

Pioneer *sound.vision.soul*

DVD Recorder & VCR

DVR-RT500

DVR-RT300



Register Your Product on
www.pioneerelectronics.com

Operating Instructions

RW
COMPATIBLE



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

CAUTION

**RISK OF ELECTRIC SHOCK
DO NOT OPEN**

CAUTION:

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



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

D1-4-2-3_En

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

D1-4-2-6-1_En

Information to User

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

D8-10-2_En

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

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

D8-10-1-2_En

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

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

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

D1-4-2-1_En

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

D8-10-3a_En

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

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

D8-10-1-3_EF

IMPORTANT SAFETY INSTRUCTIONS

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

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

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

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

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

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

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

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

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



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

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

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

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

GROUNDING OR POLARIZATION

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

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

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

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

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

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

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

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

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

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

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

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

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

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

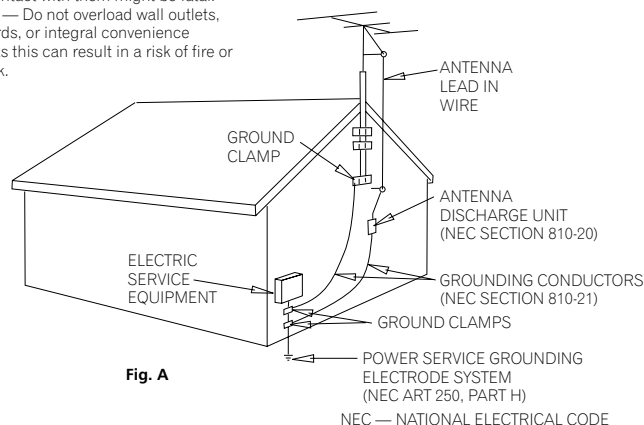


Fig. A

NEC — NATIONAL ELECTRICAL CODE

D1-4-2-2_En

DANGER

VISIBLE AND INVISIBLE LASER RADIATION WHEN OPEN. AVOID DIRECT EXPOSURE TO BEAM.

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.

CAUTION

– 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 DECOUVVERT.

D2-4-4-1_EF

NOTE TO CATV SYSTEM INSTALLER

THIS REMINDER IS PROVIDED TO CALL THE CATV SYSTEM INSTALLER'S ATTENTION TO ARTICLE 820-40 OF THE NEC THAT PROVIDES GUIDELINES FOR PROPER GROUNDING AND, IN PARTICULAR, SPECIFIES THAT THE CABLE GROUND SHALL BE CONNECTED TO THE GROUNDING SYSTEM OF THE BUILDING, AS CLOSE TO THE POINT OF CABLE ENTRY AS PRACTICAL.

D1-4-2-8_En

Recording equipment and copyright: You may use this product only to reproduce or copy materials for which you own the copyright or have obtained permission to copy from the copyright owner or for which you otherwise have a legal right to reproduce or copy. Unless you own the copyright or have obtained permission from the copyright owner or otherwise have a legal right to reproduce or copy, you may be violating the law, including copyright law, and may be subject to payment of damages and other remedies.

K018US_En

POWER-CORD CAUTION

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

S002_En

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

K041_En

WARNING: Handling the cord on this product or cords associated with accessories sold with the product will expose you to lead, a chemical known to the State of California and other governmental entities to cause cancer and birth defects or other reproductive harm.

Wash hands after handling

D36-P4_En

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

K057_En

MOISTURE CONDENSATION

DO NOT OPERATE THIS DVD/VCR FOR AT LEAST TWO OR THREE HOURS WHEN MOISTURE IN THE AIR CONDENSES ON THE DVD/VCR.

WHAT IS MOISTURE CONDENSATION?

When cold liquid is poured into a glass, for example, water vapour in the air will condense on the surface of the glass. This is called moisture condensation.

MOISTURE WILL CONDENSE ON THE UNIT IN THE FOLLOWING CASES;

- When you move this DVD/VCR from a cold to a warm place.
- After heating a cold room or under extremely humid conditions.

WHEN YOU EXPERIENCE THE ABOVE CONDITIONS;

Plug the power cord into an AC outlet, set the power switch to ON and leave the unit at room temperature until moisture condensation disappears. Depending on the surrounding conditions, this may take from two or three hours.



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.



S001_En



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		trademarks, or registered trademarks of Microsoft	
		Corporation in the United States and/or other coun-	
		tries.	
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Media mark

Each applicable media are indicated using the symbol shown below.

DVD-Video : DVD-Video	DVD-R : DVD-R
VR mode : DVD-RW in VR mode	CD : Audio CD and CD-R/CD-RW
Video mode : DVD-RW in Video mode	VCR : Video tape

Chapter 1

Before you start

Features

Not only can you playback and record video tapes, but you can also playback DVD discs or make recordings using DVD-RW, DVD-R discs with this unit. In addition, you can enjoy editing the programs you record.

Playback function

- **A realistic, powerful, Movie Theater sound** **DVD-Video**

When connected to Dolby Digital and DTS compliant devices, you can enjoy realistic, powerful surround sound.

- **Playback the scene you want to see immediately**

DVD-Video **VR mode** **Video mode** **DVD-R**

As DVD's do not require rewinding like video tapes, you can get to the scene you wish to watch immediately. A variety of search functions allow you to find the scene you wish to watch.

- **Title menu** **VR mode** **Video mode** **DVD-R**

As thumbnail images are displayed in the title menu, you can find the title you want to play back quickly.

- The title list appears on finalized DVD-RW disc (recorded in the Video mode) and DVD-R disc.

- **MP3/WMA/JPEG playback** **CD**

MP3 and WMA files can be played back. Also, you can display JPEG files on the TV screen and enjoy them as a slide show.

- **Progressive scan**

DVD-Video **VR mode** **Video mode** **DVD-R**

This unit supports the progressive scanning system. If your TV is equipped with component video input jacks which support the progressive video input, you can enjoy high quality picture.

Recording function

- **Timer recording** **VR mode** **Video mode** **DVD-R** **VCR**

You can program the recorder to record up to 8 programs, up to a month in advance, using the VCR Plus+® system*1 for easy programming if you want. As well as single programs, you can specify daily or weekly recordings, too.

**1 VCR Plus+ and PlusCode are registered trademarks of Gemstar Development Corporation.
The VCR Plus+ system is manufactured under licence from Gemstar Development Corporation.*

- **One-touch Timer Recording (OTR)**

VR mode **Video mode** **DVD-R** **VCR**

The One-touch Timer Recording feature provides a simple and convenient way to make a timed recording.

Edit function

- **Editing recorded material without changing the original titles** **VR mode**

You can create a playlist based on the original titles. The playlist won't affect the original titles. If you erase the playlist, the original titles remain. It is recommended to create and edit the playlist to prevent important titles from being erased accidentally.

- **Chapter mark** **VR mode**

You can add (or delete) a chapter mark to (from) the original title. This function is useful when searching for the scene you wish to watch that you have marked with the Chapter mark function.

- **Erasing scenes** **VR mode**

You can erase an unnecessary scene from the created playlist or the original titles.

- **Combining titles** **VR mode**

You can combine several original titles or playlists to a separate playlist.

Dubbing function

- **Dubbing a tape onto a disc or a disc onto a tape**

VR mode **Video mode** **DVD-R** **VCR**

With just this one unit, you can dub however you like, from video tape to disc, or from disc to video tape.

- Dubbing cannot be carried out when attempting to copy a "copy guarded" video tape or disc.

Disc / content format playback compatibility

General disc compatibility

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



- **DVD** is a trademark of DVD Format/Logo Licensing Corporation.

DVD-R/RW compatibility

This recorder will play and record DVD-R/RW discs.

Compatible media:

- DVD-RW Ver. 1.1, Ver. 1.1 / 2x and Ver. 1.2 / 4x
- DVD-R Ver. 2.0 and Ver. 2.0 / 4x / 8x

Recording formats:

- DVD-R: DVD-Video format (Video mode)
- DVD-RW: Video Recording (VR) format and DVD-Video format (Video mode)

Older models of DVD recorders and DVD writers may reject DVD-RW Ver. 1.2 / 4x discs. If you want to share DVD-RW discs between this recorder and an older recorder/writer, we recommend using Ver. 1.1 discs.

The following table shows older Pioneer DVD recorder compatibility with DVD-RW Ver. 1.2 / 4x discs.

Model	Playable	Recordable
DVR-7000	Yes ^{1,2,3}	No
DVR-810H/DVR-57H DVR-210/DVR-310/DVR-510H	Yes ¹	No

¹ Discs should be finalized in this recorder before playing. Unfinalized VR mode and Video mode discs may not play.

² **Cannot read the CPRM information** will show in the display when you load a disc. However, this will not affect playback.

³ Copy-once protected disc titles will not play.

CD-R/RW compatibility

This recorder cannot record CD-R or CD-RW discs.

