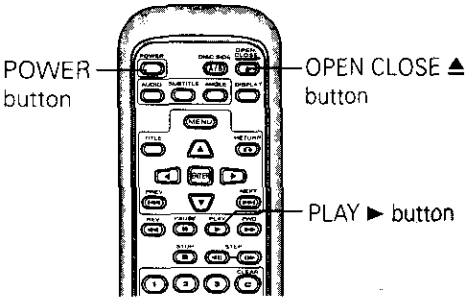
- Load a disc with the label side facing up, using the disc table guide to align the disc.

> **Notes**
>
> - ◆ You cannot play DVDs that have no region number (refer to page 56).
> - ◆ You cannot play DVDs that contain anything other than DVD-video data.
> - ◆ During operation, the following marks may appear on the TV screen.
>   - :When you perform an operation that is not possible with the player.
>   - :When you perform an operation that is not possible with the disc.

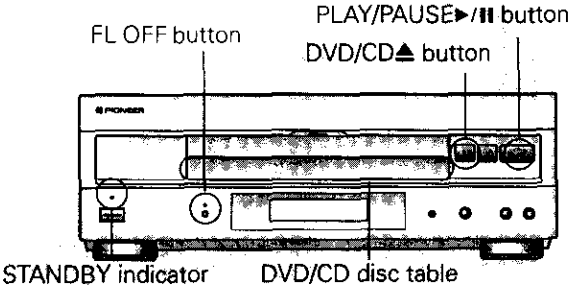
4. Press the PLAY/PAUSE ►/II button.



- Press the PLAY/ ► button on the remote control unit.
- Depending on the disc, a menu may be displayed. If a menu is displayed, refer to page 16.

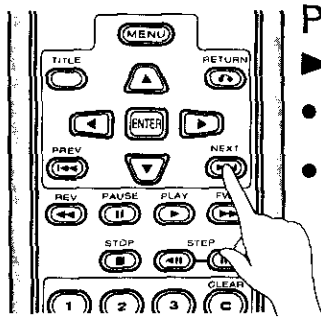


> **Note**
>
> - ◆ The time taken for playback to start may differ depending on the type of disc previously played and the type of disc currently loaded.



Chapter (Track) Skip Forward/Skip Back

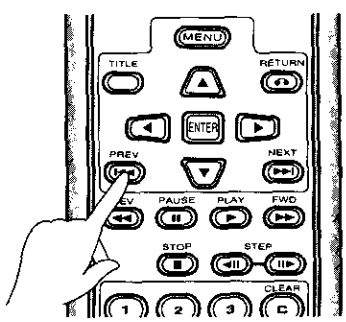
Skipping forward to the next chapter (track)



Press the NEXT ►►I button.

- Press to skip forward to the next chapter (track).
- Same operation as the FWD ►►►►I button on the player.

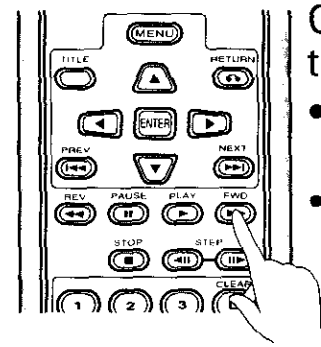
Skipping back to the previous chapter (track)



Press the PREV I◄◄ button.

- Press once to skip back to the start of the chapter (track) currently playing.
- Press again to skip back to the start of the previous chapter (track).
- Same operation as the REV I◄◄◄◄ button on the player.

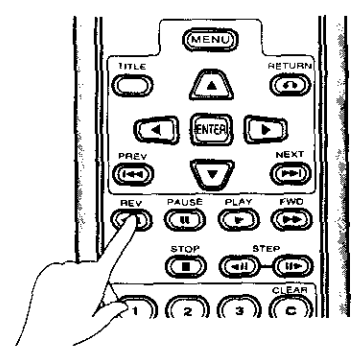
Fast forward



Continue pressing the FWD ►► button.

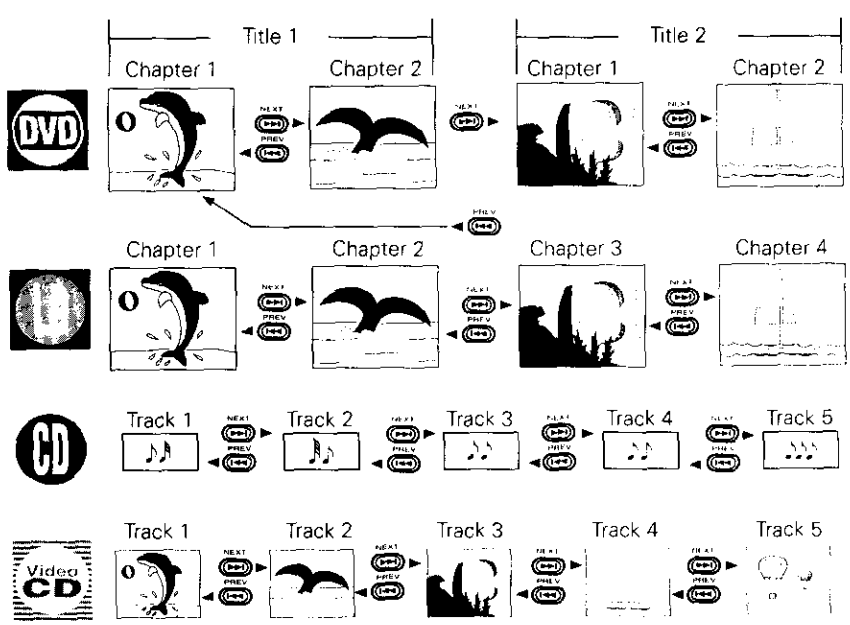
- If you stop pressing while the on-screen "Scan" indication is flashing, normal play resumes.
- If the "Scan" indication lights, fast forward continues even if you stop pressing the button. Press the PLAY ► button to resume normal play when you reach your desired location.
- Continue pressing the FWD ►► ►►I button on the player to fast forward.

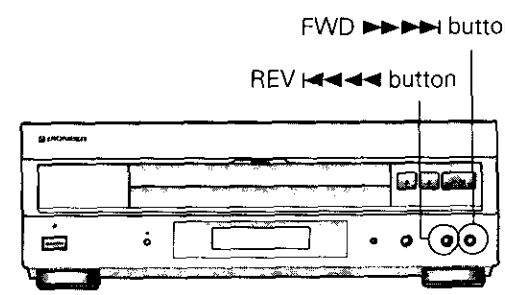
Fast reverse



Continue pressing the REV ◄◄ button.

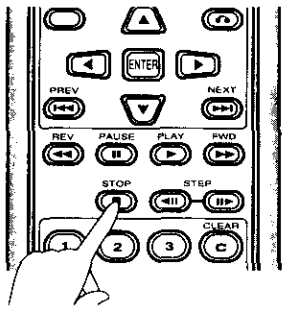
- If you stop pressing while the on-screen "Scan" indication is flashing, normal play resumes.
- If the "Scan" indication lights, fast reverse continues even if you stop pressing the button. Press the PLAY ► button to resume normal play when you reach your desired location.
- Continue pressing the REV I◄◄ ◄◄ button on the player to fast reverse.





Stopping Playback & Switching Power OFF

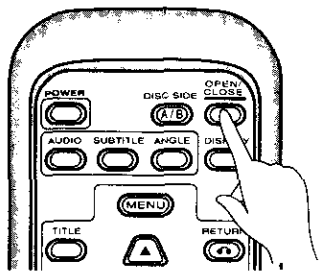
1.



Press the STOP ■ button.

- Playback stops.

2.

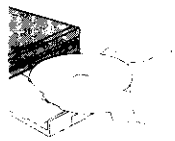


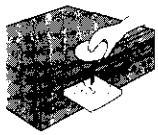
Press the OPEN/ CLOSE ▲ button.

- Press the LD ▲ button or the DVD/ CD ▲ button on the player.
- The disc table comes out.

3.

When removing an LD

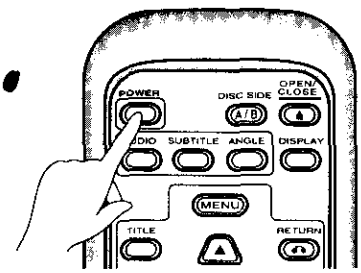




When removing a DVD/CD

Remove the disc.

4.

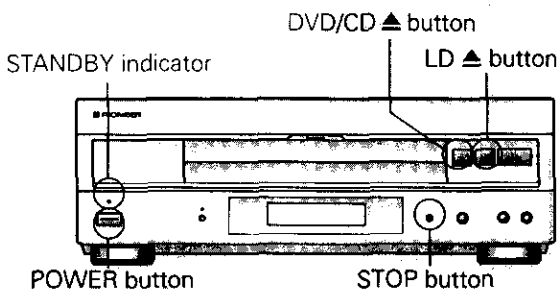


Press the POWER button.

- The disc table goes back in, power switches OFF, and the STANDBY indicator lights.

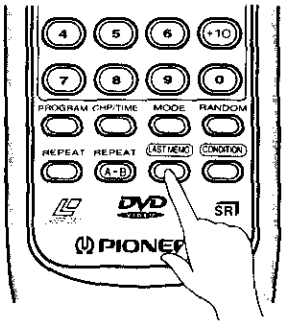
Note

◆ You can continue play from where you stopped part away through (refer to page 14).



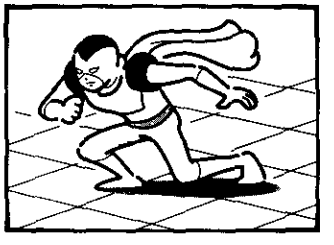
Continuing Playback from where you Stopped

Memorizing the place where you stopped watching (LAST MEMORY)



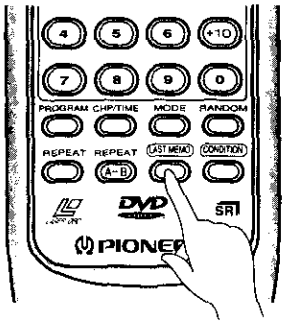
Press the LAST MEMO button during play.

- The LAST MEMORY indicator lights on the player.
- Press the POWER button to switch power OFF, or press the STOP ■ button to stop playback.



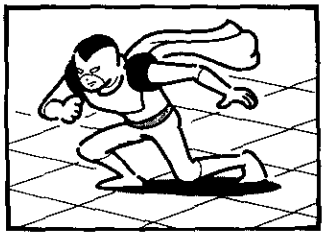
- With DVDs, LAST MEMORY memorizes video, audio, display, mode and other settings as well as the place where playback stopped.
- Even with a disc you have memorized with LAST MEMORY, playback begins at the start of the disc if you press the PLAY► button.
- When you continue playback from the point where you stopped, LAST MEMORY is automatically canceled for that disc.
- If you register more than five DVDs in LAST MEMORY, details of the latest disc are memorized, while details of the least recent disc (the disc you registered first) are erased.
- If you eject an LD or Video CD, memorized details are erased.
- With DVDs, LAST MEMORY may not function with certain titles.

Resuming playback from where you stopped



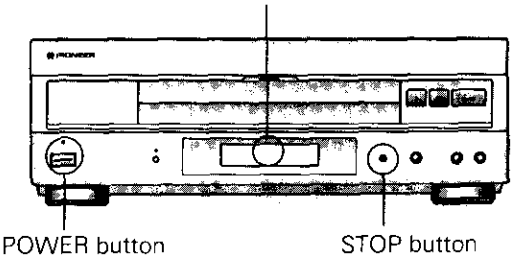
Press the LAST MEMO button during STOP.

- When power is OFF, if you press the LAST MEMO button, power automatically switches ON, and play resumes from the place you stopped watching.



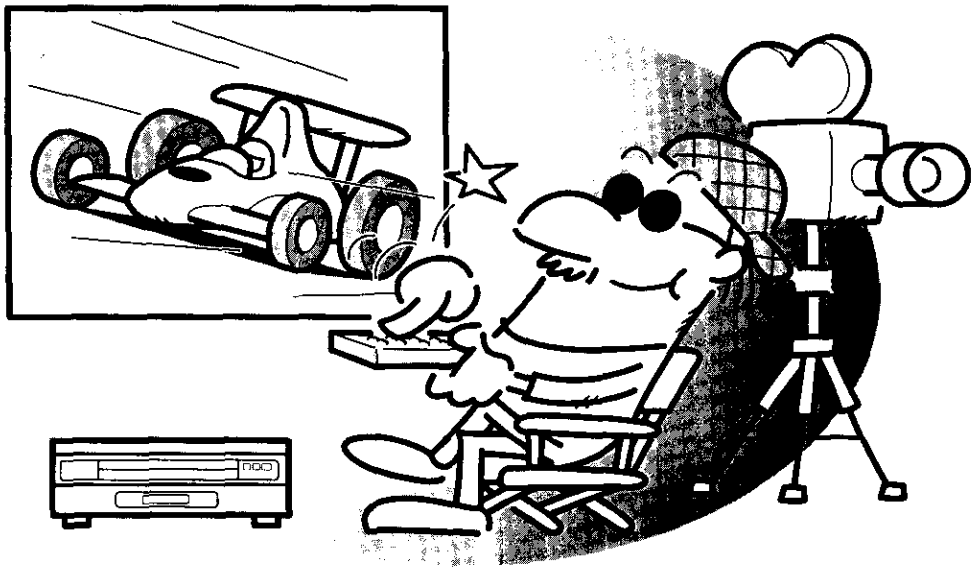
Notes

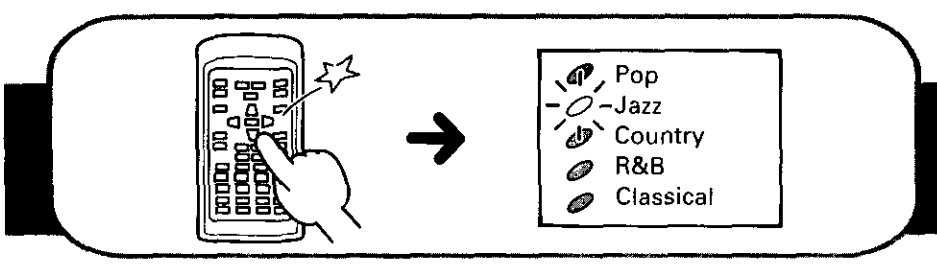
- Resuming play is not possible with CDs.
- During Video CD PBC play, Last Memory play may not be possible.
- If there is a power outage or you disconnect the power cord while the player is operating, Last Memory settings cannot be memorized. Before you disconnect the power cord, be sure to cancel the "OFF" indication in the display window by pressing the POWER button on the player or the POWER button on the remote control.



Detailed Operation

Playback by Menu Selection 16
Searching for a Desired Video Scene/Audio Track Part1 17
Searching for a Desired Video Scene/Audio Track Part2 18
Playback in a Desired Order (Program Play) 19
Repeat Play 20
Still/Step Slow Playback 21
Random Play 22





DVD

Video CD

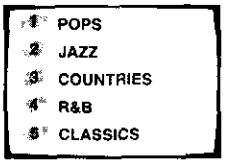
Playback by Menu Selection

DVDs and Video CDs, depending on the disc, feature selection menus.
This player lets you choose a desired title or track by selecting from a menu.

Playing Back from Menu Display

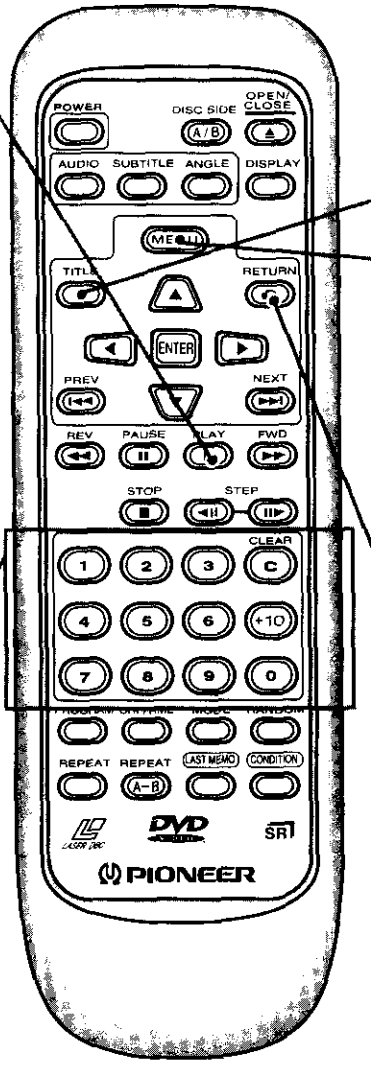
① Press PLAY.

- A menu is displayed. This menu is recorded on the disc. Menus differ depending on the disc.
- With Video CDs that have Play Back Control, PBC is indicated in the display window.



② Title (track) selection with the number buttons.

- When selecting a number higher than 10, use the +10 button.
  - When selecting 10, press +10 → 0.
  - When selecting 17, press +10 → 7.
  - When selecting 20, press +10 → +10 → 0.
- The selected title or track starts playing.
- With DVDs, you can also select numbers with the ▲ and ▼ buttons and then press ENTER.



Returning to Menu Display during Playback

In case of DVDs

① Press TITLE.

② Press MENU.

- Press MENU again for a menu of title contents.
  Perform operations following indications provided in the menu.

In case of Video CDs

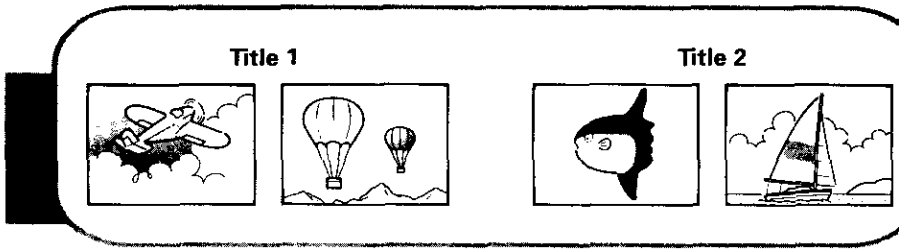
Press RETURN.

- Pressing the RETURN button during PBC play shows the menu.

- You can also play Video CDs without calling up a menu by pressing a number button during STOP. For example, to start playback from track 1, press number button 1.
- Depending on the title, you can also make a selection using a menu. To do this, press the MENU button when indications are displayed to call up a menu, and select the desired title.

Notes

- ◆ During Video CD PBC play, Program, Random and Repeat Play functions do not operate. This is because you can use menus for interactive operation.
- ◆ With Video CDs when PBC is ON, player operation differs depending on the disc. For details, read the instructions that come with the disc.
- ◆ With DVDs, menu indications may not be displayed.



DVD

Searching for a Desired Video Scene/Audio Track Part 1

Direct Search with Title Numbers

① **Press TITLE during play. (When in the Stop mode, move to step ② without pressing TITLE.)**

TITLE 1

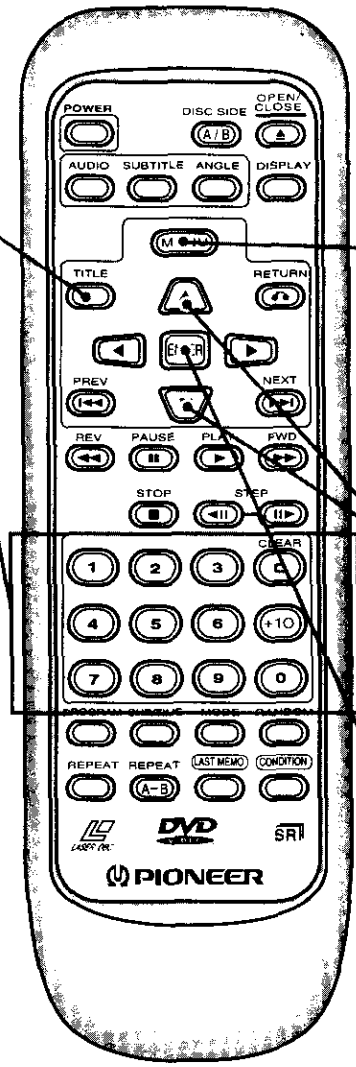
- Title numbers flash on screen.