- Compatible formats: CD-Audio, Video CD/Super VCD, ISO 9660 CD-ROM* containing MP3, WMA or JPEG files
* ISO 9660 Level 1 or 2 compliant. CD physical format: Mode1, Mode2 XA Form1. Romeo and Joliet file systems are both compatible with this recorder.
- Multi-session playback: Yes (except CD-Audio and Video CD/Super VCD)
- Unfinalized disc playback: CD-Audio only

Compressed audio compatibility

- Compatible media: CD-ROM, CD-R, CD-RW
- Compatible formats: MPEG-1 Audio Layer 3 (MP3), Windows Media Audio (WMA)
- Sampling rates: 44.1 or 48kHz
- Bit-rates: Any (128Kbps or higher recommended)
- Variable bit-rate (VBR) MP3 playback: Yes
- VBR WMA playback: No
- WMA encoder compatibility: Windows Media Codec 8 (files encoded using Windows Media Codec 9 may be playable but some parts of the specification are not supported; specifically, Pro, Lossless, Voice and VBR)
- DRM (Digital Rights Management) file playback: No (see also DRM in the Glossary on page 82)
- File extensions: .mp3, .wma (these must be used for the recorder to recognize MP3 and WMA files - do not use for other file types)
- File structure: Up to 99 folders / 999 files (if these limits are exceeded, only files and folders up to these limits are playable)

PC-created disc compatibility

Discs recorded using a personal computer may not be playable in this unit due to the setting of the application software used to create the disc. In these particular instances, check with the software publisher for more detailed information.

Discs recorded in packet write mode (UDF format) are not compatible with this recorder.

Check the DVD-R/RW or CD-R/RW software disc boxes for additional compatibility information.



Frequently asked questions

- *What's the difference between DVD-R and DVD-RW?*
The most important difference between DVD-R and DVD-RW is that DVD-R is a record-once medium, while DVD-RW is a re-recordable/erasable medium. You can re-record/erase a DVD-RW disc approximately 1,000 times.
For more information, see About DVD recording on page 52.
- *What's VR mode?*
VR (Video Recording) mode is a special mode designed for home DVD recording. It allows flexible editing of recorded material compared to 'Video mode'. On the other hand, Video mode discs are more compatible with other DVD players.
- *Can I play my recordable discs in a regular DVD player?*
Generally, DVD-R discs and DVD-RW discs recorded in Video mode* are playable in a regular DVD player, but they must be 'finalized' first. This process fixes the contents of the disc to make them readable to other DVD players as DVD-Video discs. DVD-RW discs recorded in VR mode are playable in some players.



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

Note that Pioneer cannot guarantee that discs recorded using this recorder will play on other players.

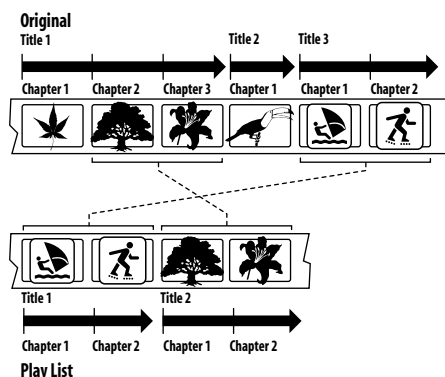
* 'DVD-Video format' recording: The use of the DVD-Video format for recording on DVD-R and DVD-RW discs is referred to as recording in 'Video mode' on Pioneer's DVD recorders. Supporting playback of DVD-R / DVD-RW discs is optional for manufacturers of DVD playback equipment, and there is DVD playback equipment that does not play DVD-R or DVD-RW discs recorded in the DVD-Video format.

Note: 'Finalization' is required.

This recorder supports the recording of 'copy-once' broadcast programs using the CPRM copy protection system (see CPRM on page 53) on CPRM-compliant DVD-RW discs in VR mode. CPRM recordings can only be played on players that are specifically compatible with CPRM.

- *Do I need two DVD recorders for editing? What kind of editing can I do?*

Unlike editing video tape, you only need one DVD recorder to edit discs. With DVD, you edit by making a 'Play List' of what to play and when to play it. On playback, the recorder plays the disc according to the Play List.



Throughout this manual, you will often see the words Original and Play List to refer to the actual content and the edited version.

- **Original** content refers to what's actually recorded on the disc.
- **Play List** content refers to the edited version of the disc-how the Original content is to be played.

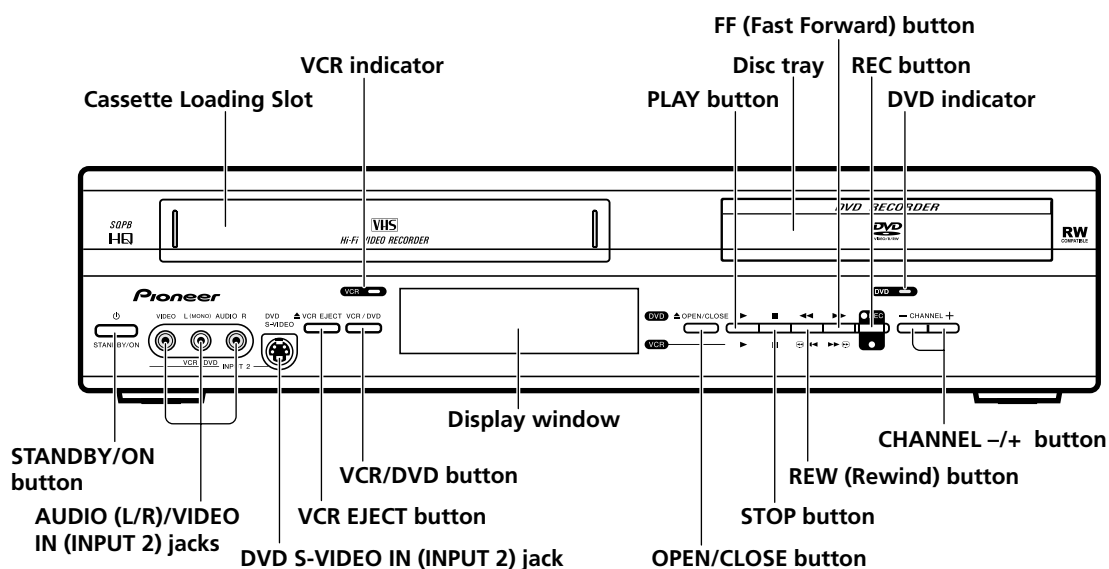
Operating DVD-Video

- Some operations of DVD-Video may be prohibited by the manufacturer, or some operation methods or functions of the DVD-Video may be different from the description in this manual.
- If you attempt an operation that is prohibited by either the disc or the unit, a "hand" mark will appear on the TV monitor. For operations prohibited by the disc, see the information that came with the disc.
- When the menu screen or the operation guide appears during disc playback, follow the displayed information.

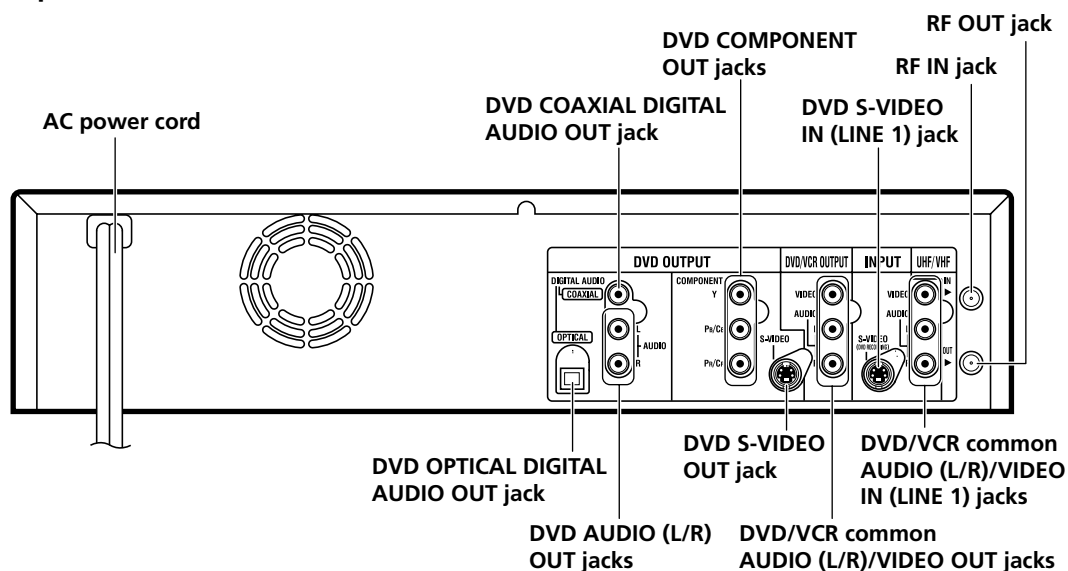
Chapter 2

Controls and displays

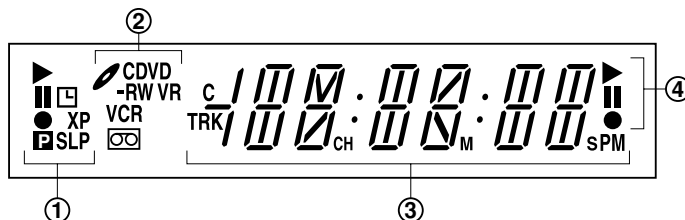
Front panel



Rear panel



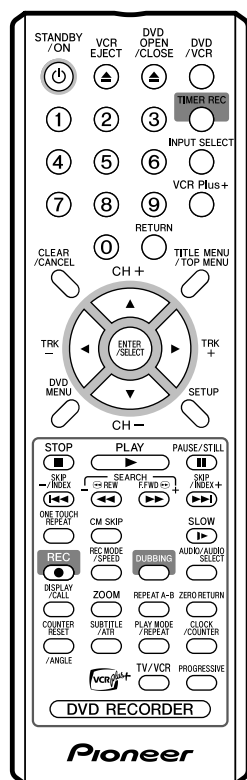
Display window



No.	Display	Description
①		Lights during video tape playback.
		Video tape is temporarily stopped.
		Lights during video tape recording.
		Progressive scanning mode.
		Timer recording display.
	XP/SP/LP/SLP	4 DVD recording modes. XP, SP, LP or SLP is selected in turn by pressing the REC MODE/SPEED repeatedly.
	SP/SLP	2 VCR recording modes. SP or SLP is selected in turn by pressing the REC MODE/SPEED repeatedly.
②		Appears when a CD is inserted.
		Appears when a CD-R is inserted.
		Appears when a CD-RW is inserted.
		Appears when a DVD-Video is inserted.
		Appears when a DVD-R is inserted.
		Appears when a DVD-RW is inserted.
	VR	Appears when a DVD-RW in VR mode is inserted. When the disc is set to video mode, VR does not appear.
	VCR	Appears when the tuner built into this unit is selected. When you press TV/VCR, VCR disappears.
		Video tape is in the unit.
③	10:00	Clock display (Colon [:] flashes).
	01H00M00S	Counter display in hour/minute/second for VCR/DVD, minute/second for CD.
	C 36CH	CATV channel display.
	2CH	TV channel display.
	TRK 2	Track number display for CD.
	PM	Display for afternoon (out in the morning).
	L1/L2	The external input channel (L1 or L2) display.
	Err	Error display.
④		Lights during playback of DVD and CD. Flashes in auto resume.
		DVD or CD is temporarily stopped.
		Lights during DVD recording.

**Note**

- Some discs may not playback correctly, or chapter number, playback time, etc may not be displayed.

Remote control

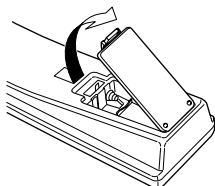
- 1 STANDBY/ON** (page 22)
Turns power on/off.
- 2 VCR EJECT** (page 48)
Ejects the cassette tapes.
- 3 DVD OPEN/CLOSE** (page 33)
Opens or closes the tray.
- 4 DVD/VCR** (78, 79)
Switches to operation between VCR and DVD.
- 5 0-9**
Use for direct TV channel selection of TV (page 54); setting the input (page 37, 76); entering a password (page 25)
- 6 TIMER REC** (page 59, 61)
Sets the unit to start recording at a preset time.
- 7 INPUT SELECT** (page 80)
Switches between the external inputs.
- 8 VCR Plus+** (page 58)
Display the VCR+ program screen.

- 9 RETURN** (page 23, 45)
Closes the menu window.
- 10 CLEAR/CANCEL**
Cancels input data in the setting mode (page 25); deletes the timer recording program (page 59, 61).
- 11 TITLE MENU/TOP MENU** (page 34, 39, 42, 64)
Selects titles of a DVD disc.
- 12 CH +/-** (page 54)
Use to select TV channels.
▲ / ▼ (page 23, 33, 37, 60)
Up/down cursor buttons
- 13 TRK +/-** (page 50)
Use to adjust the VCR manual playback tracking.
◀ / ▶ (page 23, 33, 37, 60)
Left/right cursor buttons
- 14 ENTER/SELECT** (page 23, 33, 37, 58, 60)
Use to select menu options.
- 15 DVD MENU** (page 39)
Displays the menu of the DVD disc.
- 16 SETUP** (page 23, 58, 60)
Displays the setup menu.
- 17 STOP** (page 33, 49, 55)
Stops playback or recording.
- 18 PLAY** (page 33, 49)
Starts playback.
- 19 PAUSE/STILL** (page 36, 50)
Pauses recording or playback (press again to restart).
- 20 SKIP ◀◀ / ▶▶** (page 36)
Skips forward or back chapters.
- 21 INDEX ◀◀◀ / ▶▶▶** (page 51)
Searches for INDEX marks on a tape
- 22 REW/SEARCH -** (page 36, 49, 50)
Rewind/review playback
- 23 F.FWD/SEARCH +** (page 36, 49, 50)
Fast forward/forward search playback
- 24 ONE TOUCH REPEAT** (page 38)
Repeats playback of the last 10 seconds of video.
- 25 CM SKIP** (page 37, 50)
Skips commercial breaks.
- 26 SLOW** (page 36, 50)
Starts slow motion playback.
- 27 REC** (page 54, 56, 80)
Starts recording.

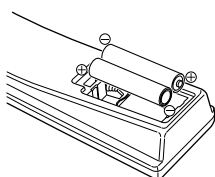
- 28 REC MODE/SPEED** (page 54, 56)
Selects the recording mode.
- 29 DUBBING** (page 78)
Copies VCR to DVD or DVD to VCR.
- 30 AUDIO/AUDIO SELECT**
Switches sound between mono and stereo (page 62); changes the language of the DVD (page 41).
- 31 DISPLAY/CALL** (page 35, 51)
Displays VCR or DVD operation status.
- 32 REPEAT A-B** (page 38)
Repeats playback between A and B.
- 33 ZERO RETURN** (page 51)
Stops the tape when the counter reaches 00_h00_m00_s.
- 34 COUNTER RESET** (page 51)
Resets the counter to 00_h00_m00_s.
- 35 ANGLE** (page 40)
Changes the DVD playback angle.
- 36 SUBTITLE** (page 41)
Selects subtitles of the DVD disc.
- 37 ATR** (page 50)
Digital auto tracking for VCR playback.
- 38 PLAY MODE** (page 37)
Selects the playback mode.
- 39 REPEAT** (page 38, 50)
Selects the repeat playback mode.
- 40 CLOCK/COUNTER** (page 51)
Changes the front panel display mode.
- 41 TV/VCR** (page 22, 55)
Switches input between the TV and VCR.
- 42 PROGRESSIVE** (page 47)
Activates the progressive scanning mode.

Putting the batteries in the remote control

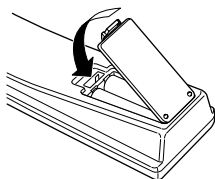
- 1 Open the battery compartment cover on the back of the remote control.



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



- 3 Close the cover.



Note

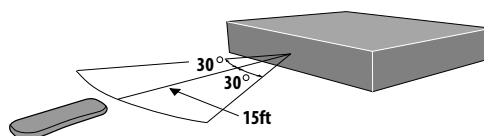
Incorrect use of batteries can result in hazards such as leakage and bursting. Please observe the following:

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

Using the remote control

Keep in mind the following when using the remote control:

- Make sure that there are no obstacles between the remote and the remote sensor on the unit.
- Remote operation may become unreliable if strong sunlight or fluorescent light is shining on the unit's remote sensor.
- Remote controllers for different devices can interfere with each other. Avoid using remotes for other equipment located close to this unit.
- Replace the batteries when you notice a fall off in the operating range of the remote.
- Use within the operating range and angle, as shown.



Power Source

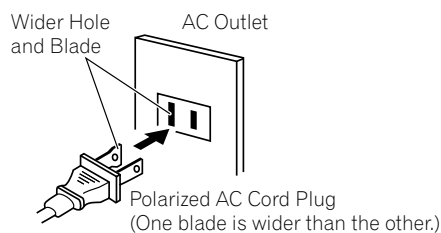
TO USE AC POWER SOURCE

Use the AC polarized line cord provided for operation on AC. Insert the AC cord plug into a standard 120V 60Hz polarized AC outlet.



Note

- Never connect the AC line cord plug to other than the specified voltage (120V 60Hz). Use the attached power cord only.
- If the polarized AC cord does not fit into a non-polarized AC outlet, do not attempt to file or cut the blade. It is the user's responsibility to have an electrician replace the obsolete outlet.
- If you cause a static discharge when touching the unit and the unit fails to function, simply unplug the unit from the AC outlet and plug it back in. The unit should return to normal operation.



Chapter 3

Connecting up

**Important**

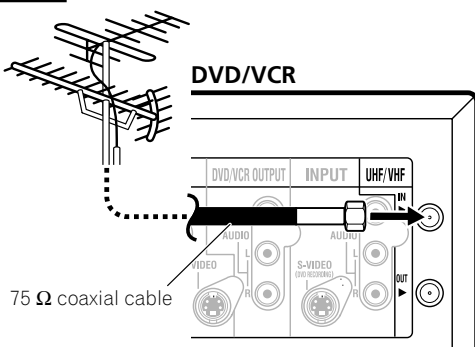
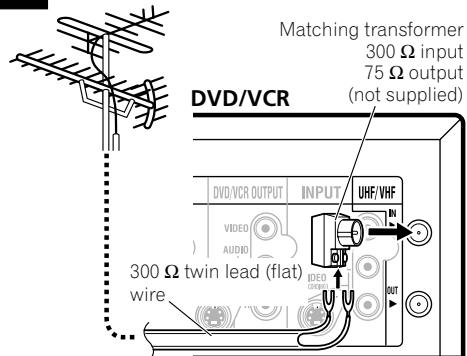
- Before making or changing any rear panel connections, make sure that all components are switched off and unplugged from the wall outlet.