② **Selecting title numbers directly with the number buttons.**

TITLE 3

- When selecting title number 3, press 3.
- When selecting title number 10, press +10 → 0.

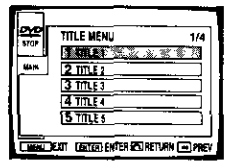
- When a title number is flashing, if you continue pressing TITLE, title numbers advance one at a time. When you reach the desired title number, you can select it by pressing PLAY.



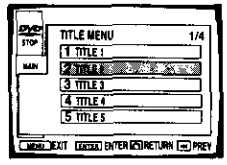
Search with Menu

① **Press TITLE. (When in the Stop mode, move to step ③.)**

② **Press MENU during play.**



③ **Select a title number using ▲ ▼ buttons.**



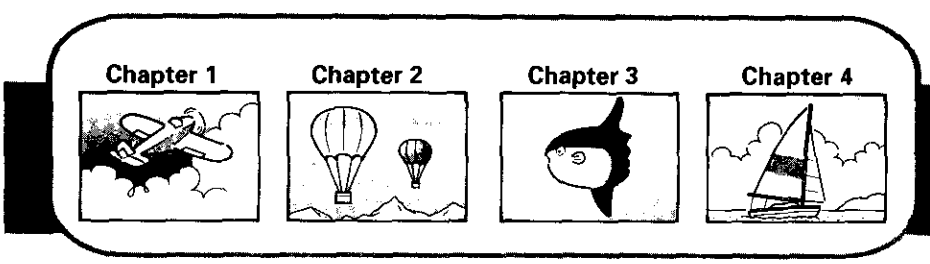
④ **Press ENTER.**

- Playback of the selected title starts.

Notes

- ◆ You cannot playback successive titles.
- ◆ To playback multiple successive titles, program the titles and then perform Program playback. (Refer to page 19.)
- ◆ With certain DVDs, search operation may stop. In this case, the ⊘ mark appears.
- ◆ Depending on the disc, menu may not be displayed.

- You can also select titles directly using the number buttons. The selected title soon starts playing.
- Depending on the title, you can also make a selection using a menu. To do this, press the MENU button when indications are displayed to call up a menu, and select the desired title.



DVD CD LD Video CD

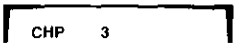
Searching for a Desired Video Scene/Audio Track Part2

Three ways to search a DVD or Video CD; normal search, direct search and time search are possible.
For CD, direct search only is possible.
Four ways to search an LD; normal search, direct search and time/frame search are possible.

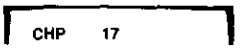
Chapter/Track Number Search (Normal Search)

Direct search using the number buttons

Example 1: To select chapter/track number 3, press ③.



Example 2: To select chapter/track number 17, press +10 → 7.



- With DVDs, when performing this operation during the Stop mode, refer to "Searching for a Desired Video Scene/Audio Track Part 1" on page 17.

When the Chapter/Track number is high

① Press CHP/TIME.

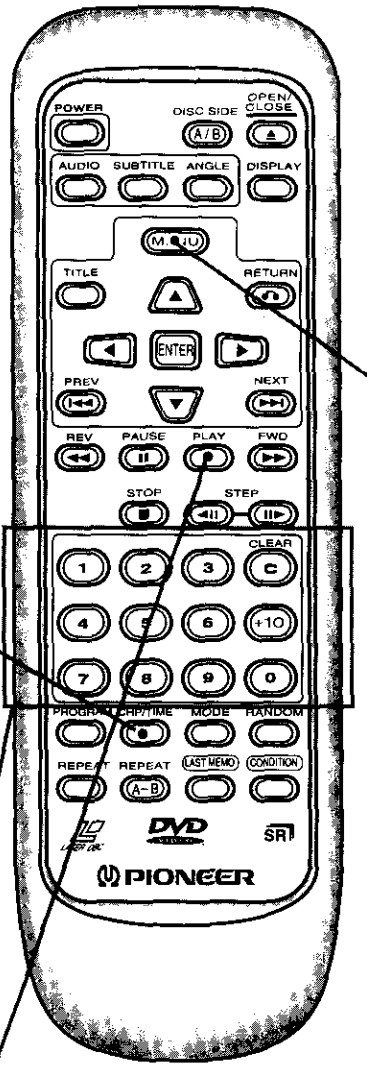
- Chapter/Track number flashes.
- With DVDs, a menu may be displayed during the Stop mode. In this case, refer to "Chapter Number Search with Menu" on the right.

② Specifying Chapter/Track numbers with the number buttons.

Example 1. Selecting Chapter/Track 31
press ③ → ①.
Example 2. Selecting Chapter 187
press ① → ⑧ → ⑦.

③ Press PLAY.

- The selected Chapter/Track starts playing.



Chapter Number Search with Menu

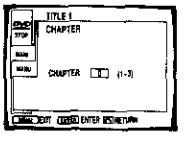
You can perform this with DVDs only.

① Press CHP/TIME.

- When in the Stop mode, proceed to step ③.

② Press MENU.

- Chapter menu is displayed.

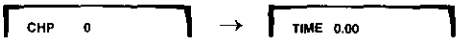


③ Make a selection following on-screen indications.

- With certain titles, there may be no menu display. In this case, perform the operations described at left.

Time Number Search/ Frame Number Search

① Press CHP/TIME twice.



- With DVDs or LDs that have no chapters, time is displayed after pressing the button once.

② Select the desired time number/frame number with the number buttons.

Example 1: To select 21 minutes 43 seconds, press ② → ① → ④ → ③.
Example 2: To select frame number 423, press ④ → ② → ③.

- With DVDs, you cannot search for chapters that overlap titles.

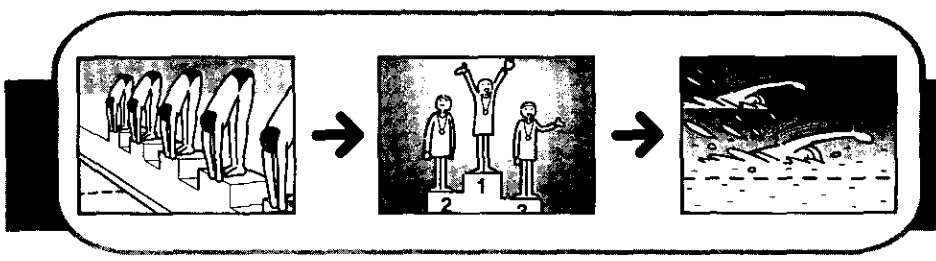
③ Press PLAY.

- Playback starts from the selected elapsed play time or selected frame.

- To clear Title and Chapter/Track/Time/Frame indications when they are flashing, press the CLEAR C button twice.
- Depending on the title, you can also make a selection using a menu. To do this, press the MENU button when indications are displayed to call up a menu, and select the desired title.

Notes

- Time Search is not possible with CDs.
- With DVDs, Search may not be possible with certain titles. In this case, the 🚫 mark is displayed.
- When performing DVD or Video CD Time Search, playback may start from a slightly different time than that specified.
- When a DVD is not playing (in the STOP mode), Time Search is not possible.
- During Video CD PBC play, search operations described above are not possible.



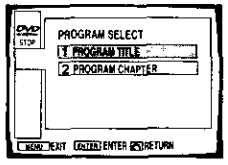
DVD CD Video CD

Playback in a Desired Order (Program Play)

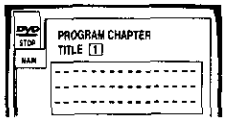
Programming (DVD)

① **Press** PROGRAM.

② **Select the program type with the number buttons and press** ENTER.



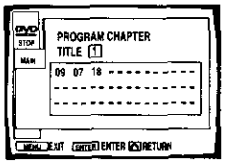
- If you select a title, move directly to step ③, and input the title number.
- If you select a chapter, the title number is indicated, and the chapter input menu is displayed. If the title number indicated is the one desired, move directly to step ③. If you want to change the title number, press the RETURN button, and then use the number buttons or ◀ ▶ buttons to change the number as desired.



③ **Program titles or chapters using the number buttons.**

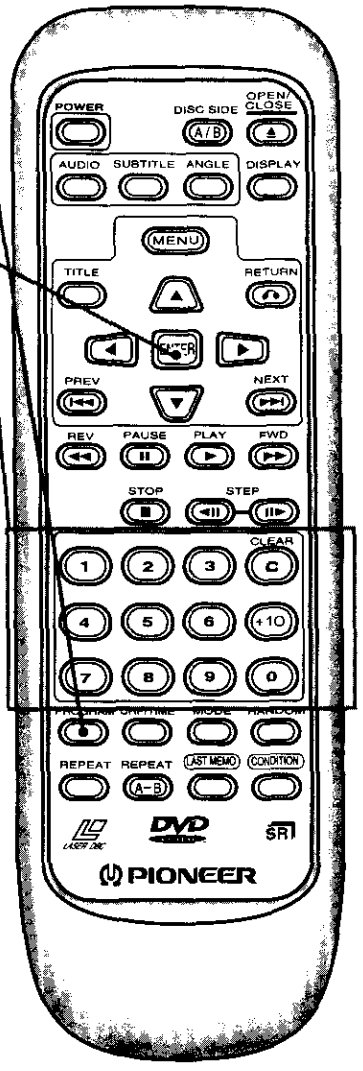
9 → 7 → +10 → 8

When programming 9, 7, 18.



④ **Press** ENTER.

- Playback starts in the set order.



Confirming, adding to and canceling programs

① **Press** PROGRAM.

② **With DVDs, select the type of program and press** ENTER.

- You can confirm programs by performing the above operations.

③ **To add to programs, make selections with the number buttons.**

④ **To cancel a program, select the desired program with ◀ ▶ and press** CLEAR.

Program setting (Video CDs, CDs, LDs)

① **Press** PROGRAM.

② **Programming tracks 9, 7 and 18 in order.**

9 → 7 → +10 → 8

Press the number buttons in order.

- With double-sided LDs, program the disc side together with each track number. For example, for track 9 on side B,

DISC SIDE → DISC SIDE → 9

③ **Press** ENTER.

- Playback starts in the specified track order.

To cancel an entire program

During STOP, press CLEAR.

- The entire program for the disc loaded in the disc table is cleared.

Stopping program play

Press STOP.

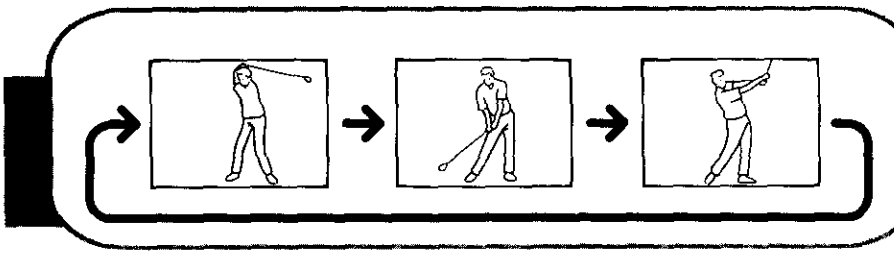
- Program play stops.

Notes

- ◆ You cannot program when playing a Video CD (during PBC).
- ◆ When moving chapters, a chapter not programmed may appear on screen, but this is not a malfunction.
- ◆ With DVDs, programming may not be possible with certain titles. In this case, the 🚫 mark is displayed.
- ◆ With DVDs, you cannot program chapters that are in different titles.

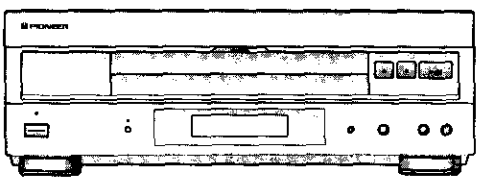
- You can program up to 24 steps.
- If you press the wrong number button, press CLEAR and then press the correct number button.
- Program play is not possible with discs that have no chapter numbers recorded on them.

Pressing PAUSE during programming:
If you press PAUSE instead of a number button, ❚❚ is displayed indicating that a pause has been programmed.



DVD CD Video CD

Repeat Play



Repeat play of a chapter/track

Press REPEAT once during playback of the chapter or track you want to repeat.

Repeat play of a title

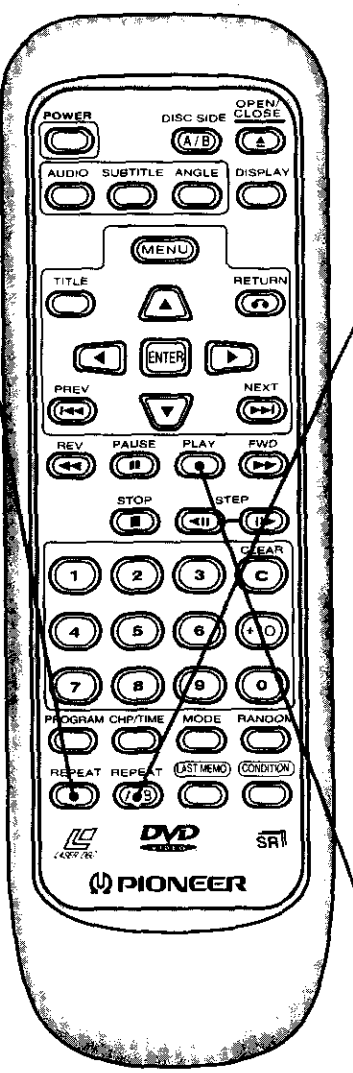
Press REPEAT twice.

- With DVDs, the title continues playing until the end, and then playback starts once more from the beginning of that title.
- With CDs and Video CDs, the entire disc is repeated
- With LDs, a single side is repeated.

Repeat play of double-sided LDs

Press REPEAT three times.

- Both sides are repeated, starting on Side A.



Repeat play of a specified section

Press REPEAT A-B at the beginning and end of the section you want to repeat.

Return to a specified location

① Press REPEAT A-B at the desired location.

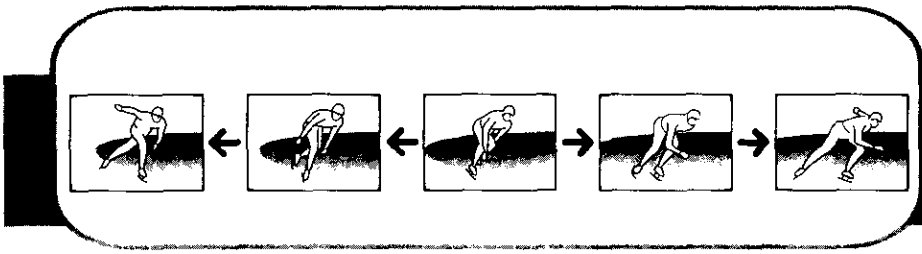
② When you want to return to the selected location, press PLAY.

- Press CLEAR to clear a specified location.

- Press CLEAR to cancel Repeat play. The Repeat play mode is canceled, but playback continues.
- With DVDs, everything in the same title is repeated.
- During program play, press REPEAT and the program is repeated.

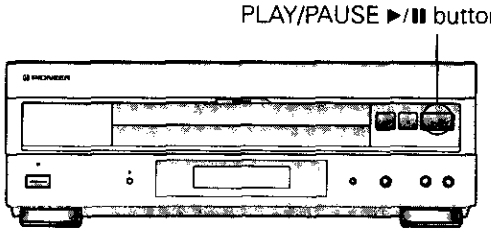
Notes

- ◆ With DVDs, Repeat play may not be possible with certain titles. In this case, the mark is displayed.
- ◆ During Video CD PBC play, repeat play is not possible. To perform Repeat play, start playback without displaying a menu (refer to page 16), and press REPEAT.



DVD Video CD

Still/Step Slow Playback



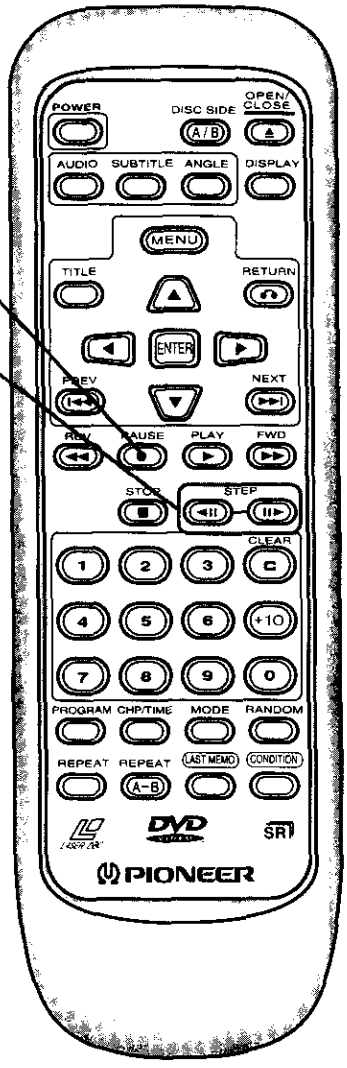
Viewing one frame at a time with Step Playback

① Press PAUSE (II).

② Press the (◀II) or (II▶) button.

(II▶): Each time you press it, you move ahead one frame.

(◀II): Each time you press it, you move back one frame. (LDs)
Each time you press it you move back a little. (DVDs)



Slow playback

During play, continue pressing the (◀II) or (II▶) button.

(II▶): Playback is slowed.

During slow playback, you can adjust playback speed with the (◀II) and (II▶) buttons.

(◀II) ← 1/16 – 1/8 – 1/4 – 1/2 → (II▶)

(◀II): Slow playback is in the reverse direction.

Viewing a Still Frame

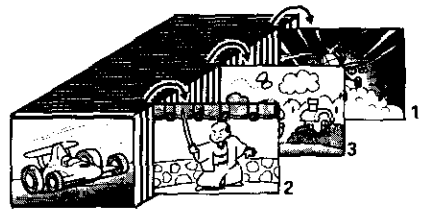
Press PAUSE (II).

- Press the PLAY/PAUSE ▶/II button on the front of the player.
- With LDs or DVDs, if still images are unclear, refer to "Field" on page 30, and perform the necessary settings.

- To return to normal playback, press PLAY (▶) (or the PLAY/PAUSE ▶/II button on the player)

Notes

- There is no sound when viewing still frames or slow playback, or when advancing one frame at a time.
- Pause may not be possible with certain discs. In this case, the 🚫 mark is displayed.
- Slow playback may not be smooth with some Video CDs.
- With LDs, play automatically stops if still frame display continues for 20 minutes.



DVD CD Video CD

Random Play

With DVDs

Random play of chapters within a single title

Press RANDOM and then press ENTER.

- "RANDOM CHP" is displayed on the screen, and chapters within a single title are played in random order.

Random play of titles

Press RANDOM twice, and then press ENTER.

- "RANDOM TITLE" is indicated on the screen, and titles are played in random order.

With LDs

Press RANDOM.

- "RANDOM" is indicated on the screen, and chapters are played in random order.

For random play of side B on an LD:

- Press DISC SIDE (A/B), and then press RANDOM after side B has been selected.