Antenna connection

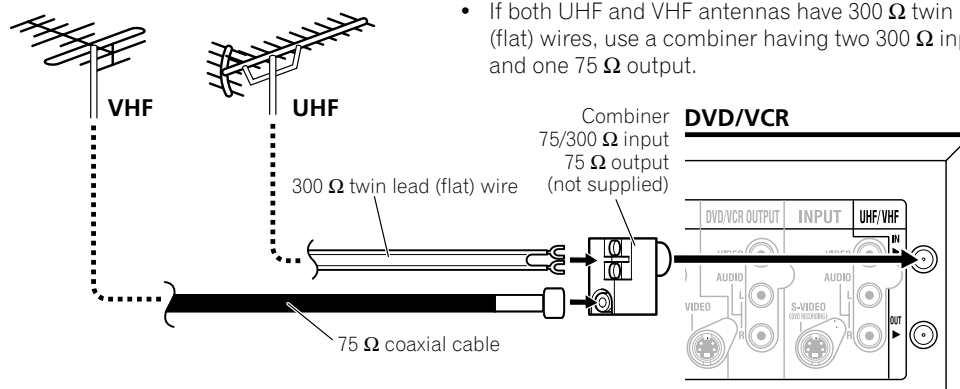
If you are using an antenna system, follow these instructions. If you are a cable (CATV) subscriber, skip ahead to page 18 for the proper connections.

ANTENNA TO DVD/VCR CONNECTION

The DVD/VCR must be connected “between” the antenna and the TV. First, disconnect the antenna from the TV and connect it to the DVD/VCR. Then connect the DVD/VCR to the TV. Below are 3 common methods of connecting an antenna system to a DVD/VCR. Find the type of antenna system you are using and follow the connection diagram.

1 Combination UHF/VHF antenna with 75 Ω coaxial cable

2 Combination UHF/VHF antenna with 300 Ω twin lead (flat) wire

3 Separate UHF and VHF antennas
**Note**

- If both UHF and VHF antennas have 300 Ω twin lead (flat) wires, use a combiner having two 300 Ω inputs and one 75 Ω output.



DVD/VCR TO TV CONNECTION

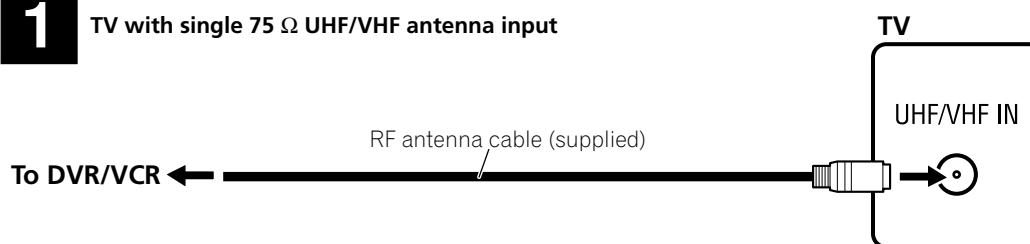
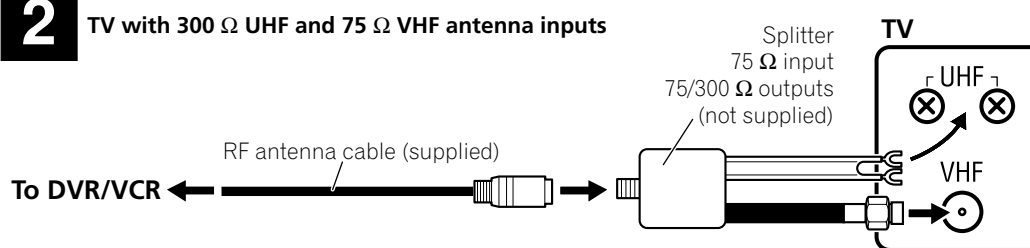
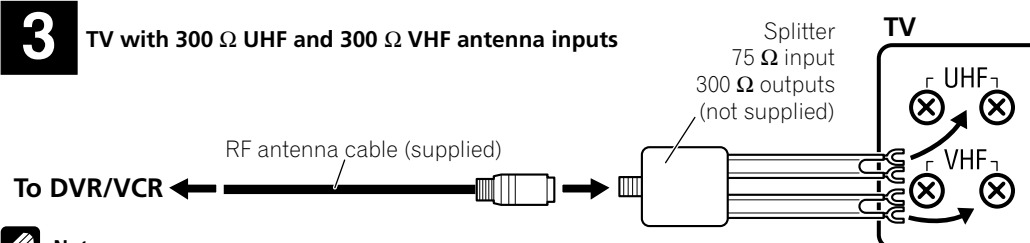
After you have connected the antenna to the DVD/VCR, you must connect the DVD/VCR to the TV.

Below are 3 common methods of connecting your DVD/VCR to a TV. Find the type of TV you are using and follow the connection diagram.

This DVD/VCR has a single 75 Ω output for connection to a TV. If your TV has separate UHF and VHF antenna inputs (numbers 2 and 3 below), use a splitter to connect the DVD/VCR to the TV for UHF and VHF reception.

**Note**

- If a UHF or VHF antenna is used, set the TV/CATV menu option to the "TV" mode.

1**TV with single 75 Ω UHF/VHF antenna input****2****TV with 300 Ω UHF and 75 Ω VHF antenna inputs****3****TV with 300 Ω UHF and 300 Ω VHF antenna inputs****Note**

- If both UHF and VHF antennas have 300 Ω twin lead (flat) wires, use a combiner having two 300 Ω inputs and one 75 Ω output.

**Note**

- A clear picture will not be obtained by the DVD/VCR unless the antenna signal is good. Connect the antenna to the DVD/VCR properly.
- For better quality recording, an indoor antenna or a telescopic antenna is not recommended. The use of an outdoor type antenna is required.
- If you are not sure about the connection, please refer to qualified service personnel.

CATV(CABLE TV) connections

Many cable companies offer services permitting reception of extra channels including pay or subscription channels. This DVD/VCR has an extended tuning range and can be tuned to most cable channels without using a cable company supplied converter box, except for those channels which are intentionally scrambled. If you subscribe to a special channel which is scrambled, you must have a descrambler box for proper reception.

1

DVD/VCR

Incoming cable

TV

UHF/VHF IN (ANT)

Allows

- Recording of nonscrambled channels.
- Use of the programmable timer.
- Recording of one channel while watching another.

2

DVD/VCR

Converter/descrambler

Incoming cable

TV

UHF/VHF IN (ANT)

Allows

- Recording of channels through the converter box (scrambled and unscrambled).
- Using the programmable timer to record only the channel selected at the converter box.

Prevents

- Recording one channel while watching another.
- Using the DVD/VCR tuner to select channels.

Note

- To record from converter/descrambler, DVD/VCR tuner must be tuned to the converter output channel, usually channel 3 or 4.

3

DVD/VCR

Incoming cable

TV

UHF/VHF IN (ANT)

Converter/descrambler

Allows

- Recording of nonscrambled channels.
- Use of the programmable timer.
- Recording an unscrambled channel while watching any channel selected at the converter box.

Prevents

- Recording scrambled channels.

Note

- If you are playing a tape or using the tuner built into the DVD/VCR, the converter must be set to the video channel output of the DVD/VCR (either 3 or 4).



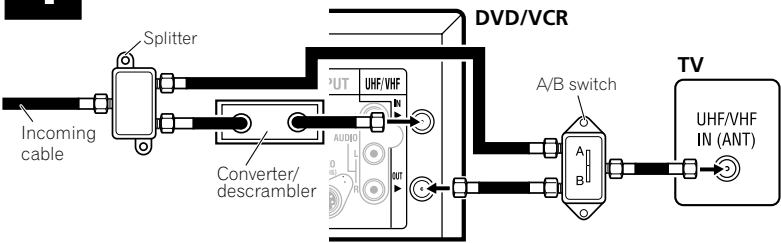
- Whenever a converter/descrambler box is placed before the DVD/VCR, you must tune the DVD/VCR to the output of the converter/descrambler box, usually channel 3 or 4.

Important

- **Make sure the TV/CATV menu option is set to the "CATV" mode.**

This DVD/VCR cannot receive scrambled programs since it does not contain a descrambler. In order to receive scrambled programs, your existing descrambler must be used. Descrambler boxes are available from cable companies. Consult your local cable company for more information concerning connection to their descrambler equipment. There are many ways to connect your DVD/VCR to a cable system. Below are six common methods of connection.

4



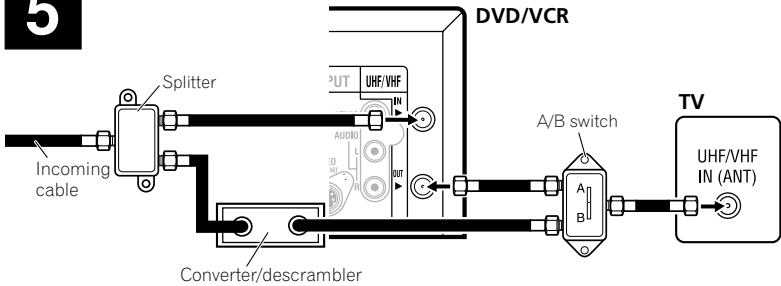
Allows

- Recording of one channel while watching another.
- Using the programmable timer to record only the channel selected at the converter box.
- Recording of all channels through the converter box.