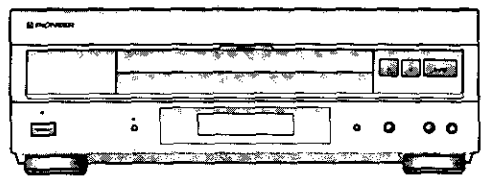
With CDs and Video CDs

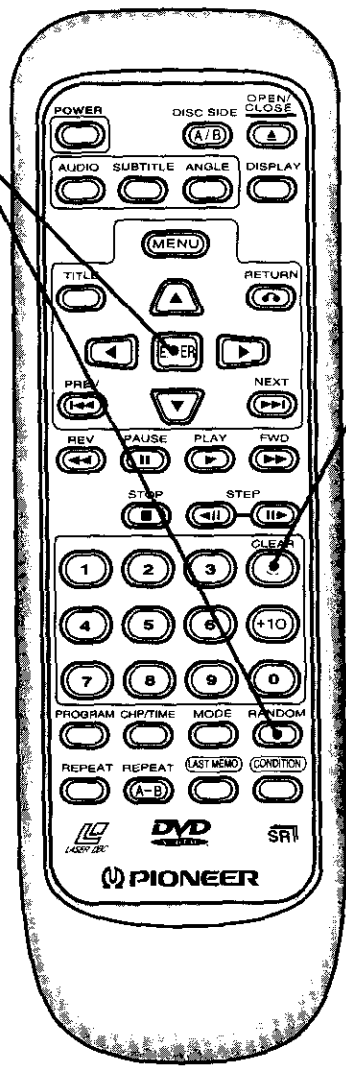
Press RANDOM.

- "RANDOM" is indicated on the screen, and tracks are played in random order.

During random play:

- Press NEXT, and the player selects and starts playing the next track.
- Press PREV, and the current track starts playing again from the beginning.





Stopping Random play

Press CLEAR.

- This returns you to normal playback of chapters/tracks in order from the chapter/track currently playing.

Notes

- ◆ Random play is not possible with LDs not featuring chapters.
- ◆ With Video CDs, Random play is not possible during playback with the menu displayed (PBC playback). To perform Random play, start playback without displaying a menu (refer to page 16), and press RANDOM.
- ◆ Random play of programmed chapters is not possible.
- ◆ With DVDs, random play is not possible with certain titles.
- ◆ Random play cannot be repeated.

Setting

Multi-Aspect Setting for Wide Screen TV Software 24
Memorizing Settings for Often Viewed DVDs (Condition Memory) 25
Selecting Languages (Multi-Language) 26
Changing Audio Type 26
Selecting Subtitle Language (Multi-Language Subtitles) 27
Viewing from a Desired Camera Angle (Multi-Angle) 27
Viewing Information 28
Changing Picture and Sound Quality 29
Quick LD Side Changing (Quick Turn) 32
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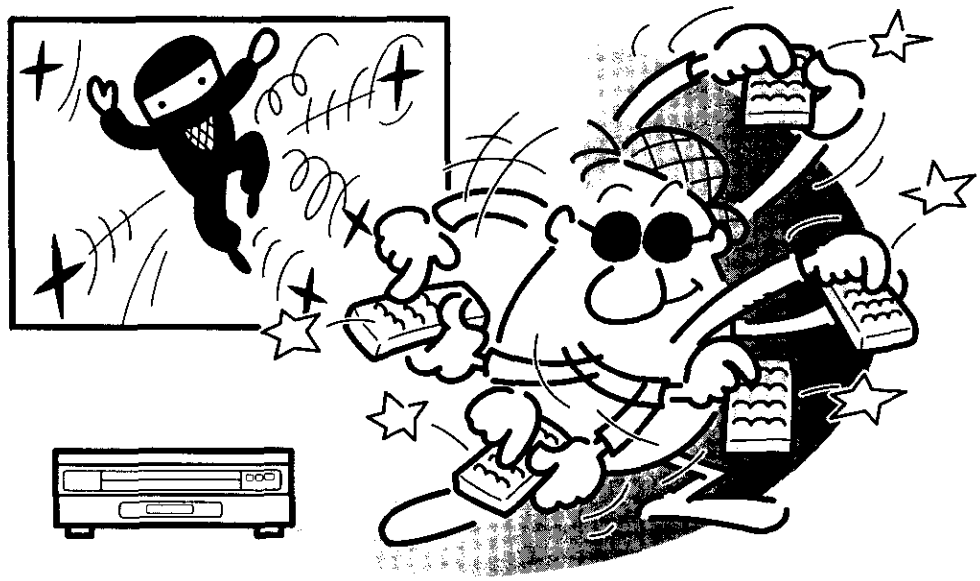
Outline of GUI (Graphical User Interface) Operation 33

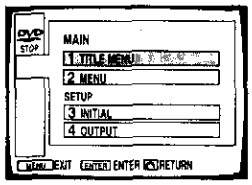


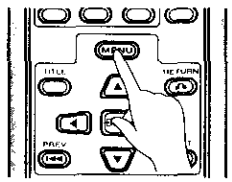
Multi-Aspect Setting for Wide Screen TV Software

Certain DVDs feature image data recorded with the "squeeze" recording system for wide screen viewing. When watching this kind of DVD on a conventional TV, the picture may appear vertically squeezed. If this occurs, you can use the Multi-Aspect function to achieve a normal picture.

Setting is possible when a DVD is loaded.

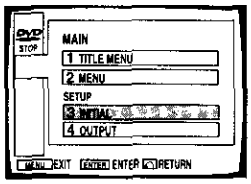
1. Press (MENU) when the player is in the STOP mode.

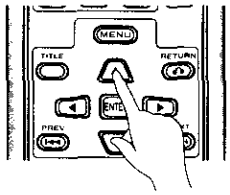




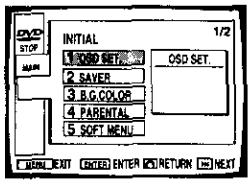
- Main Menu indications are displayed.

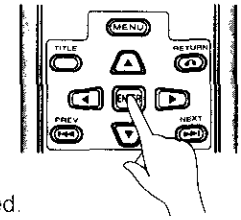
2. Select initial setting with ▲▼.





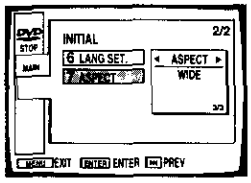
3. Press (ENTER).

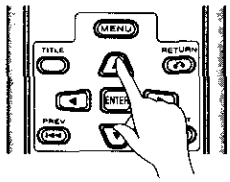




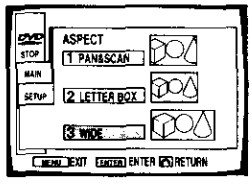
- Initial setting indications are displayed.

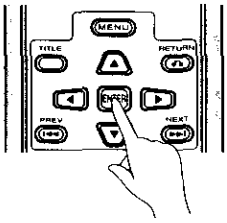
4. Select Multi Aspect with ▲▼.





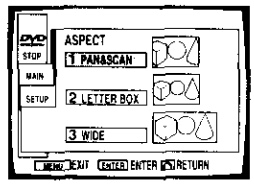
5. Press (ENTER).

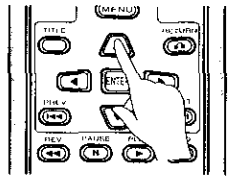




- Aspect indications are displayed.

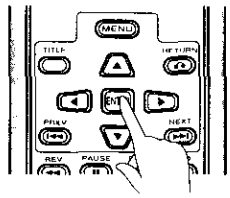
6. Select the desired mode (Pan & Scan, Letterbox, Wide) with ▲▼.





7. Press (ENTER).

- Switch to the desired screen.



With DVDs enabling switching between aspect ratios, select the appropriate one for your TV.

Disc	Aspect switching	Wide TV (16:9)	Regular TV (4:3)
16 : 9	Wide		
	Pan & Scan		
	Letterbox		
4 : 3			

Selecting ☐ in the chart above assures correct aspect ratio for the TV used.
Whether or not aspect ratio can be changed depends on the disc. Confirm by referring to the disc's jacket.
With disc not enabling aspect ratio changing, make adjustments with the TV.

Note

- ◆ If there is a power outage or the power cord is disconnected while power to the player is ON, memorized settings are erased. When disconnecting the power cord, be sure to press POWER button on the main unit and the remote control until "OFF" is no longer indicated in the display.

- The width-to-height ratio of conventional TVs is 4:3, while the width-to-height ratio of wide screen and Hi-Vision TVs is 16:9. This width-to-height ratio is called the aspect ratio.

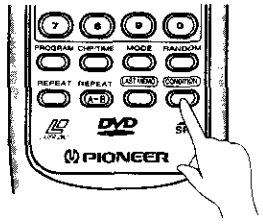
Memorizing Settings for Often Viewed DVDs (Condition Memory)

You can store settings for DVDs you often watch in memory. Settings remain in memory even if you remove the disc from the player, or switch power to the player OFF. If you load a disc that has its settings memorized, the Condition indicator lights. When you start playing the disc, the memorized settings are automatically recalled.

The Condition indicator in the display section lights. You can memorize details for the following five settings.

Multi-Aspect (page 24)
Multi-language (page 26)
Multi-language subtitles (page 27)
Cinema mode/Animation mode (page 29)
Location (page 41)

Press (CONDITION) during Play.



"CONDITION" is indicated in the display.

When a memorized disc is loaded.

"CONDITION" is indicated, and previous settings are displayed.

Erasing memorized settings.

Load a memorized disc, and when "CONDITION" is indicated, press (CLEAR).
The recorded details for that disc are erased.

Note

- If there is a power outage or the power cord is disconnected while power to the player is ON, memorized settings are erased. When disconnecting the power cord, be sure to press POWER button on the main unit and the remote control until "OFF" is no longer indicated in the display.

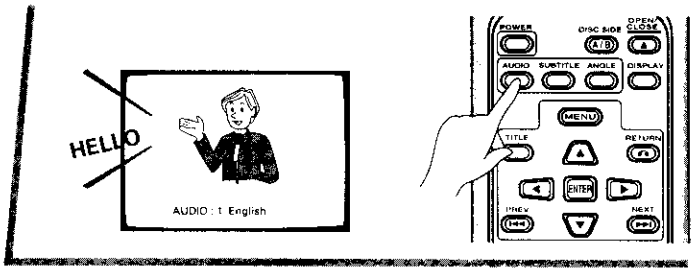
- Settings are stored in memory for use any time.
- You can store settings for up to 30 DVDs in memory. If you memorize settings for more than 30 DVDs, previously memorized settings are erased in order from the least recently memorized settings.
- To make changes to Aspect ratio, Cinema mode/Animation mode, subtitle language and language settings, press (CONDITION) during playback.
- This player memorizes multi-language subtitles and multi-languages as languages not numbers. With DVDs that have multiple settings for the same language, playback starts from the first number.

DVD

Selecting Languages (Multi-Language)

Dolby Digital, PCM and other audio data can be recorded on DVDs in a number of languages, letting you choose the desired language.

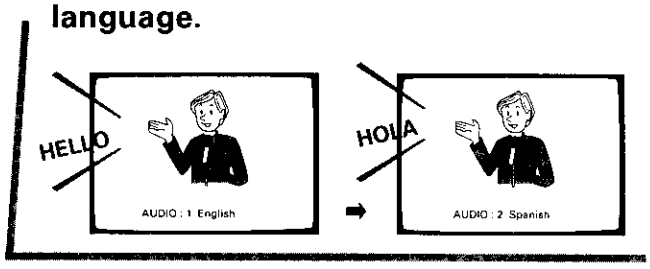
1. Press AUDIO during playback.

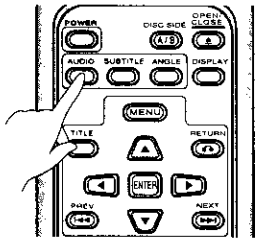


Note

- You cannot switch languages if there is only one language recorded on the disc.
- Language number and setting differ with each disc, so refer to the disc's instructions.
- Some titles may not enable switching between languages. If this happens, the mark is displayed.

2. Press AUDIO to select the desired language.



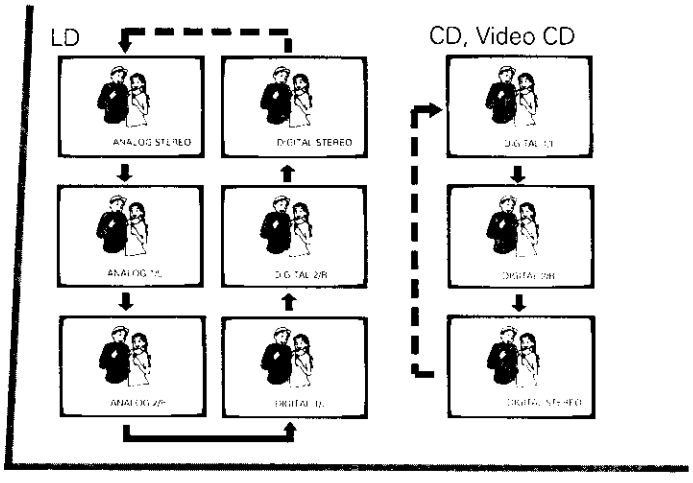


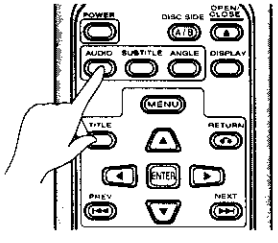
- Depending on the title, you can also make a selection using a menu. To do this, press the MENU button when indications are displayed to call up a menu, and select the desired title.

CD LD Video CD

Changing Audio Type

1. Press AUDIO during playback.





- Audio type changes each time you press the button.

Notes

- You cannot select digital audio if digital audio data is not recorded on the LD.
- You cannot switch audio type when using digital output of Video CD output (optical, coaxial) (DD RF output).
- With LDs, switching to the CX System is possible with some discs. In this case, you can perform switching with this operation.

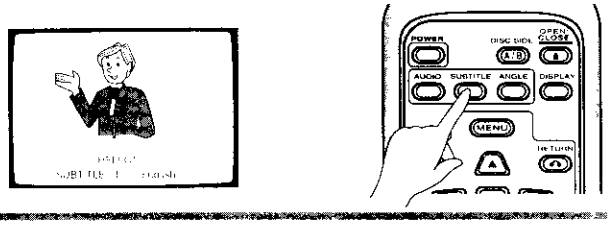
- With karaoke and other software, set the appropriate audio type for singing and accompaniment after referring to information on the disc jacket or accompanying material.

DVD

Selecting Subtitle Language (Multi-Language Subtitles)

You can select a desired subtitle language with DVDs that have subtitle data in multiple languages recorded on them.

1. Press SUBTITLE during playback.

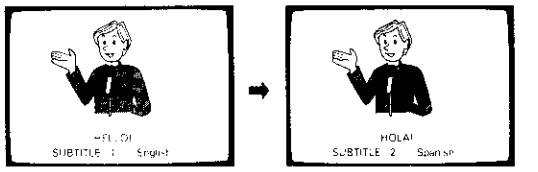


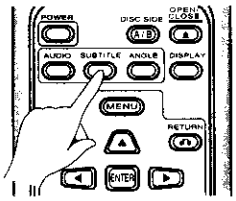
Notes

- You cannot switch subtitle languages with discs that do not have subtitle data recorded on them, or discs that feature subtitle data in only one language.
- Some titles may not enable switching between subtitle languages. If this happens, the mark is displayed.

- To clear subtitles during playback, when there's a display press CLEAR after first pressing SUBTITLE. You can also clear subtitles by selecting OFF in the subtitle menu display.
- If the basic subtitle is set to "OFF" in the initial setting menu, you can cancel subtitles.
- Depending on the title, you can also make a selection using a menu. To do this, press the MENU button when indications are displayed to call up a menu, and select the desired title.

2. Press SUBTITLE to select the desired language.



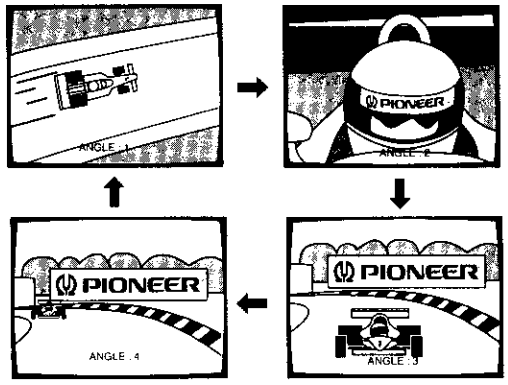


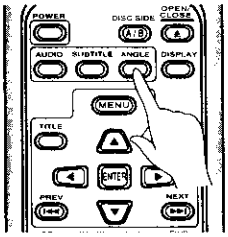
DVD

Viewing from a Desired Camera Angle (Multi-Angle)

With DVDs featuring recordings of images shot from different angles, you can choose a desired viewing angle.

1. Press ANGLE during playback.





- The camera angle changes each time you press the button.
- You can also make your selection from a menu.

Note

- Some titles may not enable switching between angles. If this happens, the mark is displayed.

To confirm whether multi-angle information is recorded on a disc

The disc jacket bears the mark. When a disc played on this player has sections that include multi-angle information, the mark will be displayed on your TV screen.

Setting without displaying angle mark

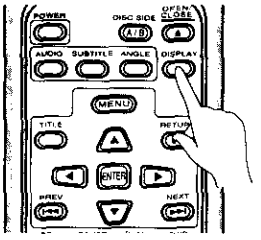
1. Press MENU.
2. Press the 3 button.
   - The initial setting menu is displayed.
3. Press the 1 button.
   - Shows the screen menu.
4. Press the 4 button.
   - The angle mark menu is displayed.
5. Press the 2 button.

- You can use the Multi-Angle function only with discs featuring recordings of images shot from different camera angles.
- During Multi-Angle playback, the Angle indicator on the player lights.
- Depending on the title, you can also make a selection using a menu. To do this, press the MENU button when indications are displayed to call up a menu, and select the desired title.

Setting

Viewing Information

Press DISPLAY during playback.

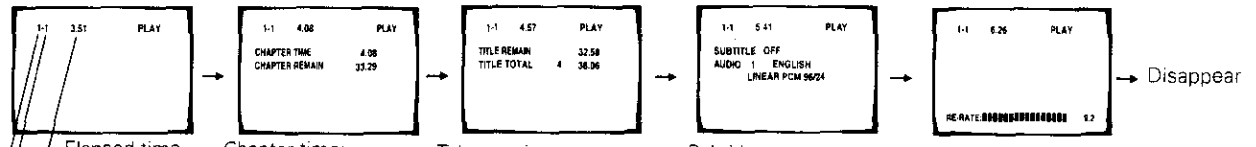


- Each time you press DISPLAY, the setting changes as shown in the flow-charts below.
- If you press during the Stop mode, all the disc's information is displayed.

Notes

- To prevent TV screen burn-in, the display automatically switches OFF after about 80 minutes.
- Not displayed with LDs that do not have a TOC (refer to page 56) or after playback of side B finishes. There is also no display if Quick Turn is switched ON.