Prevents

- Watching scrambled channels while recording another channel.
- Using the DVD/VCR tuner to select channels.

5



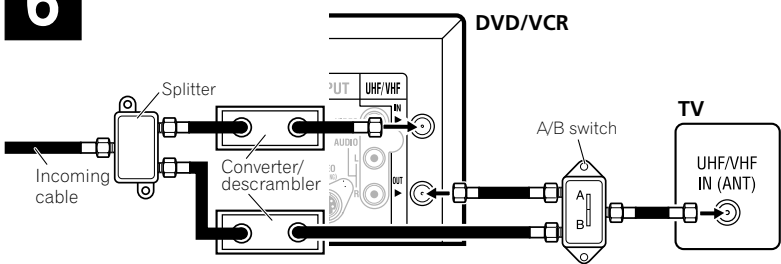
Allows

- Recording of nonscrambled channels.
- Recording of one channel while watching another.
- Watching premium channels through the converter while recording nonscrambled channels.
- Using the programmable timer.

Prevents

- Recording scrambled channels.

6



Allows

- Recording of all channels through the converter box.
- Recording a scrambled or unscrambled channel while watching another (scrambled or unscrambled) channel.
- Using the programmable timer to record only the channel selected at the converter box.

Prevents

- Using the DVD/VCR tuner to select channels.

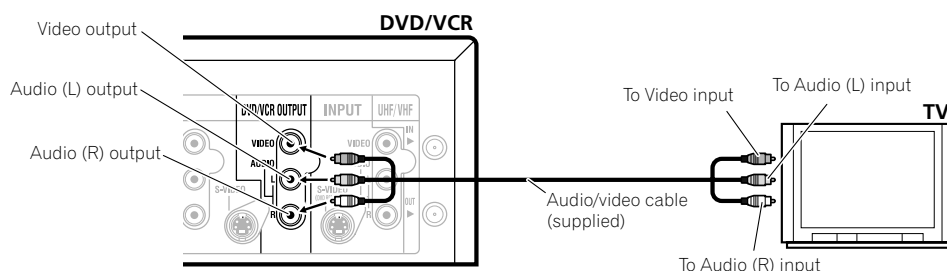
Connections with the TV or audio component

The exact arrangement you use to interconnect various video and audio components to the DVD/VCR is dependent on the model and features of each component. Check the Owner's Manual provided with each component for the location of video and audio inputs and outputs.

Connect to a TV with Audio/Video output

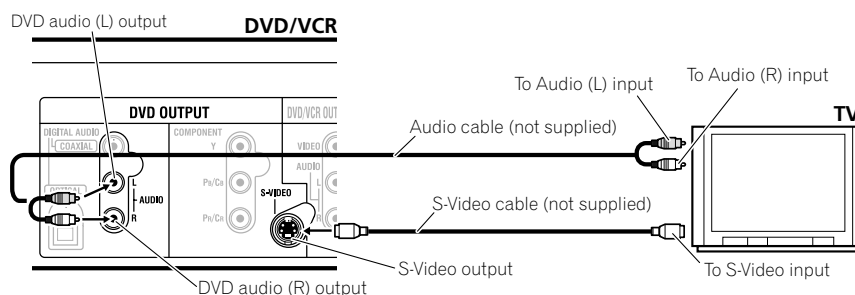
You can enjoy playback by connecting the unit to a TV.

Connect the unit to a TV equipped with audio input (L/R) and video input jacks using the supplied audio/video cable.



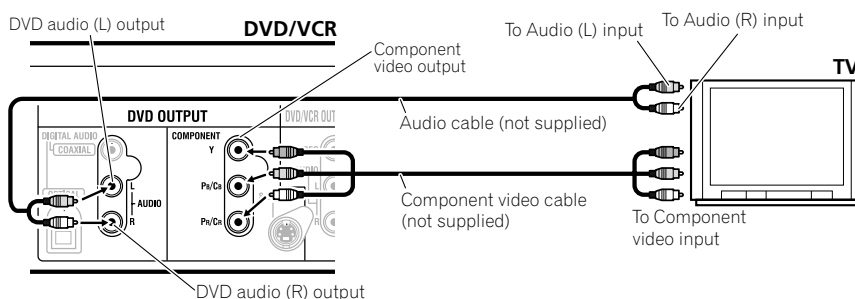
Connect to a TV with S-Video output (for DVD/CD playback)

If your TV has an S-Video input, you can get higher quality by connecting it with the S-Video output of the unit using an S-Video cable (not supplied) instead of connecting the video input of the TV to the video output jack of the unit.



Connect to a TV with Component video output (for DVD/CD playback)

You can enjoy the highest quality picture by connecting the unit's component video out jacks to the component video input jacks of your TV, with component video cables (not supplied).



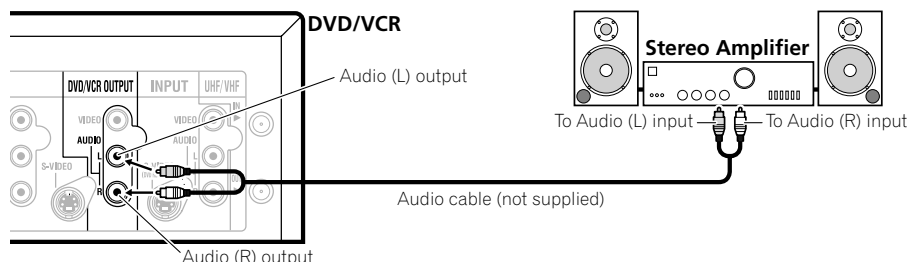
Note

- When connecting to a TV using the video or S-Video jack, make sure that the progressive indicator on the display window is not lit. If it is lit, the video and S-Video outputs do not feed the correct signals and you cannot see any picture. To turn off the progressive indicator, make the progressive scanning mode inactive (see page 47).
- If the component video input jacks on a TV are the BNC type, use an adapter to convert the RCA jacks from the component video cables to BNC (not supplied).

Connect to a stereo amplifier with audio output

You can enjoy high quality audio by connecting the audio output to your amplifier.

Connect the audio output jacks to any line-level inputs (such as AUX, DVD, CD, etc.) of an audio amplifier.



Connect to an AV Amplifier with built-in digital surround

If you are using an Amplifier with a built-in digital surround as follows, you can enjoy the various audio systems such as Dolby Digital and DTS by using the optical or coaxial digital output.

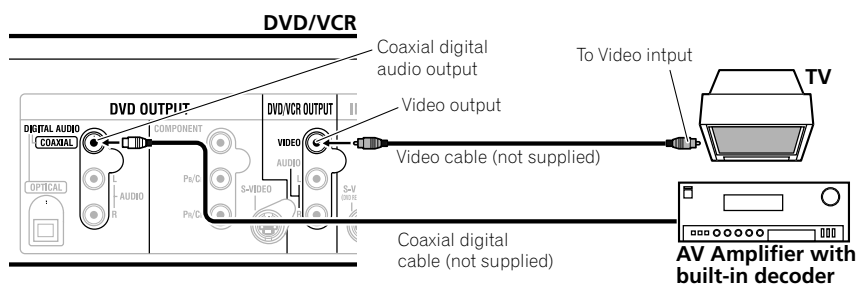
Use this connection to connect an:

- AV amplifier with built-in *Dolby Digital decoder
- AV amplifier with built-in *DTS decoder



Note

- You may connect to a TV with a component video cable (not supplied) or S-Video cable (not supplied) instead of a video cable (not supplied).



Connecting the optical digital cable

You may connect to an AV Amplifier with an optical digital cable (not supplied) instead of a coaxial digital cable.

When you connect the optical digital cable (not supplied), remove the dust protection cap from the rear panel. When not using the optical digital cable, attach the dust protection cap to protect against dust.

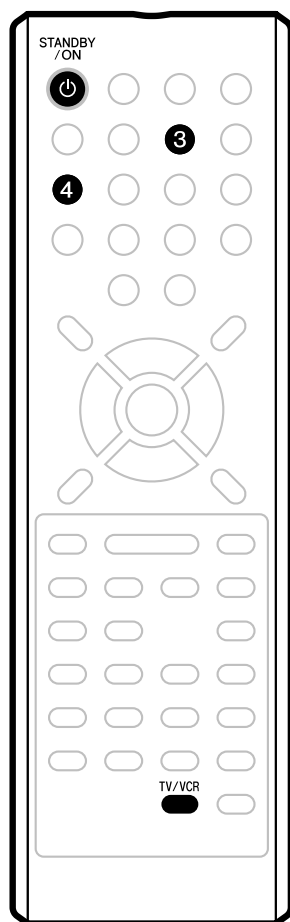


Note

- The DVD OUTPUT jacks (OPTICAL, COAXIAL, AUDIO L/R, S-VIDEO and COMPONENT) are useful only for DVD section. The VHS signal is output only from the composite jacks (DVD/VCR OUTPUT) and UHF/VHF OUT.
- When you make the connections above, do not set DOLBY DIGITAL to DOLBY DIGITAL or DTS to ON on the AV amplifier. If you do, a loud noise will suddenly come out from the speakers, affecting your ears or causing the speakers to be damaged.
- Caution for the optical digital audio output connector: Do not connect to an amplifier (with an optical digital input connector) which does not contain a Dolby Digital or DTS decoder. Otherwise, any attempt to play DVDs may cause such a high level of noise that it may be harmful to your ears and damage your speakers.
- If you use an optical or a coaxial connection, when you play a DVD-RW (VR mode) which was recorded from a bilingual broadcast, you can only hear the audio mode that was selected when it was recorded. See page 10.
- DTS audio will be output only from the COAXIAL or OPTICAL output. To hear DTS audio, DTS-Decoder is necessary.
- When playing DTS-encoded CDs, only noise will be heard from the speakers or analogue stereo outputs.
- Some DTS decoders which do not support DVD-DTS interface may not work properly with the unit.