< DVD >



Elapsed time
Chapter number
Title number

Chapter time:
Elapsed time of the chapter currently playing
Chapter remain:
Remaining time of the chapter currently playing

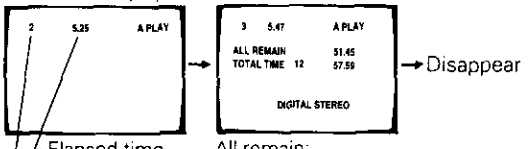
Title remain:
Remaining time of the title currently playing
Title total:
Total chapter number and total play time of the title currently playing

Subtitles:
Subtitle imformation
Audio:
Audio information

Play rate:
Level meter showing play rate

< LD >

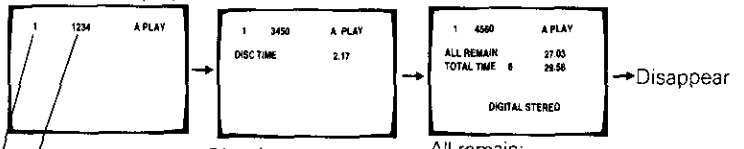
CLV: Extended play disc



Elapsed time
Chapter number

All remain:
Remaining time from the current location on the disc playing
Total time:
Total chapter number and total disc play time

CAV: Standard play disc

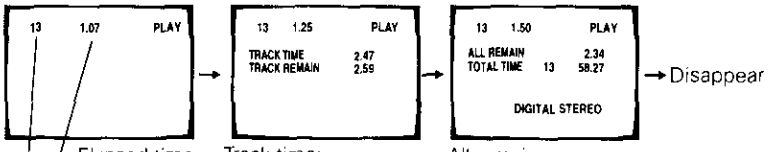


Frame number
Chapter number

Disc time:
Elapsed time from start of disc

All remain:
Remaining time from the current location on the disc playing
Total time:
Total chapter number and total disc play time

< CD >



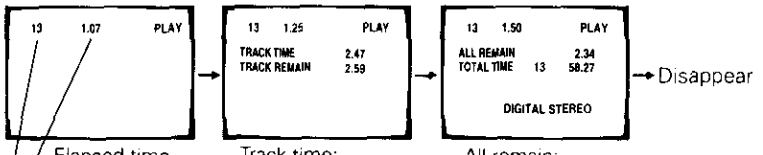
Elapsed time
Track number

Track time:
Elapsed time of the track currently playing
Track remain:
Remaining time of the track currently playing

All remain:
Remaining time from the current location on the disc playing
Total time:
Total track number and total disc play time

< Video CD >

(PBC off)

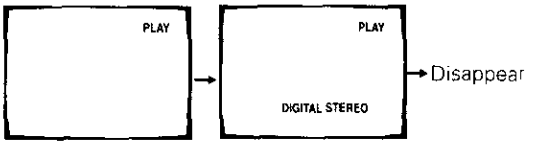


Elapsed time
Track number

Track time:
Elapsed time of the track currently playing
Track remain:
Remaining time of the track currently playing

All remain:
Remaining time from the current location on the disc playing
Total time:
Total track number and total disc play time

(PBC on)

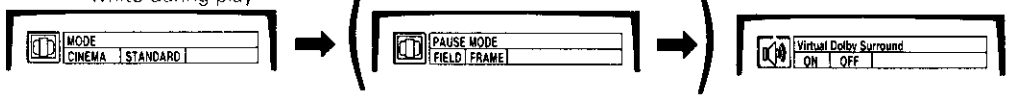


Changing Picture and Sound Quality

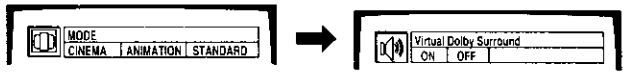
Each time you press MODE, settings change as follows.

(With DVDs)

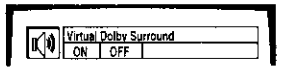
(With LDs) Displays with black and white during play



(With Video CDs)



(With CDs)

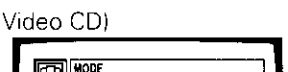


Changing picture quality (mode)

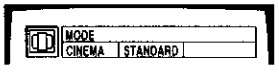
DVD Video CD

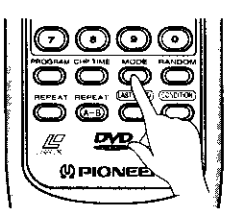
1. Press MODE during play and select "MODE".

(DVD, Video CD)



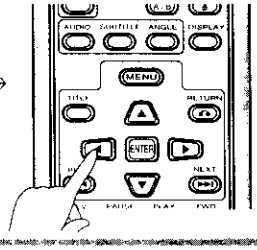
(LD)





2. Select the desired mode with the ◀ and ▶ buttons.

DVD, Video CD: Cinema → Animation → Standard
LD: Cinema → Standard



Cinema:
Picture quality: Provides clear picture with clear black and white definition.
Animation:
Picture quality: Provides beautiful images with bright, clear colors.
Standard:
Picture quality: Returns you to standard picture and function settings.

Note

- Picture quality may be poor depending on the software and the TV used. In this case, select the Standard mode.

- You cannot use the Animation mode for the video part of LDs and CDVs.
- You can use the same setting for CDV video part as for LDs.

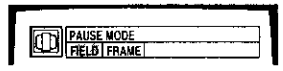
Setting

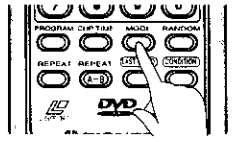
Changing Still Frame conditions (PAUSE MODE) DVD

During Still Frame play, switch to Field if the picture is out of focus.

With LDs, this functions only during play of standard (CAV) discs. With long-play (CLV) discs, still picture becomes field, and cannot be switched.

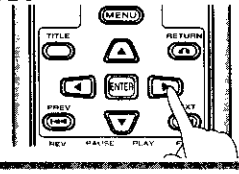
1. During play, press MODE, and select PAUSE MODE.





2. Select Field or Frame with ◀ and ▶ buttons.

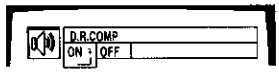
The setting changes each time you press a button.

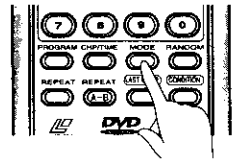


Changing sound quality (D.R.COMP) DVD

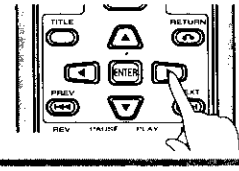
D.R.COMP stands for Dynamic Range Compression. On the DVDs, sound has a wide dynamic range. Use D.R.COMP if sounds such as dialogue are hard to hear on your stereo system or TV speakers.

1. Press MODE during play, and select D.R.COMP.

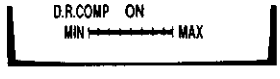


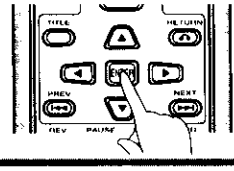


2. Switch ON or OFF with the ◀ and ▶ buttons.

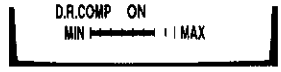


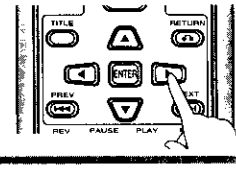
3. If you select ON, press ENTER.



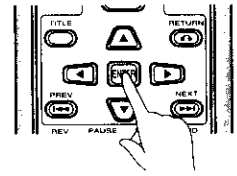


4. Adjust the degree of change with the ◀ and ▶ buttons.





5. Press ENTER.



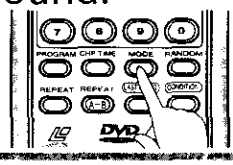
- Pressing the ▲ or ▼ button at step 4 switches between ON and OFF.

Switches to a more spacious sound (Virtual Dolby Surround)

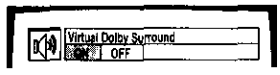
TruSurround with SRS

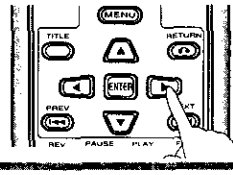
DVD CD Video CD

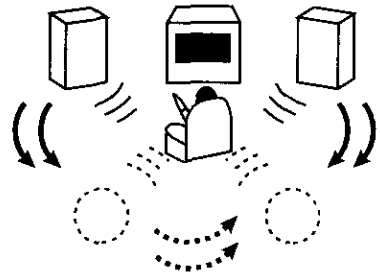
1. Press MODE during play, and select Virtual Dolby Surround.



2. Select ON with the ◀ and ▶ button.







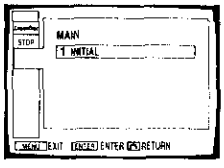
SRS Labs, Inc.'s TruSurround system TruSurround has been adopted as virtual technology.
TruSurround is a trademark of SRS Labs, Inc. SRS and the SRS symbol are registered trademarks of SRS Labs, Inc. in the United States and selected foreign countries.
TruSurround is incorporated under license from SRS Labs, Inc.
Permission for use of TruSurround technology has been registered through SRS Labs, Inc.

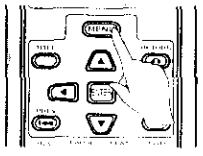
Setting

Quick LD Side Changing (Quick Turn)

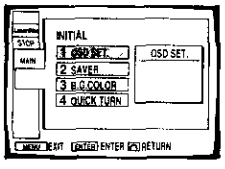
This function shortens the time required to change from A to the B side, or from the B to the A side when playing an LD.

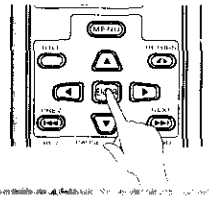
1. Press MENU when play has stopped.



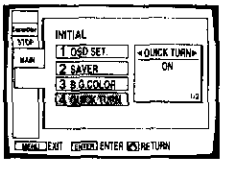


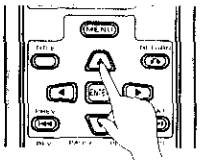
2. Press ENTER.



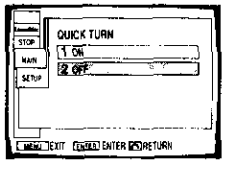


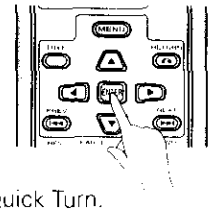
3. Select Quick Turn with the ▲ and ▼ buttons.





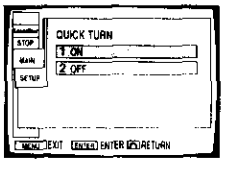
4. Press ENTER.

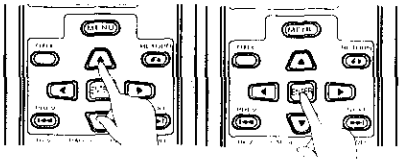




Displays the selection menu of Quick Turn.

5. Select ON with the ▲ and ▼ buttons and press ENTER.





Quick Turn is set to ON.

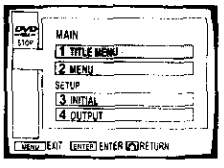
Note

When Quick Turn is ON, on-screen display of remaining and total play time cannot be used.

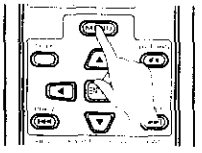
Selecting a Desired Background Color

You can select a color for menu displays and the screen when the player is not playing.

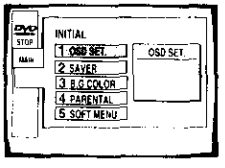
1. Press MENU when the player is not playing.

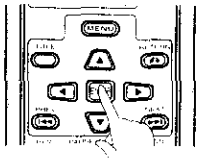


(With a DVD)

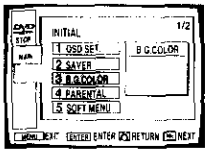


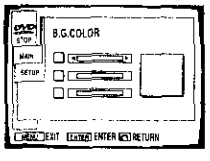
2. With the ▲ ▼ buttons, select "INITIAL" and press ENTER.

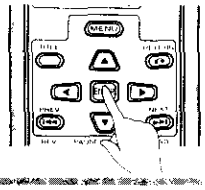




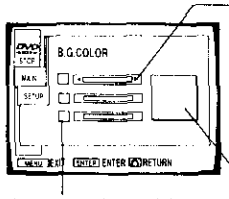
3. Select "B.G. COLOR" with the ▲ ▼ buttons and press ENTER.







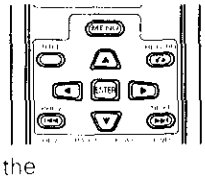
4. Select the desired color with the ▲ ▼ buttons and adjust the color with the ◀ ▶ buttons.



2 Adjust color with the ◀ ▶ buttons.

1 Select a color with the ▲ ▼ buttons.

Changes to the selected color.

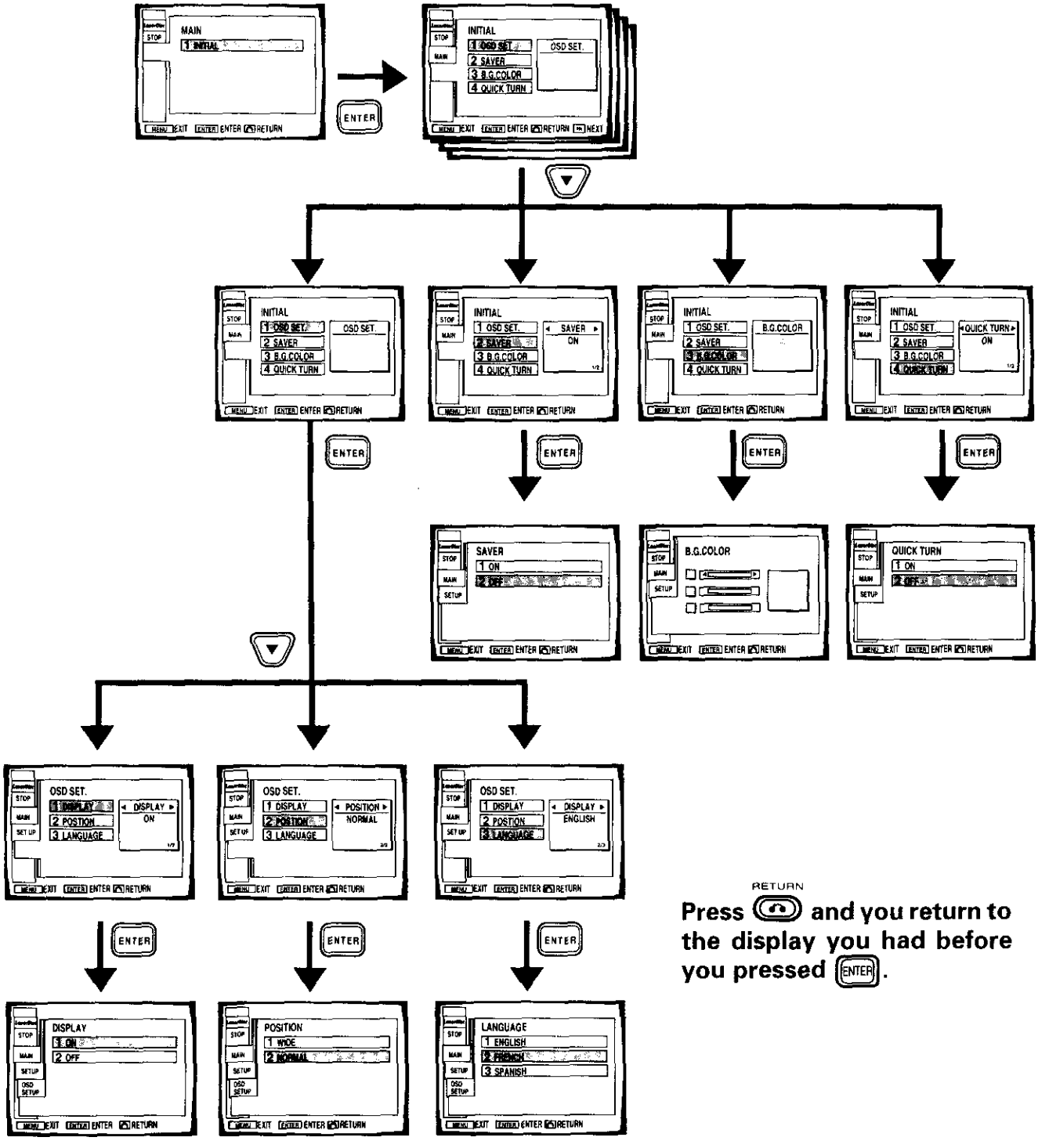


5. Press the ENTER button.

Outline of GUI (Graphical User Interface) Operation

On this player, various settings can be selected while watching menu screens and using the remote controller.
Here we will explain how to access menu screens. Because menu screen access differs according to the type of disc being used, or the playback mode (playback mode, stop mode etc.), refer to the following menu map when accessing.

LD

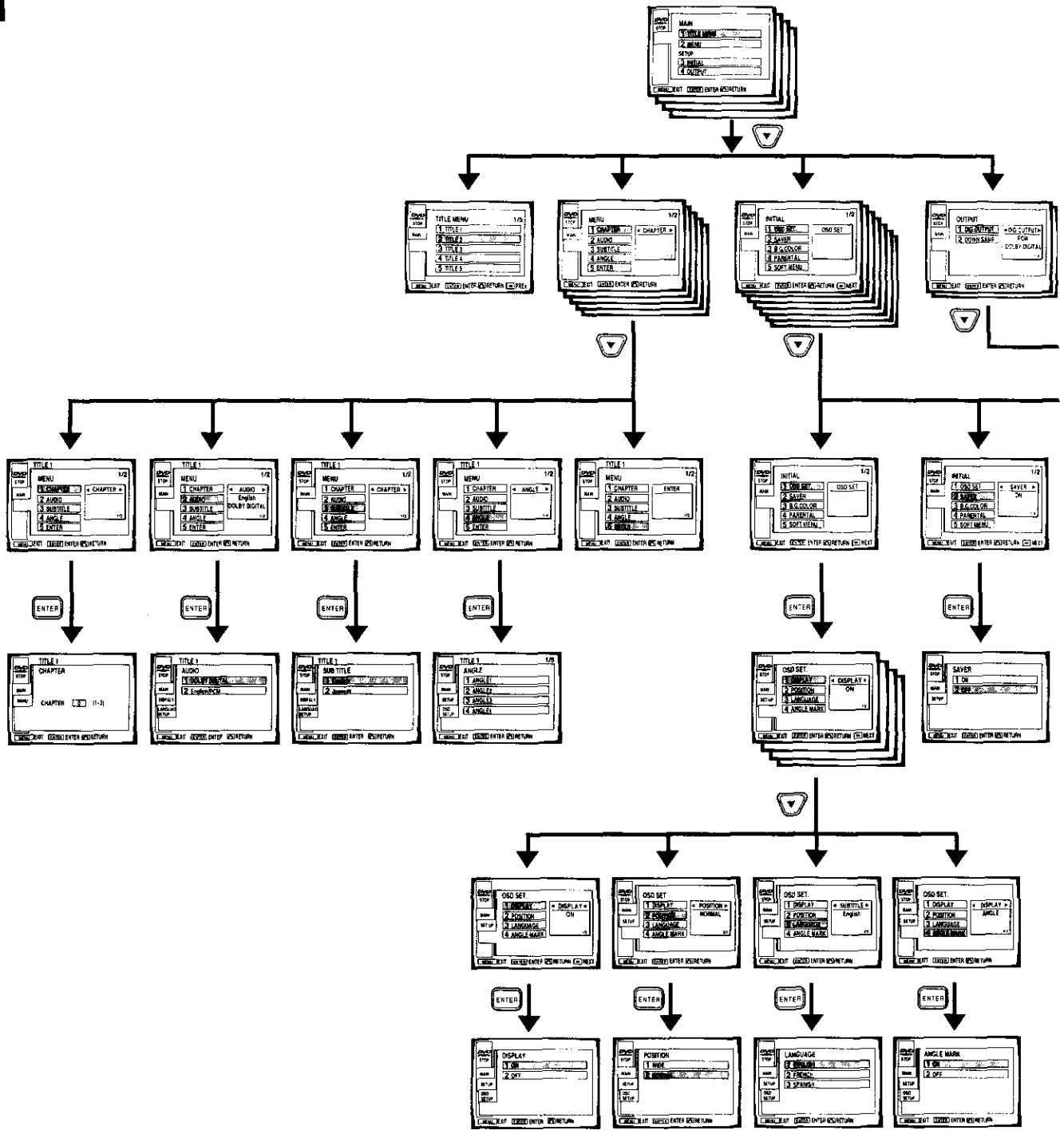


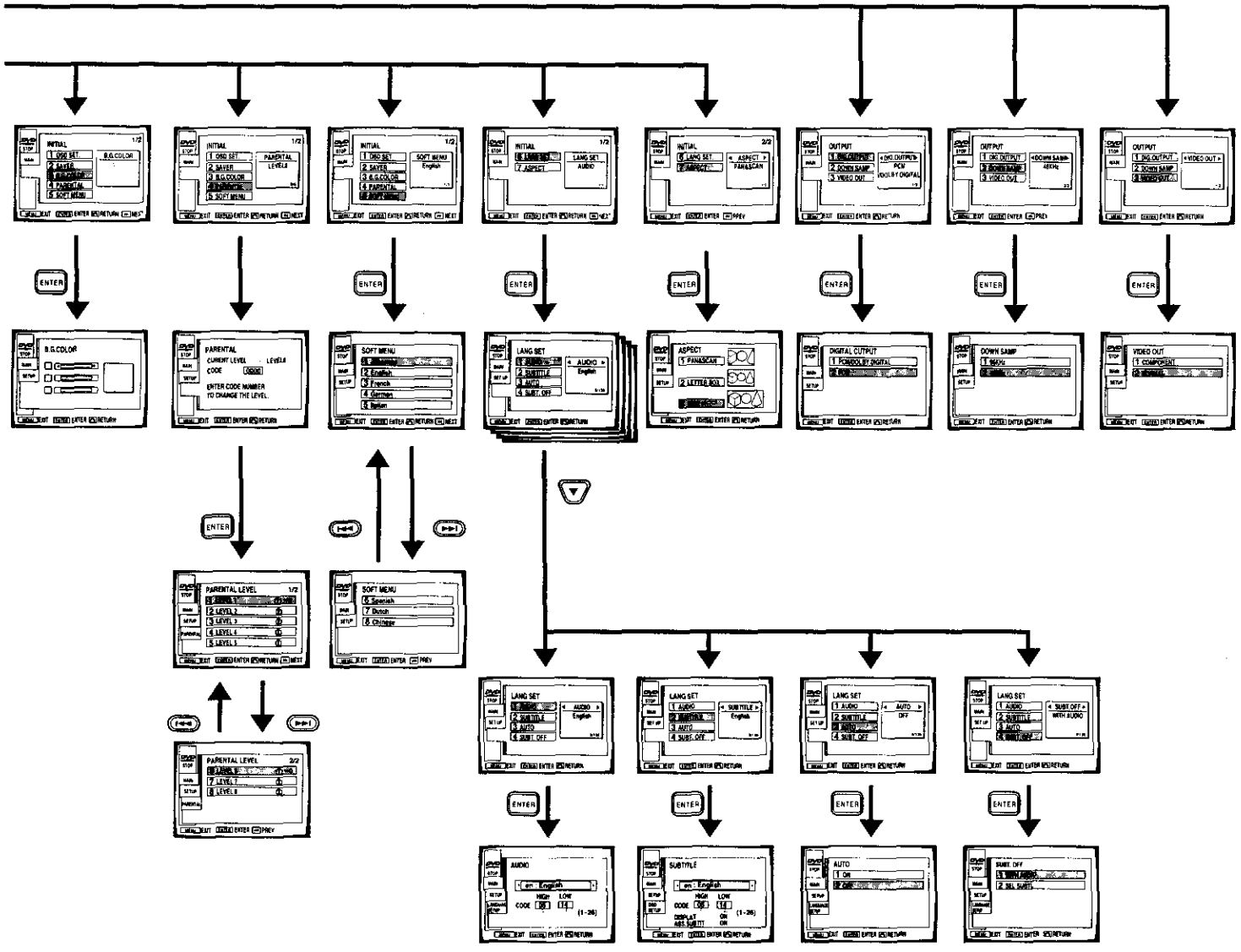
RETURN

Press ↩ and you return to the display you had before you pressed ENTER.

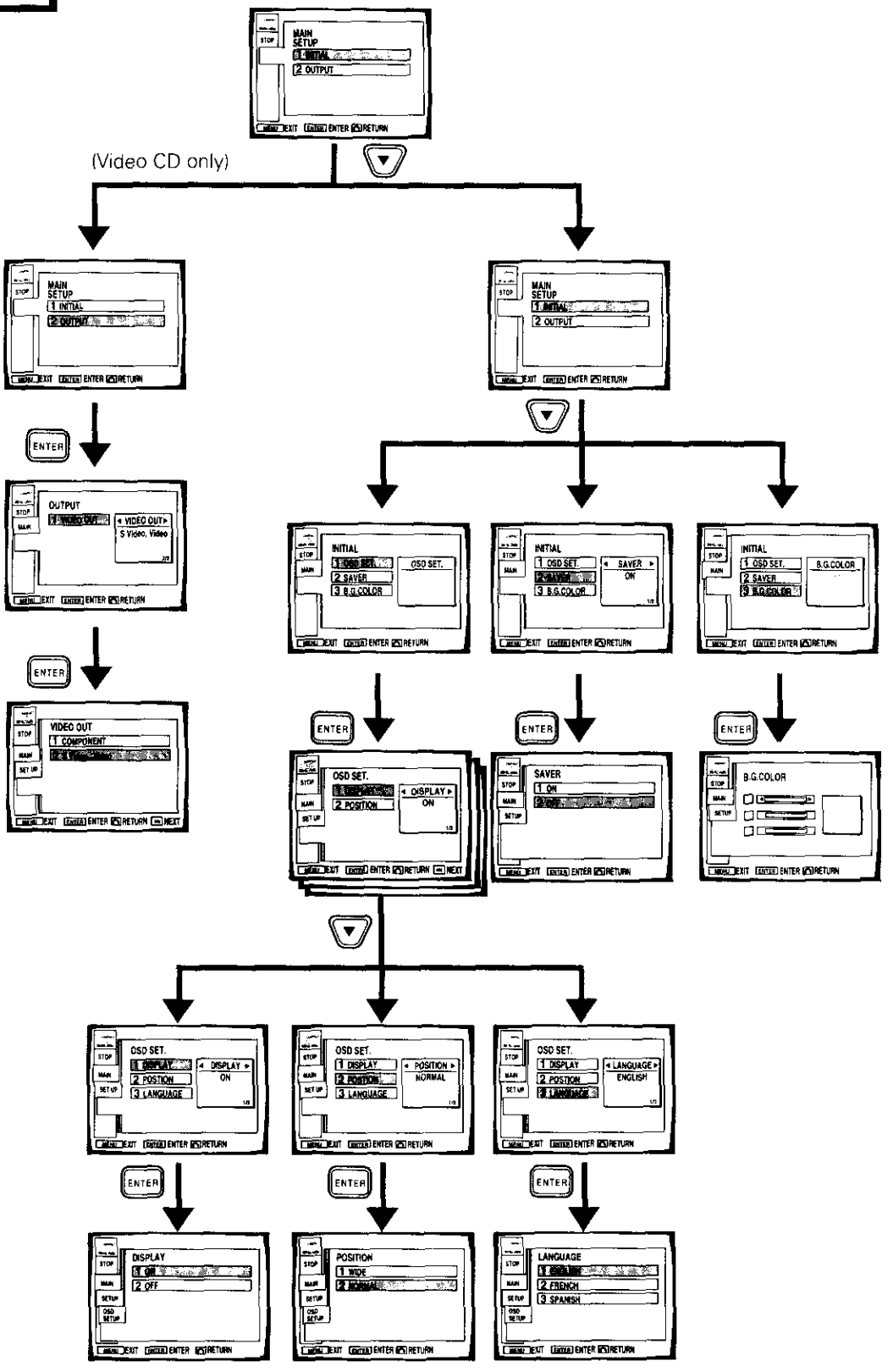
Outline of GUI (Graphical User Interface) Operation

DVD



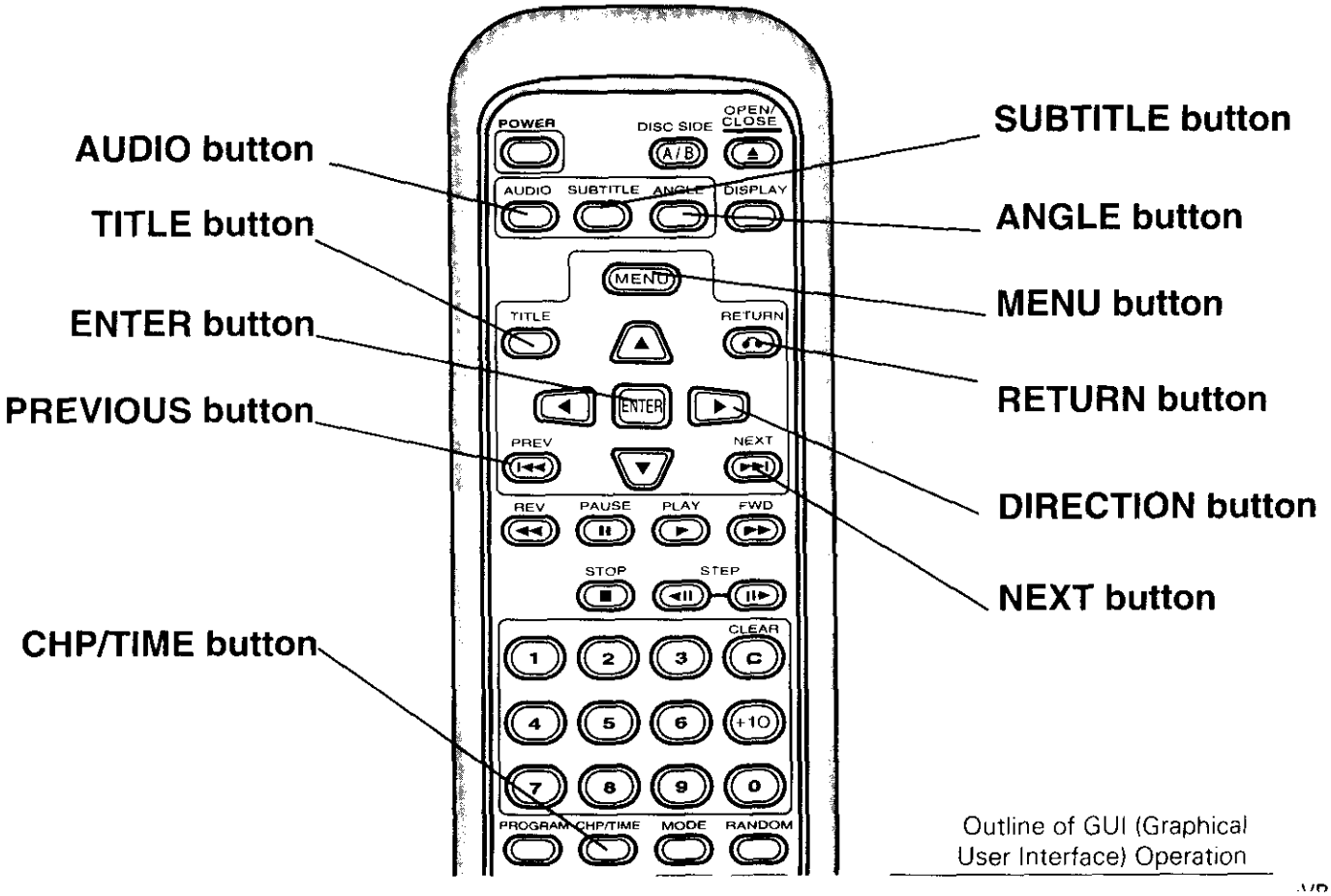


CD,Video CD


MAIN SETUP
1 INITIAL
2 OUTPUT
(Video CD only)
ENTER
OUTPUT
VIDEO OUT
S Video, Video
VIDEO OUT
1 COMPONENT
INITIAL
1 OSD SET.
2 SAVER
3 B.G.COLOR
OSD SET.
SAVER
ON
B.G.COLOR
1 DISPLAY
2 POSITION
3 LANGUAGE
ON
NORMAL
ENGLISH
DISPLAY
1 ON
2 OFF
POSITION
1 WIDE
2 NORMAL
LANGUAGE
1 ENGLISH
2 FRENCH
3 SPANISH

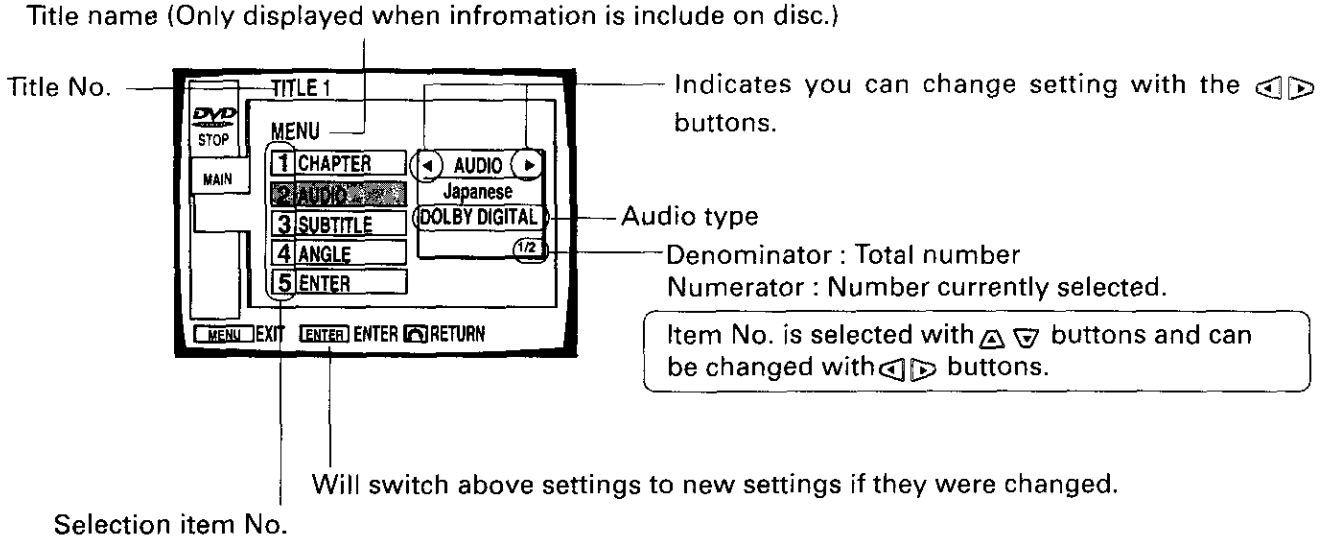
Button operation within each menu

Button name	Button shape	Operation
MENU button	MENU	To leave the menu screen (settings are invalidated)
RETURN button	RETURN	To return one menu screen back (Set up operation is completed. However, search cannot be performed.)
Digit buttons	1 · 0 · +10	Selection and conclusion (In the set up menu, some items only operate for selection.)
Direction button	▲ ▼ ◀ ▶	Selection
ENTER button	ENTER	Setting and implementation (playback mode is engaged after title or chapter change)
PREVIOUS button	PREV	To go to previous menu screen
NEXT button	NEXT	To go to next menu secreen
Direct button	TITLE CHP/TIME AUDIO SUBTITLE ANGLE	To go to menus (setting selected before moving to a new menu will be invalidated)



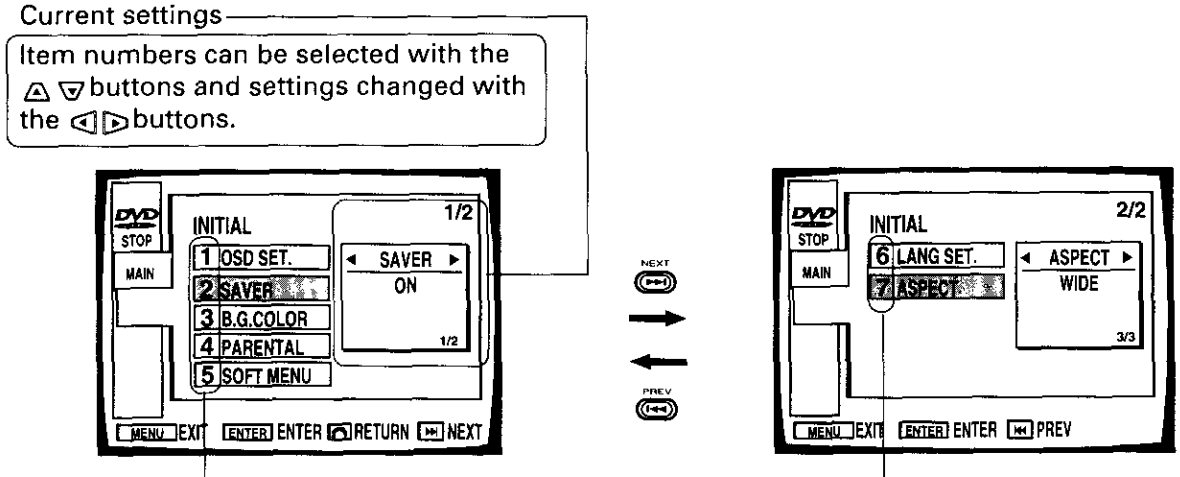
Examples of screen indicators and operation

Ex.1: Display content within menus/Button operation (Ex: DVDs)



When selection is made by pressing a **digit button** or the △ or ▽ buttons, and then pressing the **ENTER button**, the selection screens for the various set-up items will be displayed. Selecting 5 [ENTER], however, will select the new setting changes and close the screen.

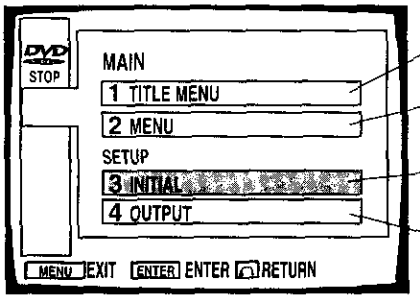
Ex.2: Display content within set up menus/Button operation (Ex: DVDs)



Selection can also be made with the digit buttons.

About the main menu (Ex: DVDs)

The main menu is the menu used for selecting the Title menu screen, Menu screen and Set up screen.



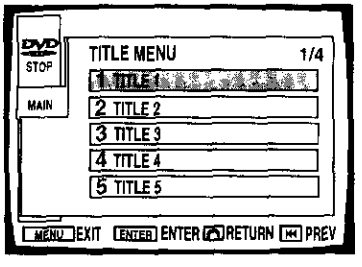
In the Title menu screen:
Titles can be selected and played back. (Title search)

In the Menu screen:
Chapters (songs), subtitles, audio and angles within a title can be selected.

In the initial setting menu:
You can perform on-screen setting of each function.

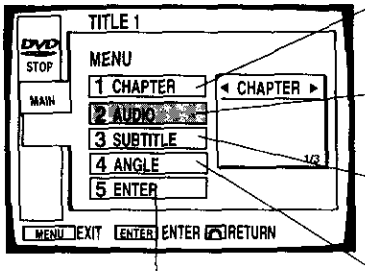
In the output setting menu:
You can select the audio signal or video signal output from the player's digital output jack.

About the title menu



Titles can be selected and played back. This selection screen is the same as the one in "Direct Search with Title Numbers" on page 17.

Menu screen contents



Completes the setting of changes to the above items.

To go to the Chapter screen

In the Chapter screen:
One chapter (song) within a title can be selected and played back.

To go to the Audio screen

In the Audio screen:
Audio contents can be selected on discs that include more than one audio language or audio type.