Chapter 4

Getting started

**Note**

- If the unit does not operate properly, or there is no key operation from the unit and/or the remote control: Static electricity, etc., may affect the operation. Disconnect the AC power cord once, then connect it again.

Auto clock setting

Preparation:

You must connect the antenna or cable before connecting the AC cord to the power source.

Wait 30 minutes with the power turned off, after the antenna or cable is connected, for the auto clock feature to activate.

After the clock is set automatically, you may have to set the time zone and daylight saving time. (See page 26.) Press **STANDBY/ON** to turn on the DVD/VCR after the auto clock operation completed.

- When shipped from the factory, the "AUTO CLOCK" option is set to "ON" position.
- If you turn the DVD/VCR on during auto clock setting, the clock is not set.
- After a power failure or disconnection of the power plug, the clock setting will be lost. In this case, wait 30 minutes before turning the DVD/VCR on.
- With cable box connection, if the auto clock setting is unsuccessful, select the PBS channel carrying the XDS information, then turn the DVD/VCR off. After 30 minutes, turn the DVD/VCR on.
- If the clock is not set automatically, set the clock manually. (See page 26.)

Setting the video channel

To view playback of a recorded tape or DVD disc, or to watch a program selected by the VCR's channel selector, the TV must be set to channel 3 or 4 (video channel).

When a TV is connected with the 75 Ω coaxial cable only:

- 1 Press and hold 3 or 4 on the remote control for 3 seconds in the standby mode to select CH 3 or 4. The selected channel number will flash on the display for about 4 seconds.
- 2 Turn ON the TV and set to CH 3 or 4 to correspond with the channel selected in step 1.
- 3 Press **STANDBY/ON** to turn on the DVD/VCR.
- 4 Press **TV/VCR** to select the VCR position. The VCR indicator will appear in the display.

5 Select any channel to receive a TV station in your area.

The channel number will appear on the screen for about 4 seconds.

For a push-button TV tuner

If CH **3** or **4** corresponding to the video channel cannot be tuned on your TV, proceed as follows: set the VCR 3/4 channel selector and the TV to CH **3** or **4**, playback a prerecorded tape and tune the TV to receive a sharp color picture from the video cassette recorder. Refer to your TV owner's manual for details.



Note

- When shipped from factory, the video channel is set to CH 3.

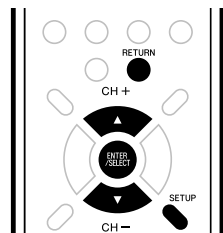
SETUP MENU

The SETUP MENU consists of several menus where you can make various settings concerning language, audio functions, and images. In addition, this menu includes a clock, channel and other things that require setting just after purchase.

For details of each menu, see the corresponding section in this chapter.

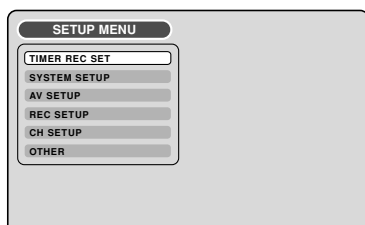
Using the SETUP MENU

The following example shows the basic setting procedure of the SETUP MENU. The remote control keys that operate the SETUP MENU are displayed at the bottom of the screen.



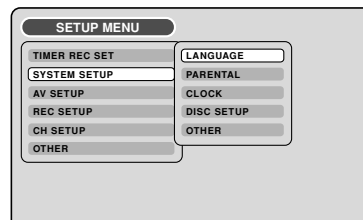
1 Press SETUP while the DVD or video tape is stopped.

The SETUP MENU screen will appear.



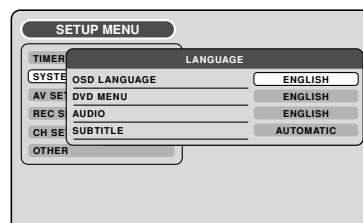
2 Press ▲ or ▼ to select the desired menu and press ENTER.

The submenu screen of the selected menu will appear.



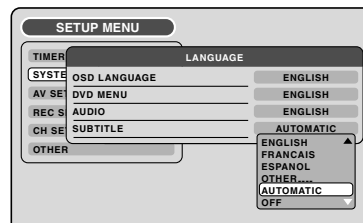
3 Press ▲ or ▼ to select the desired submenu and press ENTER.

The screen for the selected submenu will appear.



4 Press ▲ or ▼ to select the desired item you want, and press ENTER.

Selectable items will be listed.



5 Press ▲ or ▼ to select the desired item and press ENTER.

This completes the setting procedure.

- To return to the previous screen, press **RETURN**.
- To close the SETUP MENU, press **SETUP**.



Note

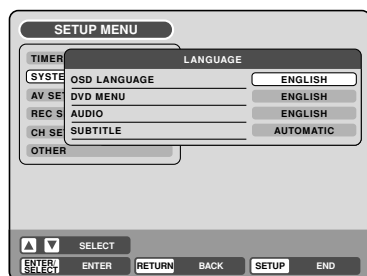
- For items that require different operations from the basic setting procedure, the setting procedure is described in each individual section.
- The item which is indicated by green color cannot be selected.

Setting the language

You can choose the language of the menu screen, DVD menu, DVD audio and subtitles.

Preparation:

- Turn ON the TV and set it to the video input mode.
- Select "**LANGUAGE**" from "**SYSTEM SETUP**". For the procedure, see steps 1 to 3 in "Using the SETUP MENU" on page 23.



OSD LANGUAGE

You can set the language for on screen display. Select "OSD LANGUAGE" and select the language from the list below.

Selectable languages:

ENGLISH, FRANCAIS, ESPANOL

DVD MENU

When several menu languages are recorded on a DVD, you can select the language to be used for the DVD menu.

Select "DVD MENU" and select the language from the list below.

Selectable languages:

ENGLISH, FRANCAIS, ESPANOL

The selected language is the first priority menu language.

OTHER

If you want to select another language, before pressing **ENTER**, input the language code by using the **numeric keys**. (See the Language code list on page 81). Then press **ENTER**.

- If you input a wrong number, press **CANCEL**.

AUDIO

When several audio languages are recorded on a DVD, you can select the audio language to be played back. The selected language remains in effect after the power is turned off or the disc is replaced. Select "AUDIO" and select the audio language from the list below.

Selectable languages:

ENGLISH, FRANCAIS, ESPANOL

The language you have selected will play if it is recorded on the disc.

ORIGINAL

The unit will select the first priority language of each disc.

OTHER

If you want to select another language, before pressing **ENTER**, input the language code by using the **numeric keys**. (See the Language code list on page 81). Then press **ENTER**.

- If you input a wrong number, press **CANCEL**.



Note

- If the selected language is not recorded on the disc, the first-priority language is selected.

SUBTITLE

When several subtitles languages are recorded on DVD, you can select the language to be used for the subtitles. The selected language remains in effect after the power is turned off or the disc is replaced.

Select "SUBTITLE" and select the menu language from the list below.

Selectable languages:

ENGLISH, FRANCAIS, ESPANOL

The subtitle is displayed with the selected language if it is recorded on the disc.

OTHER

If you want to select another language, before pressing **ENTER**, input the language code by using the **numeric keys**. (See the Language code list on page 81). Then press **ENTER**.

- If you input a wrong number, press **CANCEL**.

AUTOMATIC

- The unit will automatically select the same language in the AUDIO setting.
- When the unit selects the same language as the AUDIO setting, the subtitles will not appear during playback.
- When you do not use the same language as the AUDIO setting, the subtitles will appear during playback.

OFF

Subtitles do not appear.



Note

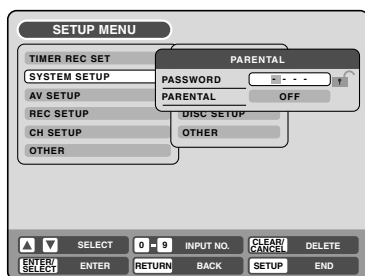
- If the selected language is not recorded on the disc, the first-priority language is selected.

Setting the parental control

Some discs are specified as not suitable for children. This unit can prevent playback of such discs.

Preparation:

- Turn ON the TV and set it to the video input mode.
- Select **"PARENTAL"** from **"SYSTEM SETUP"**. For the procedure, see steps **1** to **3** in "Using the SETUP MENU" on page 23.



Selecting parental control

Select "PARENTAL" and select the parental control level. If the recorder is set to a lower level than the disc, it will require you to enter a password before the disc will play.

To lock the selected parental control level

- 1 To lock the selected parental control level, press **▲** or **▼** to select **"PASSWORD"**.
- 2 Use the numeric keys to input a 4-digit password.
 - If you input a wrong number, press **CANCEL**.
 - Be sure to remember this number!
- 3 Press **ENTER**.