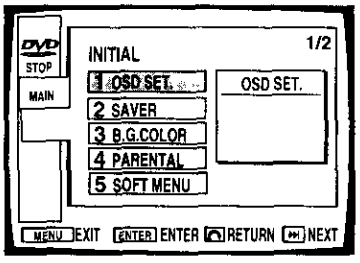
To go to the Subtitle screen

In the Subtitle screen:
Subtitle contents can be selected on discs that include subtitle information.

To go to the Angle screen

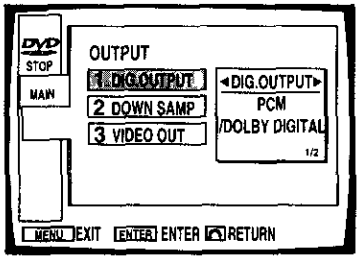
In the Angle screen:
The scene angle that you want can be selected on discs that include scenes that have been filmed from various angles.

Initial setting menu



Use to change a wide range of settings. On the next page, the details of each item are provided.

Output setting menu



Use when you have selected audio output or video output from the player via the digital output jack. Change the setting to match your amplifier or monitor.

On the next page, the details of each item are provided.

Settings Chart

Class		Item	Details	Settings status: Initial settings (factory settings)	Settings status
Initial setting	OSD setting	Display	Switches between display of operation indications (Play, Stop etc.) (ON, and no display of indications (OFF).	**ON** Display of operation indications	**OFF** No display of operation indications
		Position	When watching regular software on a wide TV, operation indications may be displayed outside the area of the screen, so you can't see them. Changing the on-screen location of the indications lets you see them even when watching a wide TV.	**Normal** When using a regular (4: 3) TV.	**Wide** When using a wide TV (Not compatible with menu display)
		Language	Switches between display of operation and menu indications in Japanese or English.	**English**	**French** / **Spanish**
		Angle mark	is displayed to clearly indicate when the scene playing has various recorded angles.	**OFF** No indication	**ON** is indicated.
	Saver		Leaving a still image on screen for a prolonged period can result in screen "burn". This player features a screen saver function that prevents screen "burn" due to prolonged display (5 minutes or more) of menus and other indications. It is recommended to leave this function ON.	**OFF** The screen saver will not operate.	**ON** The screen saver will operate.
	Background color		Lets you select background color for menus and for screen color when no software is playing. You can set R (red), G (green), and B (blue) independently. Setting for each color is possible in 21 steps.	**Blue**	**Switchable**
	Parental control		This function lets you prevent your children viewing unsuitable material. You can use this handy function if the disc features recorded parental lock coding. With parental lock discs, this function works by skipping violent or other scenes you don't want your children to see. For details, read the disc's instructions. Once the secret number has been set, the restricted viewing level remains the same until the number is reset. Try not to forget the secret number. If you do, you must return to the initial settings. (See page 42.)	**Level 8**	**Switchable between 1~8**
	Software menu		This lets you select a desired language for menus on discs that have them in multiple languages.	**English**	**Selection possible depends on the disc**
	Quick Turn		This shortens the time required to change from A to the B side, or from the B to the A side when playing an LD. If you use this function, display of remaining and total time are not possible.	**ON**	**OFF**
	Language setting	Audio	This lets you select and set the usual language for movies in the same way as for subtitles. Even if you change the language during play, or change discs, the language changes to the one set.	**English**	Select one from 136 languages. (See how to set the language on the next page.)
		Subtitle	This lets you select and set the usual language for subtitles. Even if you change the subtitle language during play, or change discs, the subtitle language changes to the one set.	**English**	Select one from 136 languages. (See how to set the language on the next page.)
		Auto	ON This sets basic language and basic subtitle language to the same language beforehand. When the basic language and basic subtitle language are not identical, if you switch "DISPLAY" OFF and "ASSIST" ON in the subtitle menu, it's the same as switching Auto OFF. With Auto on, the original language and subtitle language are automatically selected. When the language and subtitle language are the same, subtitles are not displayed. Language Selection may not operate in this way with certain discs. ● You can select a language (see page 26) and select a subtitle language (see page 27) part way through a movie. OFF Subtitle and dialog languages are those selected.	**ON**	**OFF**
		Subtitle OFF	The subtitle which is displayed by discs can be selected, when the subtitle is set to "OFF". SEL. SUBTL : The selected audio language will be selected. WITH AUDIO: The selected subtitle language will be selected.	**SEL. SUBTL**	**WITH AUDIO**

Outline of GUI (Graphical User Interface) Operation

Class	Item	Details	Settings status		
			Initial settings (factory settings)		
	Aspect	When watching wide mode software, this lets you adjust aspect ratio to suit your TV.	**Wide**	**Pan & Scan**	**Letterbox**
Output setting	**Digital output**	You can switch between audio output from the player's digital output jack or the digital coaxial PCM/DD jack. Dolby Digital (sound system used at cinemas etc.) and Linear PCM (the same digital signal as CDs) are the two standards for DVDs.	**PCM/DOLBY DIGITAL** Automatically selects between Dolby Digital and linear PCM to match the audio signal. This is when using an amp with a Dolby Digital (AC-3) decoder.	**PCM** Dolby Digital and linear PCM signals are output in line with the linear PCM standard. This is when using a regular amp or Dolby Pro Logic amp.	
	Video output	This lets you select between component output and regular output of video signals. If you select component output, the signal from the video output jack becomes black and white. You cannot switch to Component for watching video on LDs, CDVs or CDs bearing the GRAPHICS mark. With these discs, the player automatically switches to (S) video output.	**(S) video output**	**Component output**	
	Down sampling	**96 kHz**: With PCM audio sources that have a sampling frequency of 96 kHz, this assures high sound quality. With audio sources that have a sampling frequency of 48 kHz, play is performed with sampling frequency unchanged at 48 kHz. **48 kHz**: During play, this compresses sampling frequency of 96 kHz discs to 48 kHz. 48 kHz discs are played as they are, at a sampling frequency of 48 kHz. ● You can select the sampling frequency to match that of the audio signal recorded on a disc. Simultaneous switching of the Analog output and Digital output is performed to match your selected sampling frequency. ● Some 96 kHz DVDs are copy protected. With this kind of disc, no signal is output from the digital output terminal.	**96 kHz**	**48 kHz**	

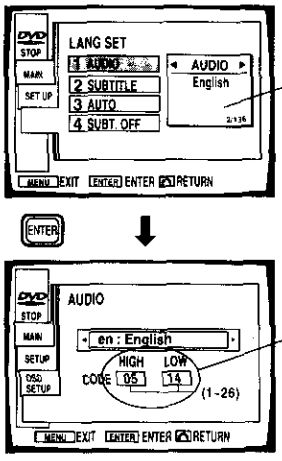
To return to the initial factory settings if they have been changed since you first purchased the player, perform the following procedures.

If power to the player is ON, switch it OFF. While power is OFF, press the POWER button while pressing the STOP button.

DVD

Setting the Basic Language and Subtitle Language

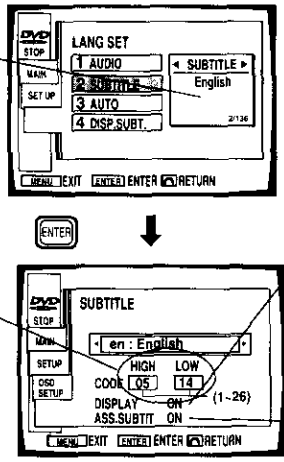
Basic language



Change in order with the ◀ and ▶ buttons on the remote control.

With the remote control number buttons, input the appropriate upper and lower language code input numbers as shown in the chart below.

Basic subtitle language



Press the remote control ▲ and ▼ buttons to make it flash, and then you can switch indication display ON or OFF with the ◀ and ▶ buttons.

Some discs provide subtitles offering explanations of scenes for those who are hard of hearing. Switching "ASS. SUBTIT" ON assures these subtitles are displayed from the beginning.

Language code chart

Language	Language code	Input code (upper)	Input code (lower)
Japanese	ja	10	01
English	en	05	14
French	fr	06	18
German	de	04	05
Italian	it	09	20
Spanish	es	05	19
Dutch	nl	14	12
Russian	ru	18	21
Chinese	zh	26	08
Korean	ko	11	15
Greek	el	05	12
Afar	aa	01	01
Abkhazian	ab	01	02
Afrikaans	af	01	06
Amharic	am	01	13
Arabic	ar	01	18
Assamese	as	01	19
Aymara	ay	01	25
Azerbaijani	az	01	26
Bashkir	ba	02	01
Belorussian	be	02	05

Language	Language code	Input code (upper)	Input code (lower)
Bulgarian	bg	02	07
Bihari	bh	02	08
Bislama	bi	02	09
Bengali, Bangla	bn	02	14
Tibetan	bo	02	15
Breton	br	02	18
Catalan	ca	03	01
Corsican	co	03	15
Czech	cs	03	19
Welsh	cy	03	25
Danish	da	04	01
Bhutani	dz	04	26
Esperanto	eo	05	15
Estonian	et	05	20
Basque	eu	05	21
Persian	fa	06	01
Finnish	fi	06	09
Fiji	fj	06	10
Faroese	fo	06	15
Frisian	fy	06	25
Irish	ga	07	01

Outline of GUI (Graphical User Interface) Operation

Language	Language code	Input code (upper)	Input code (lower)
Scottish Gaelic	gd	07	04
Galician	gl	07	12
Guarani	gn	07	14
Gujarati	gu	07	21
Hausa	ha	08	01
Hindi	hi	08	09
Croatian	hr	08	18
Hungarian	hu	08	21
Armenian	hy	08	25
Interlingua	ia	09	01
Interlingue	ie	09	05
Inupiak	ik	09	11
Indonesian	in	09	14
Icelandic	is	09	19
Hebrew	iw	09	23
Yiddish	ji	10	09
Javanese	jw	10	23
Georgian	ka	11	01
Kazakh	kk	11	11
Greenlandic	kl	11	12
Cambodian	km	11	13
Kannada	kn	11	14
Kashmiri	ks	11	19
Kurdish	ku	11	21
Kirghiz	ky	11	25
Latin	la	12	01
Lingala	ln	12	14
Laotian	lo	12	15
Lithuanian	lt	12	20
Latvian, Lettish	lv	12	22
Malagasy	mg	13	07
Maori	mi	13	09
Macedonian	mk	13	11
Malayalam	ml	13	12
Mongolian	mn	13	14
Moldavian	mo	13	15
Marathi	mr	13	18
Malay	ms	13	19
Maltese	mt	13	20
Burmese	my	13	25
Nauru	na	14	01
Nepali	ne	14	05
Norwegian	no	14	15
Occitan	oc	15	03
(Afan) Oromo	om	15	13
Oriya	or	15	18
Panjabi	pa	16	01

Language	Language code	Input code (upper)	Input code (lower)
Polish	pl	16	12
Pashto, Pushto	ps	16	19
Portuguese	pt	16	20
Quechua	qu	17	21
Rhaeto-Romance	rm	18	13
Kirundi	rn	18	14
Rumanian	ro	18	15
Kinyarwanda	rw	18	23
Sanskrit	sa	19	01
Sindhi	sd	19	04
Sango	sg	19	07
Serbo-Croatian	sh	19	08
Singhalese	si	19	09
Slovak	sk	19	11
Slovenian	sl	19	12
Samoan	sm	19	13
Shona	sn	19	14
Somali	so	19	15
Albanian	sq	19	17
Serbian	sr	19	18
Siswati	ss	19	19
Sesotho	st	19	20
Sundanese	su	19	21
Swedish	sv	19	22
Swahili	sw	19	23
Tamil	ta	20	01
Telugu	te	20	05
Tajik	tg	20	07
Thai	th	20	08
Tigrinya	ti	20	09
Turkmen	tk	20	11
Tagalog	tl	20	12
Setswana	tn	20	14
Tongan	to	20	15
Turkish	tr	20	18
Tsonga	ts	20	19
Tartar	tt	20	20
Twi	tw	20	23
Ukrainian	uk	21	11
Urdu	ur	21	18
Uzbek	uz	21	26
Vietnamese	vi	22	09
Volapük	vo	22	15
Wolof	wo	23	15
Xhosa	xh	24	08
Yoruba	yo	25	15
Zulu	zu	26	21

Set Up

Connecting the Player

Connection example 1. To a TV with video input 46

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Connection example 4. TV featuring color signal inputs 48

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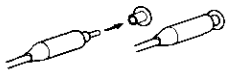
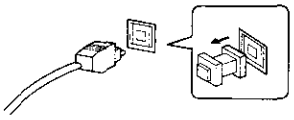
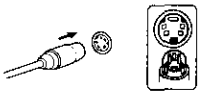
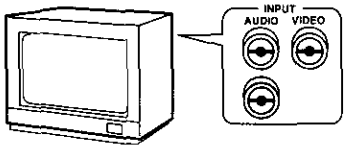
Connecting the Player

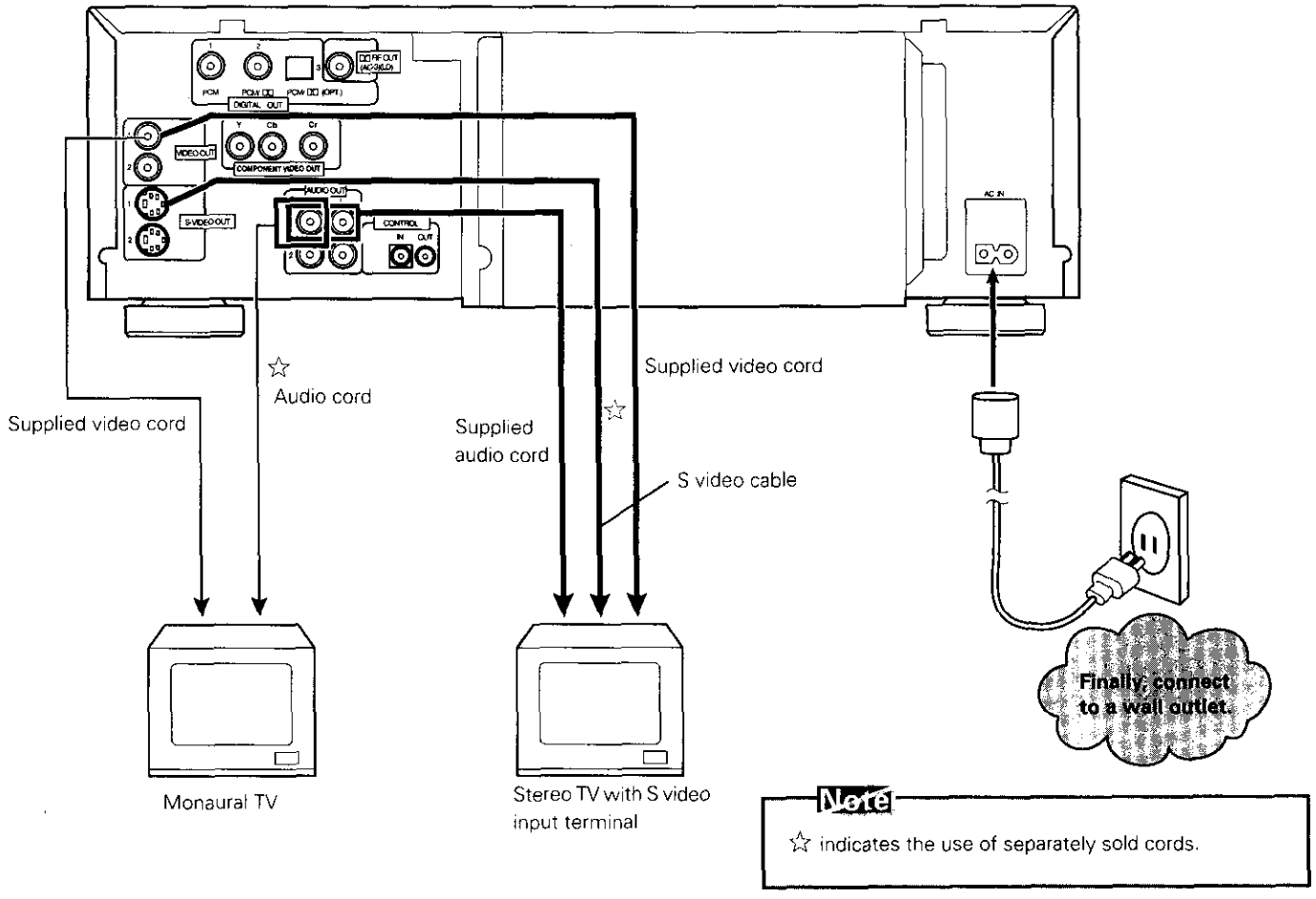
Precautions when connecting the player

Some discs will be copy protected at the direction of the copyright owners.
For best playback, make sure the DVD player is connected either directly to the television or through an A/V selector and not through a VCR.

■ Input/output plug (pin cable)	■ Optical cable	■ S video cable
 Match jack color (white, red, yellow) and plug color.		

Connection example 1. **To a TV with video input**		If your TV has a video input, and it is available for use, this is the easiest way to hook up the player.

Please also refer to the manual for the TV (monitor TV) that you are making connection to.

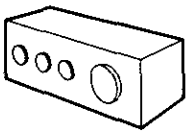


Note

☆ indicates the use of separately sold cords.

Connection example 2.

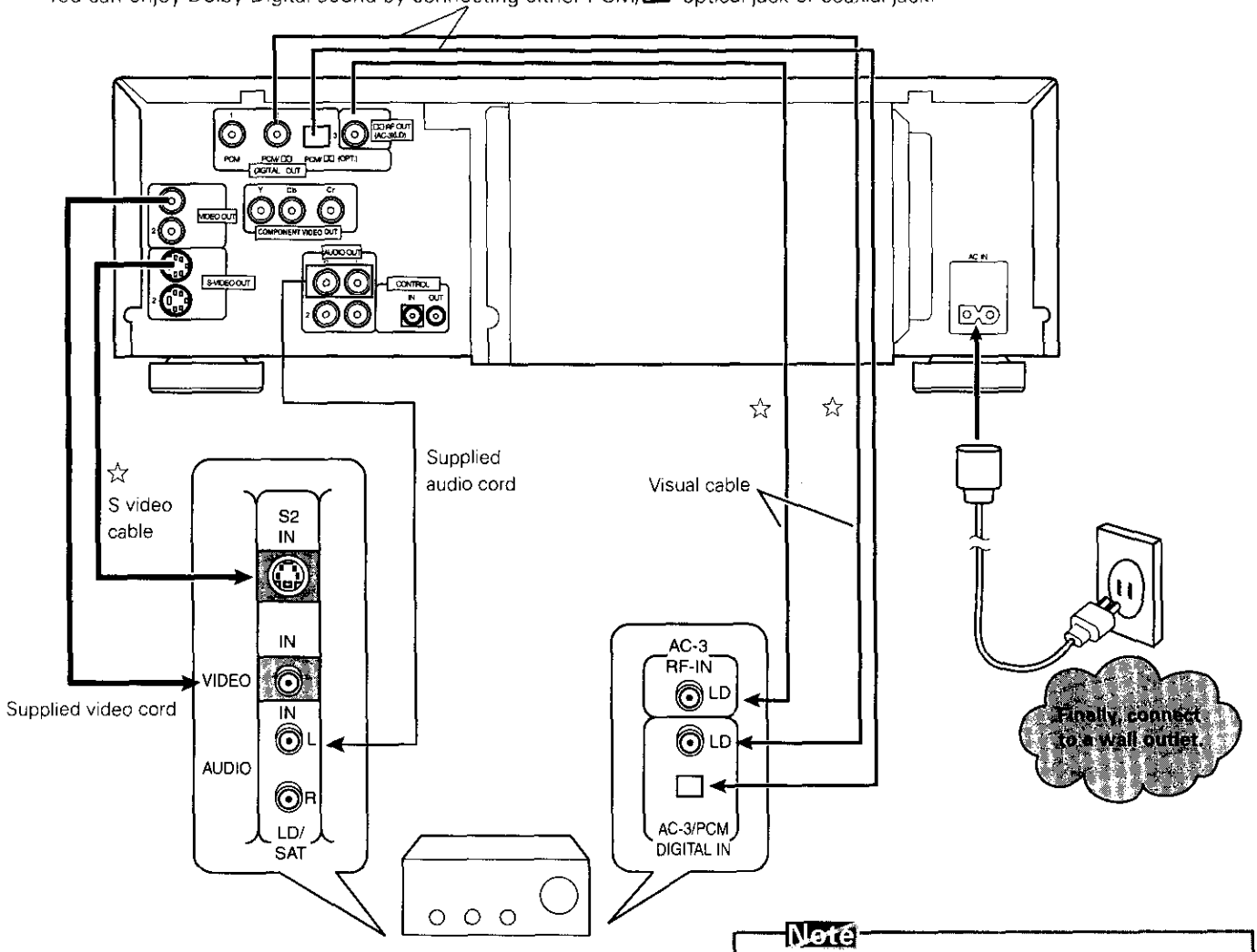
To an amp with Dolby Digital (AC-3) input



AV amplifier or AV receiver enabling Dolby Digital (AC-3) digital input and RF input in the same function

- Connect this player's digital output PCM/DD jack to the Dolby Digital input jack of an amp with Dolby Digital capability. Use coaxial digital output or optical digital output depending on the amp's inputs.
- Connect this player's DDRF output (for LD) jack to the Dolby Digital (AC-3) RF input jack on an amplifier or a receiver with Dolby Digital capability.
- Digital output of LD analog audio is not possible, so also connect this players audio output jack and the amp audio input jack.
  When using an optical cable, perform the settings in the "Digital output" section on page 42, making sure to select PCM/DD.