1234 change to

To cancel the locked parental control level

- 1 Select **"PASSWORD"** shown in step 1 of the above section and use the numeric keys to input the password.
- 2 Press **ENTER**.
The locked mark will change to an unlocked mark .
Then, you can change the parental control level, or enter a new password.

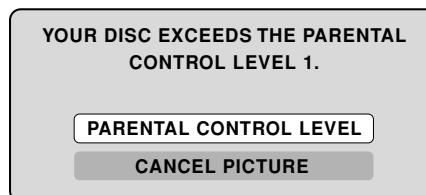
Note

- The selected level will apply to operations executed after this.
- The unit cannot restrict playback of some discs.
- Some discs may not be encoded with specific rating level information though its disc jacket says "adult". Parental control will not work with those discs.
- Do not forget the password. If you forget the password, contact customer service.

Temporarily cancelling parental control

Parental control can temporarily be cancelled with some DVDs.

- 1 Playback a DVD. (See page 33.)
- 2 If the DVD disc has been designed to temporarily cancel the rating level, the screen that follows the **"READING"** screen will change. If you select **"YES"** with the **ENTER**, the message **"YOUR DISC EXCEEDS THE PARENTAL CONTROL LEVEL 1."** (for example) will then appear.



- 3 If you wish to cancel the set rating level temporarily, select **"PARENTAL CONTROL LEVEL"** with **▲** or **▼**, then press **ENTER**. If the password has been selected, the password input screen will appear. Alternatively, if the password has not been set, playback will commence. If you don't know (or have forgotten) the password, select **"CANCEL PICTURE"**. The setting screen will disappear. Press **OPEN/CLOSE** to remove the disc.

- 4 Use the numeric keys to input the password.
 - To interrupt the input process, press **RETURN**.
- 5 Press **ENTER**.
- 6 Playback will commence if the entered password was correct.

Note

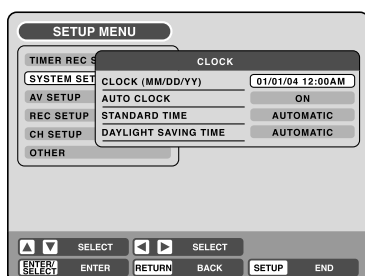
- This temporary cancellation of the rating level will remain active until the disc is ejected. When the disc is ejected, the original rating level will be set again automatically.

Setting the clock

The clock is set to the correct time automatically, but it can also be set manually. The clock can be set for daylight saving time and time zone.

Preparation:

- Turn ON the TV and set it to the video input mode.
- Select "**CLOCK**" from "**SYSTEM SETUP**". For the procedure, see steps **1** to **3** in "Using the SETUP MENU" on page 23.



CLOCK (manually)

You can manually set the date, year and present time with the remote control.

Ex.: Setting the clock to "10:20AM" October, 30th, 2004.

1 Select "CLOCK" and press ENTER.

01/01/04 12:00AM

2 Select the desired items using ◀ or ▶ (month, date, year, hour, minute and AM/PM) then press ENTER.

3 Press ▲ or ▼ to set the value of the selected item.

- For the minutes, press ▲ or ▼ once to set the time minute by minute, or hold down either of buttons for several seconds to set the time in 10-minute intervals.

10/30/04 10:20AM

4 Repeat steps 2 and 3 to set the date, year and present time, and press ENTER. The SETUP MENU will close.

This completes clock time setting.

AUTO CLOCK

You can automatically set the clock by turning "ON" the AUTO CLOCK function.

When you want to set the auto clock function to "OFF", select "AUTO CLOCK", press ENTER and select "OFF" from the list.

For more information see page 22.

STANDARD TIME (Time zone)

In the rare event that you live within the broadcast range of two stations in two different time zones, the DVD/VCR may recognize the wrong station for the auto clock set.

To correct the situation:

Select "STANDARD TIME" and select the time zone from the list below.

Selectable time zones and correction times

ATLANTIC:	GMT – 4 hours (GMT: Greenwich Mean Time)
EASTERN:	GMT – 5 hours
CENTRAL:	GMT – 6 hours
MOUNTAIN:	GMT – 7 hours
PACIFIC:	GMT – 8 hours
ALASKA:	GMT – 9 hours
HAWAII:	GMT – 10 hours
AUTOMATIC:	AUTO SET



Note

- When shipped from the factory, the "TIME ZONE" is set to "AUTOMATIC".
- After making the auto clock setting, in some cases the clock may display another time zone. You can correct the clock by selecting your time zone setting above.
- When the clock is not set or you set the clock manually, the time zone setting is not available.

DAYLIGHT SAVING TIME

You can set the clock to daylight saving time automatically or manually.

To select daylight saving time, select "DAYLIGHT SAVING TIME" and select "ON", while to cancel the daylight saving time, select "OFF".

ON: For manual setting (forward 1 hour)

OFF: For manual setting (back 1 hour)

AUTOMATIC: For automatic setting (read XDS in the signal)



Note

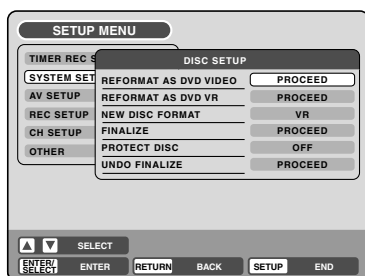
- When you want to set daylight saving time, on the first Sunday in April you set it to "ON", and on the last Sunday in October you set it to "OFF".
- When shipped from the factory, the "DAYLIGHT SAVING TIME" option is set to "AUTOMATIC".
- When the clock is not set, the daylight saving time setting is not available.
- When there is no daylight saving time in your area, always select "OFF".

Setting the disc

You can format, protect, or finalize a disc.

Preparation:

- Turn ON the TV and set it to the video input mode.
- Select **"DISC SETUP"** from **"SYSTEM SETUP"**. For the procedure, see steps **1** to **3** in "Using the SETUP MENU" on page 23.



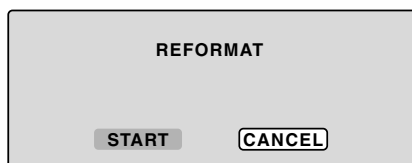
REFORMAT

You can format a recorded DVD-RW.

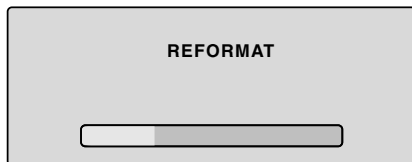
Check the content of the disc before format. If you format the disc, the recorded content of the disc will be erased.

To format a DVD in the Video mode, select "REFORMAT AS DVD VIDEO", and to format it in the VR mode, select "REFORMAT AS DVD VR".

The screen below will appear.



- When you select "START" and press **ENTER**, format will start. The screen below will appear.



- When you select "CANCEL" and press **ENTER**, the DISC SETUP screen will appear.

Note

- You cannot format Ver. 1.0 DVD-RW and DVD-R.
 - You cannot format a disc if the disc protection is "ON".
- In such a case, be sure to cancel the disc protection (see page 28) before formatting.

NEW DISC FORMAT

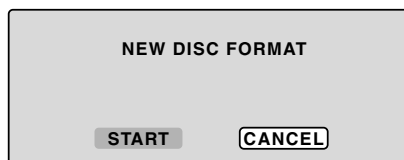
If you insert an unused disc, the disc is automatically formatted.

If you use the DVD-RW (Ver.1.1 or later), you can select the mode to be used for automatic format. Select "NEW DISC FORMAT" and select the mode from the list below.

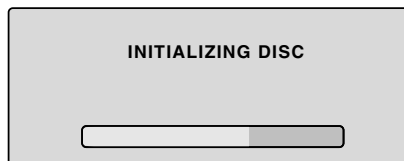
VR: Format the disc in the VR mode.

Video: Format the disc in the Video mode.

When you insert an unused disc, the following message screen will appear.



- When you select "START" and press **ENTER**, formatting will start. The screen below will appear.



- When you select "CANCEL" and press **ENTER**, the normal TV screen will appear.

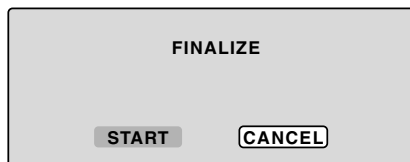
Note

- If a recorded disc has scratches or contamination on it, the "NEW DISC FORMAT" screen may appear. If this happens, select "CANCEL".

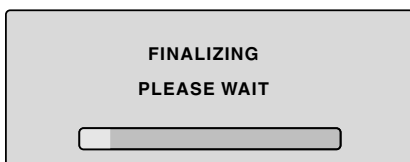
FINALIZE

To play a DVD disc recorded on this unit you must finalize the disc to insure compatibility with other DVD players. In addition if you are using a DVD-RW disc you must record in Video mode.

When "FINALIZE" is selected, the screen below will appear.



- When you select "START" and press **ENTER**, finalization will start. The screen below will appear.



- When you select "CANCEL" and press **ENTER**, the DISC SETUP screen will appear.