You can enjoy Dolby Digital sound by connecting either PCM/DD optical jack or coaxial jack.



Note

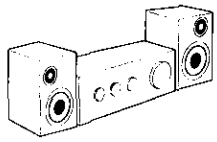
☆ indicates the use of separately sold cords.

Some DVD format discs feature copy protect. With this kind of disc, when a sampling frequency of 96 kHz is selected, no signal is output from the digital output (see page 42).

When playing a disc with this player, switch the function to the connected input jack on the player. In the case of diagram above, select LD/SAT terminals.

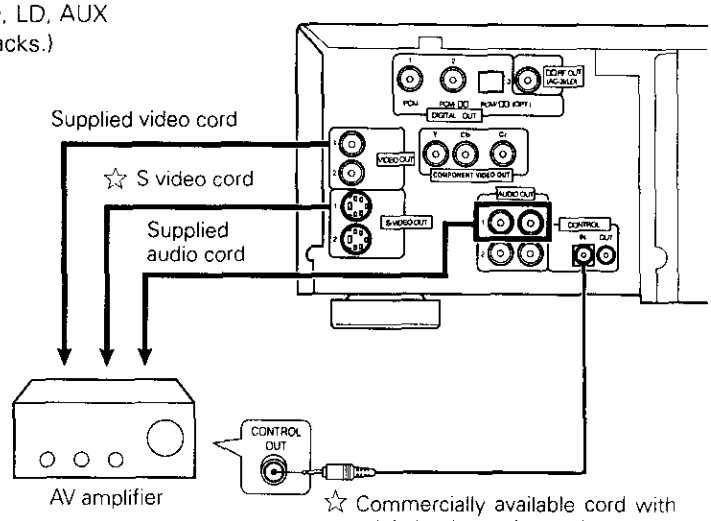
Connection example 3.

AV amplifier



By connecting to a regular AV amp or stereo amp, you can enjoy playback with improved sound quality.

- Connect this player's audio output jacks to an amp's CD, LD, AUX or other audio input jacks. (Do not connect to PHONO jacks.)
- Connect this player's video output jack to the amp's video input jack.



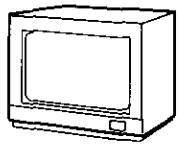
Note

☆ indicates the use of separately sold cords.

- **When connecting to a component bearing the Pioneer SR mark.**
  If you use a commercially available cord with mini plugs (no resistance) to connect this player's control input jack to the control output jack of the component bearing the SR mark, you can control the player as though it were a component in a system (system control).
- If you connect for system control, you cannot operate the player directly by pointing the remote control at it and pressing buttons.
- When controlling the unit as part of a system, be sure to connect to the amplifier with audio cord even if you are using only digital components.
- If your AV amplifier is a Dolby Pro Logic decoder, you can enjoy surround sound.
- For more details, refer to the connected component's operating instructions.

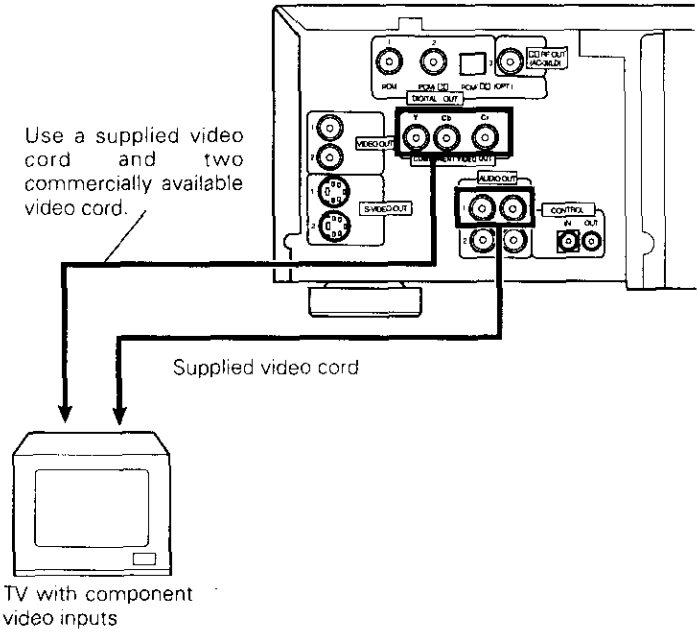
Connection example 4.

TV featuring color signal inputs



Using a TV with a component video inputs assures improved image quality.

- You can use the player with a TV featuring color signal inputs for video input. This assures high picture quality.
- The names given to the color signal inputs differ depending on the TV.
- When image color is thin or different, make adjustments on the TV side.

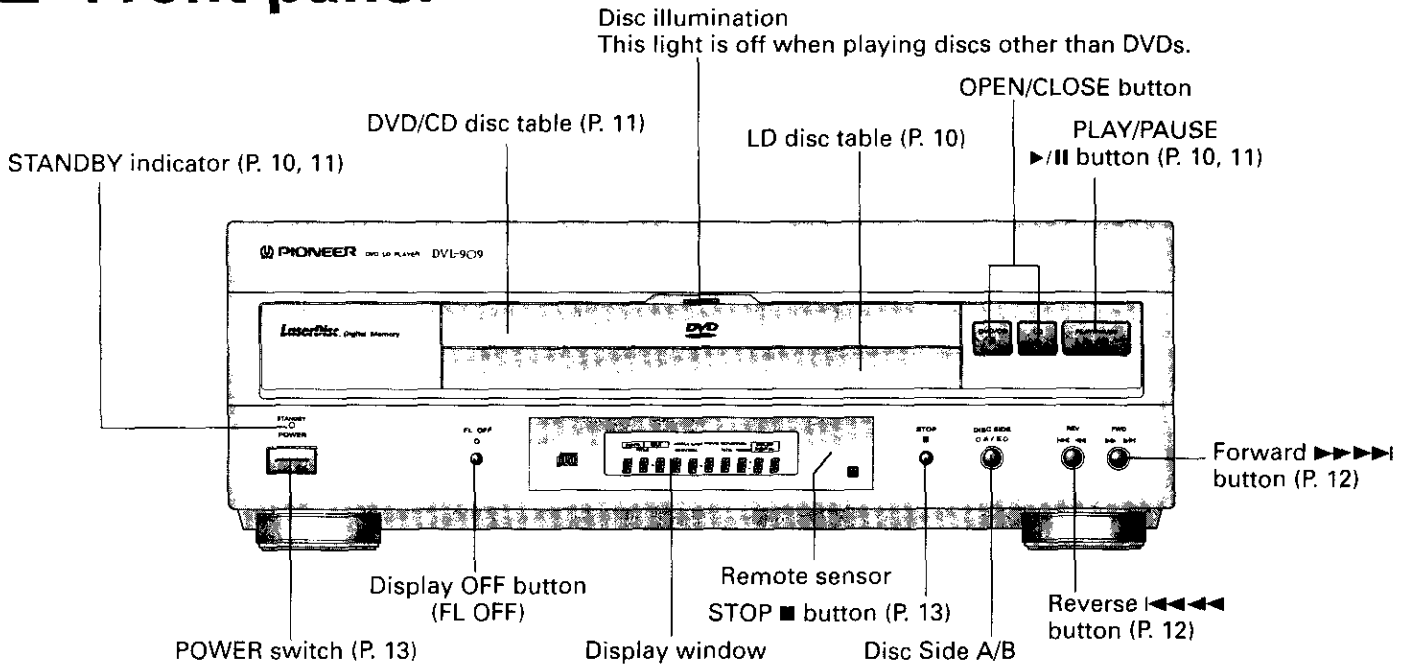


Note

☆ indicates the use of separately sold cords.

Names and Functions

■ Front panel



■ Rear panel

Digital Output Jack (Coaxial)

This is used for output of the digital audio signal recorded on CDs, Video CDs and digital audio LDs. Depending on the components connected, noise may be generated.

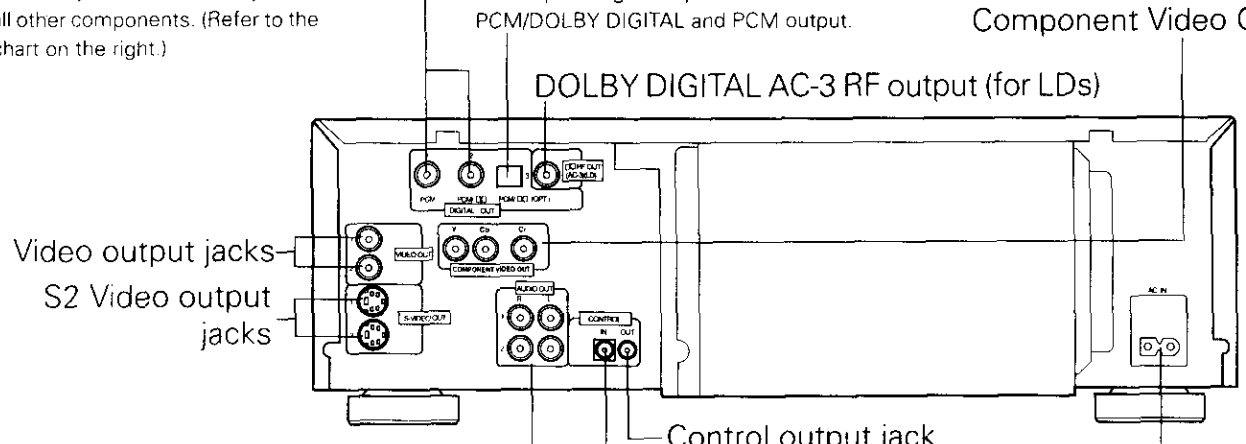
Your amp	Regular digital amplifier	Coaxial	Connect to the PCM jack, and select PCM from a menu.
		Optical	Connect to the optical jack, and select PCM from the menu.
	AC-3 compatible amplifier	Coaxial	Connect to the PCM/DD jack, and select PCM/DOLBY DIGITAL from the menu.
		Optical	Connect to the optical jack, and select PCM/DOLBY DIGITAL from the menu.

Digital Output

When connecting to an AC-3 compatible component, use the PCM/DD jack. Use the PCM jack for all other components. (Refer to the chart on the right.)

Optical Digital Output

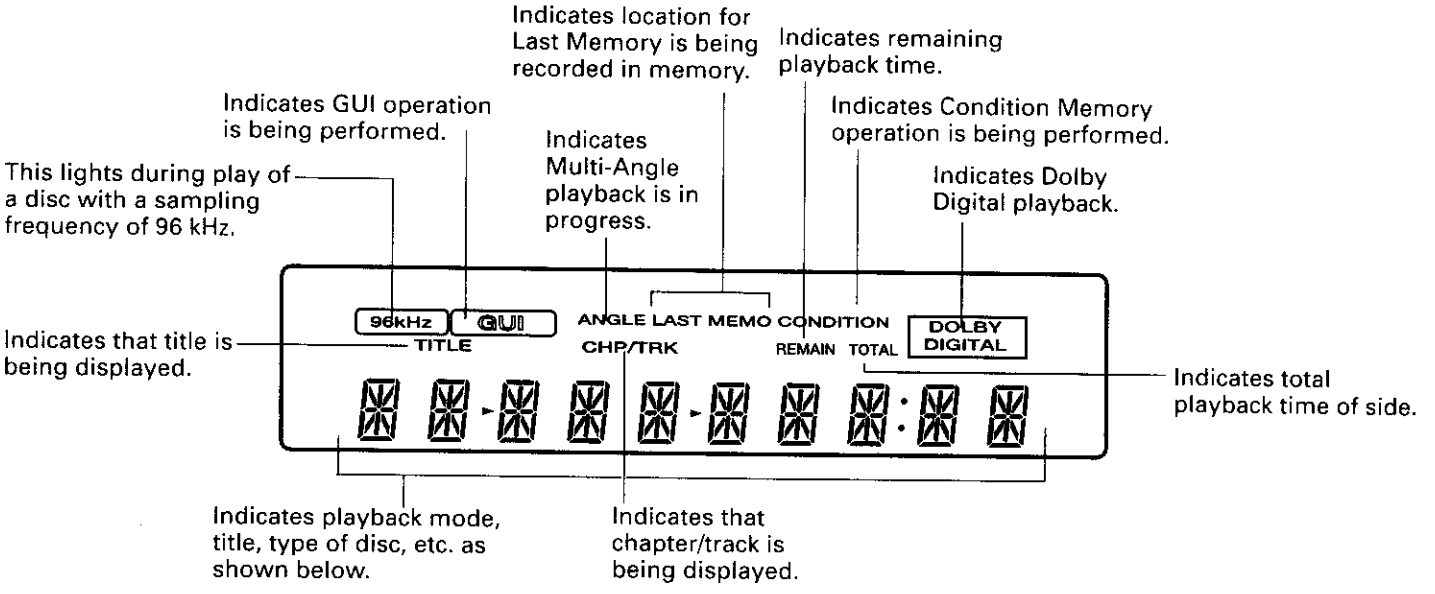
Audio optical digital output. Switchable between PCM/DOLBY DIGITAL and PCM output.



Audio output jacks

There are two sets of outputs, 1 and 2, which you can simultaneously connect. Connect 1 to the TV, and 2 to your AV amp.

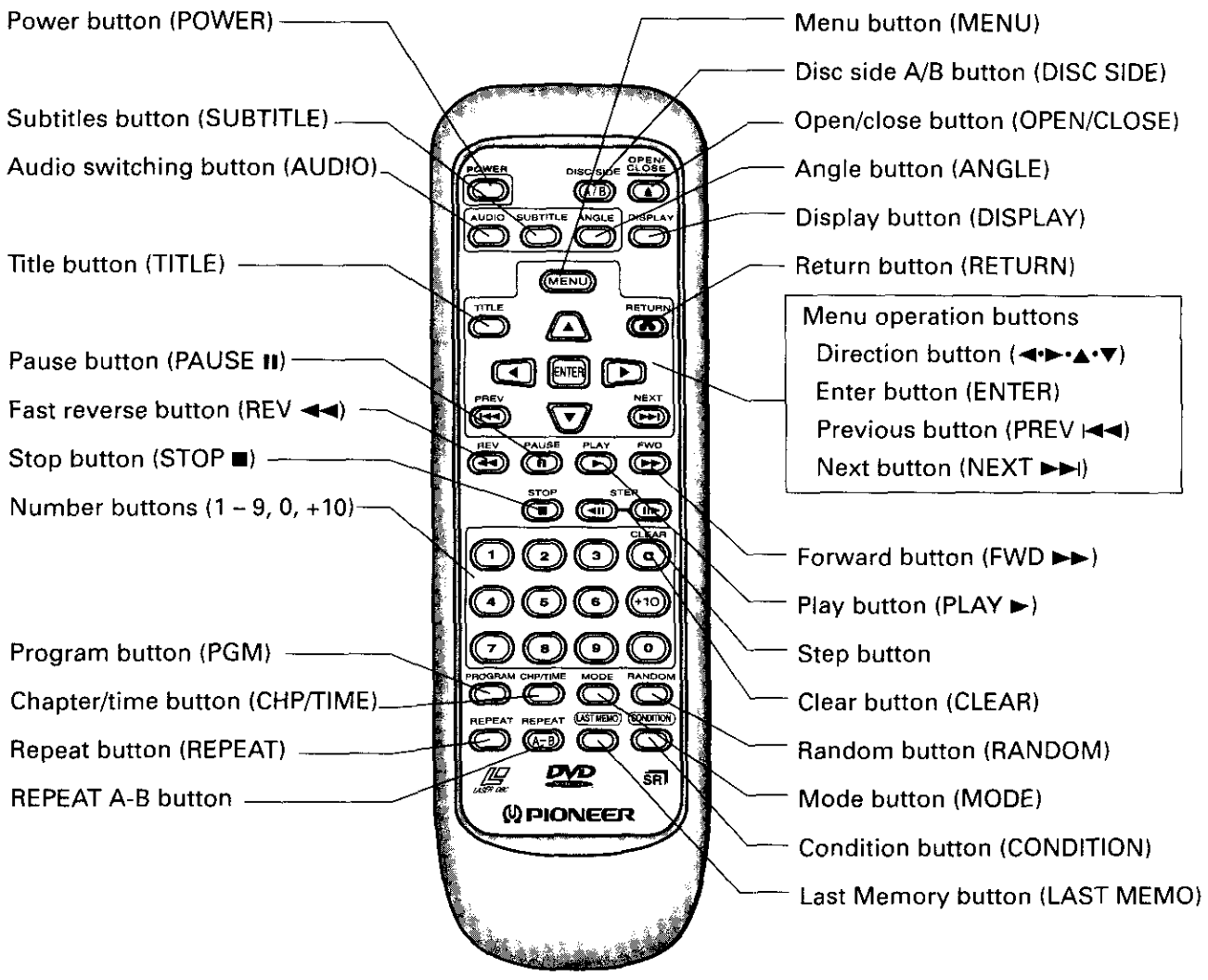
■ Display window



Sample Display

LD	:LaserDisc	R_TTL	:Repeat playback of the title
CD	:Compact disc	R_CHP	:Repeat playback of the chapter
CDV	:CD video	R_SID	:Both sides of LD repeat playback
DVD	:DVD	STEREO	:Stereo
VCD	:Video CD	PLAY	:Playback
PBC PLAY	:During Video CD PBC play	STOP	:Stop
OPEN	:Disc table is opening or is open	PAUSE	:Pause
CLOSE	:Disc table is closing	NO DISC	:No disc
RDM	:Random playback	-- OFF --	:Power is turned off
PROGRAM	:Program mode	MENU	:Menu mode
PGM	:Program playback	TITLE	:Title menu
R_TRK	:Repeat mode	SETUP	:Set-up menu
R_A	:Start point of 2 point repeat playback	COND_MEM	:Condition Memory
R_AB	:2 point repeat playback	LAST_MEM	:Last Memory

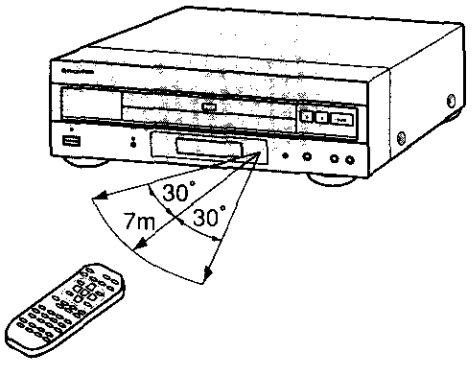
■ Remote control



Remote control operation

When operating the remote control, point it at the remote sensor located on the player's front panel. The remote control can be used up to 23 feet (7 m) from the player and within a 30° angle each side of the sensor.

- Exposing the remote sensor to direct sunlight or strong light may cause faulty operation.
- If the CONTROL IN jack on the player's rear panel is connected to another component, point the remote control at that component for operation. Operation is not possible when pointed at this player. (Refer to page 48.)
- When using the remote control, first press the POWER switch to turn on the player's power.



Setup

Troubleshooting

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

	Symptom	Possible causes	Reference page
Operation	1. The disc table doesn't stay in even when it is closed.	● The disc is dirty.	p.54
		● The disc is not correctly loaded in the disc table.	p.5
		● The region number is different.	p.56
		● There's condensation inside the player.	p.53
	2. Playback is not possible.	● SECAM system discs cannot be played.	p.5
	3. The picture is unclear during DVD play.	● This player is compatible with copy guard analog copy protect technology. Some discs may feature a copy protect signal. Playing this kind of disc with some TVs may result in horizontal lines in part of the picture and other picture defects, but this does not mean the player is malfunctioning.	
	4. If I record a DVD on a VCR and play it back, or play a DVD through a VCR, the picture is unclear.	● This player is compatible with copy guard analog copy protect technology. Some discs may feature a copy protect signal. If you record this kind of disc on a VCR and play it back, or play this kind of disc through a VCR, the copy guard system prevents normal playback.	p.4
	5. The mark appears on screen.	● The selected operation is not possible with that disc.	
	6. The picture stops, and operation buttons do not function.	● Press the STOP (■) button, and then press PLAY again.	
	7. The picture is black and white.	● Video signal output is set to COMPONENT VIDEO OUT.	p.42
Remote control	8. The remote control doesn't operate.	● The rear panel control input jack on the player is being used.	p.48
		● You are too far from the player. Or the angle between the remote control and the remote control reception window is too large.	
		● The remote control's batteries are dead.	
	9. TV and other components operate incorrectly.	● Some TVs with wireless remote capability operate incorrectly with this player's remote control.	
Audio	10. There's no sound. Sound is distorted.	● Plugs are not pushed in sufficiently, or plugs are disconnected.	
		● Connection plugs and jacks are dirty.	
		● The player is connected to a stereo amp's PHONO input jack.	
		● Audio cable connection is incorrect.	
		● Play is paused.	
		● Stereo amp operation is incorrect. (In particular, check that input selection for CD, LD etc. is correct.)	
		● Digital output is set for 96 kHz. Digital output may not be possible with certain discs.	
	11. DVD sound volume level is low.	● DVD sound volume level may sound lower than other discs, but this is due to the disc's recording system, and is not due to the player malfunctioning.	

Caution:
Abnormal functioning of this unit may be caused by static electricity, or other external interference. To restore normal operation, unplug the AC power cord and then plug it in again.

For Proper and Long Use

■ DO NOT MOVE THE UNIT DURING PLAYBACK

During playback, the disc rotates at high speed. Do NOT lift or move the unit during playback. Doing so may damage the disc.

■ WHEN MOVING THE UNIT

When changing places of installation or packing the unit for moving, be sure to remove the disc and return the disc table to its original position in the player. Then, switch the power OFF. **Check that the "–OFF–" indication on the display goes off**, then disconnect the power cord.

■ INSTALLATION PLACE

- Select a stable place to the side of a TV set or stereo system to be connected to the unit.
- When using the unit with a stereo system, install the speakers a little bit away from the TV.
- Do NOT install the unit on top of a TV or color monitor. Install the unit away from equipment that may be affected by magnetism, such as a cassette deck.

■ AVOID INSTALLING IN A PLACE THAT IS:

- Exposed to direct sunlight
- Exposed to humidity or where ventilation is poor
- Extremely hot or cold
- Exposed to vibration
- Exposed to dust
- Exposed to oily smoke, steam or heat (for example, a kitchen)

■ DO NOT PLACE AN OBJECT ON TOP

Do NOT place an object on the unit.

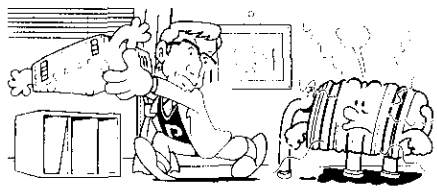
■ DO NOT BLOCK VENTS

Do NOT use the player on top of a long-fibered carpet, bed or sofa, and do not cover it with a cloth etc. This will prevent heat radiation and could result in damage.

■ AVOID HEAT

Do NOT place the unit on equipment generating heat, such as an amplifier.

When installing the unit in a rack, place it on the lowest shelf possible (however, not where it is exposed to dust) and separated from the amplifier to avoid the heat generated by the amplifier or other audio equipment.



■ CAUTION: WHEN PLACING THE UNIT IN A STEREO RACK WITH GLASS DOORS

Be sure there is ample space between the unit and the glass doors when opening the disc table using the remote control.

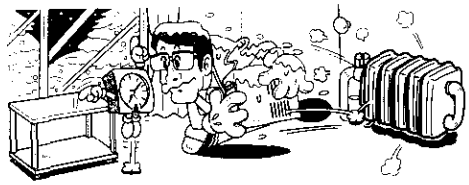
If the disc table opens against strong resistance, **such as a closed glass door,** damage to the unit may result.

■ CONDENSATION

Moisture will form in the operating section of the player if the player is brought from cool surroundings into a warm room or if the temperature of the room rises suddenly. When this happens, the player's performance will be impaired.

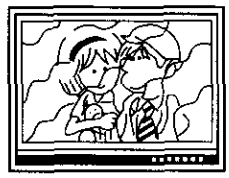
To prevent this, let the player stand in its new surroundings for about an hour before switching it on, or make sure that the room temperature rises gradually.

Condensation may also form during the summer if the player is exposed to the breeze from an air conditioner. In such cases, change the location of the player.



■ SWITCH THE POWER OFF WHEN NOT USING THE UNIT

Depending on the strength of the TV or radio broadcast signal, having the TV or radio ON while power to the unit is ON may result in stripes on the TV screen or noise. However, this is not a malfunction of this unit or the TV or radio. In such a case, switch the power of the unit OFF.



POWER-CORD CAUTION

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

CARE OF DISCS

How to hold discs
When loading or removing discs, try not to touch their playing surfaces.

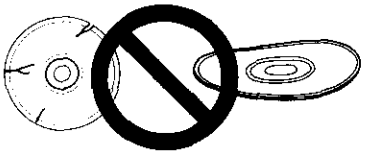
Cleaning
Fingerprints or other dirt on the disc may affect sound and picture quality.

To clean your discs, use a soft clean cloth to wipe them. If necessary, moisten a soft cloth with diluted neutral detergent to remove heavy dirt or fingerprints.

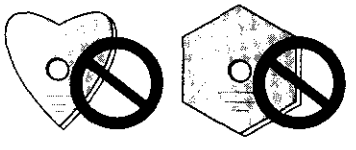
Do not wipe in a circular direction
(Concentric scratches in the disc groove tend to cause noise.)
Gently wipe from the inside toward the outer edge.
Discs must not be cleaned with record cleaning sprays, or static prevention sprays, etc. Also do not use volatile liquids such as benzine, or thinner, etc.

NEVER PLAY CRACKED OR WARPED DISCS.

- The disc revolves in the player at a high speed when it is played. Never play a cracked, scratched or warped disc. This may damage the player or cause it to malfunction.



Do not play a CD with a special shape
Do not play a CD having other shape than a circular disc, such as a heart shaped disc. Otherwise malfunction may occur.



After using discs, store them upright
After playing a disc, always remove it from the player and return it to its jacket. Then store it standing upright away from heat and humidity.

- Store discs carefully. If you store discs at an angle, or stacked on top of each other, discs may become warped even when in their jackets.
- Do not leave discs in locations such as the seat of car, which may become excessively hot.

CAUTION WHEN USING THE DISC
All rights reserved.
Unauthorized public performance, broadcasting or copying is a violation of applicable laws.

CLEANING CARE

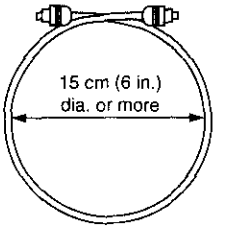
Use a soft, dry cloth for cleaning. For stubborn dirt, soak the cloth in a weak detergent solution; wring well first and wipe. Use a dry cloth to wipe it dry. Do not use any volatile agents such as benzine or paint thinner, as they may damage the surface of the player.

LD/CD lens cleaner

The player's pickup lens should not become dirty in normal use, but if for some reason it should malfunction due to soiling, consult your nearest PIONEER authorized service center. Lens cleaners for LD/CD players are commercially available, but special care should be exercised in their use since some may cause damage to the lens.

Notes on using the optional optical cable

- Do not route the cable around sharp objects. When storing, wind the cable so that it has a diameter of at least 15 cm (6 inches).
- When connecting, push the plug all the way into the terminal.
- Please don't use cables with a length of over 3 m (10 feet).
- If moisture or dust has collected on the plug, wipe it with a soft cloth before connecting.



Terms

Dolby Digital (AC-3)*

The maximum 5.1 channels of audio used in the surround system (Surround Digital) for movie theaters is digital data compressed by AC-3.

For DVD discs, the digital output PCM/DD jack (coaxial or optical) must be connected to the amplifier or processor's digital input AC-3/PCM jack.
For LD discs, the AC-3 RF OUT (LD) jack must be connected to the amplifier's AC-3 RF IN jack.

Virtual Dolby Surround** TruSurround

Sound can be enjoyed virtually when a 2 channel audio system is used. To virtualize the audio output, refer to "Switches to a more spacious sound" on page 31.

PCM

PCM stands for Pulse Code Modulation and is digital audio. The digital audio of CD, LD or DVD discs is PCM.

Title number

Title numbers refer to titles of movies etc. As DVD discs have a large capacity, many movies can be recorded on one disc. For example, when 3 different movies are recorded on a disc, they are divided into TITLE 1, TITLE 2 and TITLE 3. Playback can be operated by selecting the title number.

Chapter number

Chapter numbers are the numbers assigned to sections on a title of the disc, similar to chapters in a book. If the disc includes these numbers, you can locate the section you want very quickly using chapter search and other functions.
Some discs may not include chapter numbers.

Frame number

This is the number recorded in each frame on a CAV disc. You can use frame numbers for such operations as Frame Search for a desired frame.

Time number

The time number is the playback lapse time of a title in the disc from its beginning. The scene you want to locate can be searched for with the time number using the time number function etc.

LD (Laserdisc)

Depending on the signal recording method used, there are two types of Laserdiscs; Standard play discs (CAV) and Extended play discs (CLV).

CAV

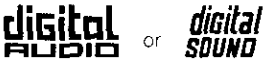
CAV disc jackets or labels are marked with "Standard play disc/CAV" or "Standard Play".

CLV

CLV disc jackets or labels are marked with "Extended play disc/CLV" or "Extended Play".

Laserdiscs with digital audio

These type of discs are recorded with digital audio signals in addition to the analog audio signals. This allows you to enjoy high quality digital sound along with the laser disc's high quality picture.



Multi audio discs with digital sound

These type of discs are recorded with different types of digital audio and analog audio content.

Digital audio or analog audio can be enjoyed by switching between them.

Parental level

This function was suggested by parents. Parental level restrictions are restrictions incorporated into scenes that parents do not wish their children to view.

TOC

TOC (Table Of Contents) information is data other than audio signal data, recorded at the beginning of a disc. As the name implies, it's like the list of contents in a book, with information such as the number of songs and playback time.

- Some LDs also feature a TOC.
- LDs and CDVs with a TOC belong to the "optical digital audio video disc system" family of discs.

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Terms

Video CDs

These discs provide MD quality sound, and VHS quality video images. Thanks to MPEG1, the digital signal compression system, a single disc provides up to 74 minutes of continuous digital audio and video. There are also Video CDs with Playback Control (PBC) that let you select playback of desired scenes using menus, and view still images.

Playback Control (PBC)

This refers to signals recorded on a Video CD (Version 2.0) enabling playback control.
You can use menus recorded on discs with PBC for easy, interactive Search for desired scenes, and playback.
You can also enjoy viewing high-resolution/standard resolution still images.

High-resolution images

If the high-resolution still images are recorded in the Video CD, you can enjoy viewing them with four times the resolution of moving images.

Screen saver

When a still picture is displayed for a long period a phenomena know as "screen burn" may occur.
To avoid this, computers are equipped with screen savers.

Multi-angle

When you watch regular TV programs you are watching the image filmed through the TV camera. Because of this the picture is displayed on your TV from the view point of the TV camera's position. In a TV studio the image is filmed by many cameras at the same time, and one of those images is selected by the program director and transmitted to your household TV. If all the filmed images were transmitted to your TV you would be able to select the camera image you want. Some DVD discs are recorded with the angles of all camera's used for filming and these can be selected using this player. These types of discs are called multi-angle discs.

Subtitle

Subtitles are language titles superimposed on movies etc. Up to 32 different subtitle languages can be recorded on a DVD disc. The subtitle function can be used to select the language of your choice.

Aspect ratio

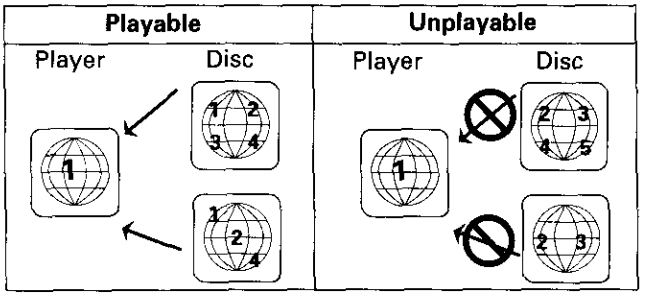
Aspect ratio refers to the length to height ratio of TV screens. The ratio of a normal TV is 4:3, while the ratio of a Hi-vision TV or wide TV is 16:9. This allows you to enjoy a picture with a wider perspective.

Condition memory

"Condition" refers to the various mode settings etc. On this player, various conditions, such as those set during playback etc. can be memorized. This function allows you to play back the same disc at any time without having to reset the condition settings.

Regional restriction codes (region number)

Regional restriction codes are built-in to DVD players and DVD discs for each sales region. If the regional code of the DVD player does not match one of the regional codes of the DVD disc, playback will not be possible. At this time an indicator will appear on the screen.
The region number is described on the rear panel.



Optical digital output

Normally, audio is converted to an electric signal and transmitted through an electric wire from the player to the amplifier etc. Changing this signal to a digital signal and transmitting it through an optical fibre cable is called optical digital output. (Optical digital input is the side receiving the signal such as the amplifier etc.)
You can switch the setting of the optical digital output.

- PCM/DD: Choose this setting when connecting to the Dolby Digital (AC-3) optical digital input of an amp equipped with a Dolby Digital (AC-3) decoder.
- PCM: Choose this setting when connecting to the optical digital input of a regular amp, a Dolby Pro Logic amp etc.

Dynamic range

Dynamic range refers to the difference between the maximum conversion level for transmission/conversion of distortion free signals and noise and/or the minimum level limited by the equipment's characteristics. Decibel units (dB) are used.

Specifications

General

System ..... DVD system, LaserVision Disc system and Compact Disc digital audio system
Laser ..... Semiconductor laser: wavelength 650 nm, 780 nm
Power requirements ..... AC 120 V, 60 Hz
Power consumption ..... 57 W
Weight ..... 8.8 kg (19 lb 6 oz)
Dimensions ..... 420 (W) x 463 (D) x 146 (H) mm (16-1/2 x 18-3/16 x 5-3/4 in.) (Not including protruding cables, etc.)
Operating temperature ..... +5°C to +35°C (+36°F to +96°F)
Operating humidity ..... 5% to 85% (no condensation)

Video Output (2 pairs)

Output level ..... 1 Vp-p (75 Ω when loaded, synchronous negative)
Jacks ..... RCA jacks

S-Video Output level (2 pairs)

Y (luminance) - Output level ..... 1 Vp-p (75 Ω)
C (color) - Output level ..... 286 mVp-p (75 Ω)
Jacks ..... S-VIDEO jacks

Component Video Output

Output level ..... Y: 1.0 Vp-p, 75 Ω, synchronous negative
Cb, Cr: 0.7 Vp-p, 75 Ω
Jacks ..... RCA jacks

Audio Output (2 pairs)

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

Digital audio characteristics

Frequency response	4 Hz to 22 kHz (DVD fs: 48 kHz)
	4 Hz to 20 kHz (LD, CD)
S/N ratio	115 dB (EIAJ)
Dynamic range	97 dB (EIAJ)
Total harmonic distortion	0.003%
Wow and flutter	Limit of measurement (±0.001% W. PEAK) or lower (EIAJ)

Other Terminals

Optical digital output (PCM/DTS) ..... Optical digital jack
Coaxial digital output (PCM/DTS) ..... RCA jack
Coaxial digital output (PCM) ..... RCA jack
AC-3 RF output (for LD) ..... RCA jack
CONTROL IN ..... Minijack (3.5ø)
CONTROL OUT ..... Minijack (3.5ø)

Accessories

Remote control unit 1
AA/R6P dry cell batteries 2
Audio cord 1
Video cord 1
Power cord 1
Operating Instructions 1
Warranty card 1

NOTE:

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

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.

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

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

PIONEER ELECTRONICS SERVICE, INC.
CUSTOMER SUPPORT DIVISION
P.O. BOX 1760, LONG BEACH,
CA 90801-1760, U.S.A.

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

Should this product require service in Canada, please contact a Pioneer authorized dealer in Canada to locate the nearest Pioneer Authorized Service Company.
Alternatively, please contact or ship your defective product freight prepaid to one of the following Factory Service locations closest to you:

Pioneer Electronics of Canada, Inc.

Factory Service East
300 Allstate Parkway
Markham, ON L3R 0P2
(905) 479-4411

Factory Service West
13911 Bridgeport Road
Richmond, BC V6V 1J6
(604) 278-1014

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

Si ce produit doit être réparé au Canada, veuillez vous adresser à un distributeur autorisé Pioneer au Canada pour obtenir le nom de la société de service autorisée Pioneer la plus près de chez vous. Ou encore, veuillez communiquer avec le centre de service en usine Pioneer le plus près de chez vous ou faire parvenir l'article défectueux, port payé à ce centre.

Pioneer électroniques du Canada, Inc.

Service en usine - Est
300 Allstate Parkway
Markham (Ontario) L3R 0P2
(905) 479-4411

Service en usine - Ouest
13911 Bridgeport Road
Richmond (C.-B.) V6V 1J6
(604) 278-1014

Pour obtenir des renseignements sur la garantie, veuillez vous reporter au feuillet sur la Garantie Limitée gui accompagne le produit.

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