Note

- During the finalization the cursor will move repeatedly. When the finalization finished, "DISC FINALIZED" will appear.
- The finalization process may require a few minutes to about 1 hour according to disc type or the amount of free space on the disc.
- You can record or edit a finalized DVD-RW (in VR mode) by cancelling the finalizing, but you cannot do these operations with a DVD-RW (Video mode), or with a DVD-R.
- For a DVD-RW (in VR mode) which was finalized by another unit, you can record or edit on this unit by cancelling the finalization.
- You cannot playback a disc recorded on VR mode on a unit that does not support DVD-RW.
- Even if you finalize a disc in the Video mode, the disc cannot be played back in some DVD players.
- A DVD-R disc cannot be named after it is finalized.

PROTECT DISC

You can protect a disc to prevent the content recorded on it from being erased, edited or re-recorded. Only DVD-RW (in VR mode) can be protected. Select "PROTECT DISC" and select "ON" to protect the disc.

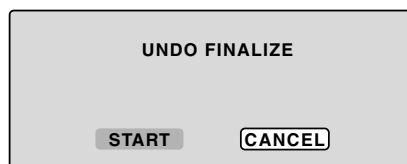
To cancel the disc protection, select "OFF".

UNDO FINALIZE

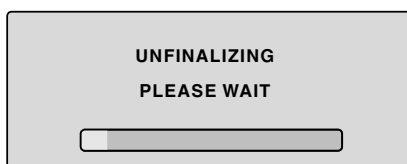
You can cancel the finalization of a finalized DVD-RW (in VR mode).

You cannot cancel the finalization for discs other than above. You can record or edit on a disc whose finalization has been cancelled.

Select "UNDO FINALIZE", and the screen below will appear.



- When you select "START" and press **ENTER**, the cancelling finalization will start. The screen below will appear.



- When you select "CANCEL" and press **ENTER**, the DISC SETUP screen will appear.

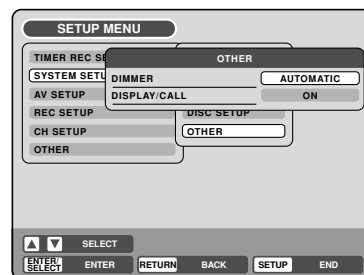
Note

- During the cancelling finalization the cursor will move repeatedly.
- The cancelling finalization process may require a few minutes to about 1 hour according to disc type or the amount of free space on the disc.
- When the disc's finalization cannot be cancelled, you cannot select "UNDO FINALIZE".

You can turn the display window and screen display "ON" or "OFF".

Preparation:

- Turn ON the TV and set it to the video input mode.
- Select "**OTHER**" from "**SYSTEM SETUP**". For the procedure, see steps **1** to **3** in "Using the SETUP MENU" on page 23.



DIMMER (Brightness of the display window)

You may adjust the brightness or turn off the display on the front panel of the unit.

Select "DIMMER" and select the display window status from the list below.

AUTOMATIC:

When the power is on, the display window appears bright. When the power is off, it appears dark.

DIM:

The window display always appears dark.

OFF:

When the power is on, the display window appears dark. When the power is off, it is turned off.

DISPLAY/CALL (Turning the screen display "ON" or "OFF")

You can turn off the screen display that is output to the TV screen by this unit. Select "DISPLAY/CALL", and select "ON" or "OFF".

ON:

The screen display appears.

OFF:

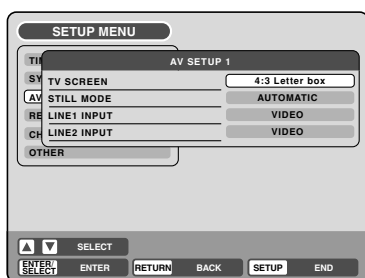
Nothing but the SETUP MENU and error messages appear.

Setting the screen

This section describes settings about the screen.

Preparation:

- Turn ON the TV and set it to the video input mode.
- Select "**AV SETUP 1**" from "**AV SETUP**". For the procedure, see steps **1** to **3** in "Using the SETUP MENU" on page 23.

**TV SCREEN**

You can select the TV screen size to suit the screen image.

Select "TV SCREEN" and select screen size from the list below.

4:3 Pan scan

It displays a wide picture across the whole screen with left and right edges automatically cut off.

4:3 Letter box

Select this mode when connecting to a conventional TV. When playing back a wide screen DVD disc, it displays a wide picture with black bands at the top and bottom of screen.

16:9

Select this mode when connecting to a wide-screen TV. A wide-screen picture is displayed in full size.

**Note**

- If the DVD disc is not formatted in the pan scan format, it displays a 4:3 aspect ratio.

STILL MODE

You can set the type of image displayed on the TV screen when the playback of the DVD is stilled. Select "STILL MODE" and select the image to be displayed from the list below.

AUTOMATIC

The field still or frame still is automatically selected. (For normal use.)

STILL BY FRAME

The frame still is set.

Note for the field still and frame still:

(with 480i interlaced scanning mode)

- Field* still (240 lines)
Since only one field (half of the video information) is shown on the TV screen, the picture appears rough but does not shake.
- Frame* still (480 lines)
Two fields are alternatively shown on the TV screen. The picture shakes but the resulting picture quality is superior to the field still pictures.

Field*: A field refers to the video information in one-half of a frame. 1 frame (screen) consists of 2 fields.

Frame*: A frame refers to the total area occupied by each picture on the TV screen.

LINE1 INPUT/LINE2 INPUT

This unit comes with an S-Video input jack and Video input jack. When you use an S-Video or Video input jack, you must select the input mode.

Select "LINE1 INPUT" ("LINE2 INPUT") and select the mode from the following list.

S-VIDEO

The video signal is input only from the S-Video input jack.

VIDEO

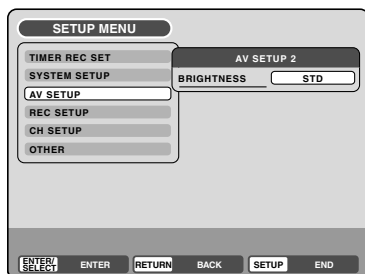
The video signal is input only from the video input jack.

Setting the image quality

This section describes image quality settings.

Preparation:

- Turn ON the TV and set it to the video input mode.
- Select "**AV SETUP 2**" in "**AV SETUP**". For the procedure, see steps **1** to **3** in "Using the SETUP MENU" on page 23.



BRIGHTNESS

You can control the brightness level of the image. Select "BRIGHTNESS" and select the level from the list below.

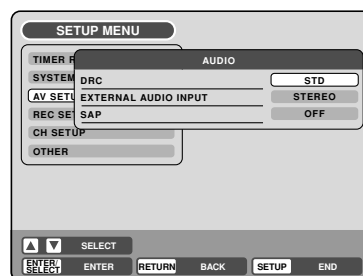
- MAX:** The image becomes brighter.
- STD:** The image is of standard brightness.
- MIN:** The image becomes darker.

Setting the audio

This section describes audio settings.

Preparation:

- Turn ON the TV and set it to the video input mode.
- Select "**AUDIO**" from "**AV SETUP**". For the procedure, see steps **1** to **3** in "Using the SETUP MENU" on page 23.



DRC

DRC (Dynamic Range Control) enables you to control the dynamic range so as to achieve a suitable sound for your equipment.

Select "DRC" and select the level from the list below.

- MAX:** Full dynamic range is maintained.
- STD:** Full dynamic range is reduced.
- TV:** Dynamic range is reduced.



Note

- This function works only during playback of Dolby Digital recorded discs.
- When you listen to the sound from TV's speaker, we recommend that you select "TV".
- The level of Dynamic Range Reduction may differ depending on the DVD.

EXTERNAL AUDIO INPUT

The audio mode for the audio input jack can be selected, choosing either stereo or monaural. Select "EXTERNAL AUDIO INPUT" and select from the list below.

STEREO:

The sound is treated as stereo sound.

L CH:

The sound is treated as the monaural sound of the left channel.

R CH:

The sound is treated as the monaural sound of the right channel.

SAP (Second Audio Program)

This unit is fitted with a SAP broadcast system that enables you to switch to a second audio program while viewing a selected channel.

This function applies only when the program is broadcast in multiple languages through the SAP broadcast system.

Select "SAP" and select "ON" to use SAP, and to not use it, select "OFF".

Listening to SAP

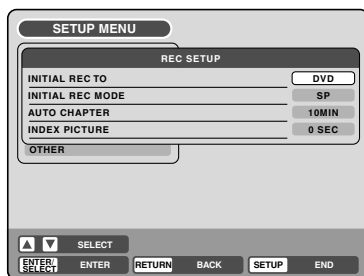
When the unit is turned on or a channel selection is made, make certain the letters "SAP" appear on the screen. This means that "Second Audio Program" broadcasting is available.

Setting the recording

This section describes recording settings.

Preparation:

- Turn ON the TV and set it to the video input mode.
- Select "**REC SETUP**". For the procedure, see steps **1** to **3** in "Using the SETUP MENU" on page 23.



INITIAL REC TO

You can select the recording media that is first displayed in the item "REC TO" on the timer recording screen.

Select "INITIAL REC TO" and select "DVD" or "VCR".

INITIAL REC MODE

You can select the recording mode that is first displayed in the item "REC MODE" on the timer recording screen.

Select "INITIAL REC MODE" and select XP, SP, LP, or SLP.



Note

- For the DVD recording mode, see page 52. And for the VCR recording mode, see page 48.

AUTO CHAPTER

You can automatically make chapter marks on the DVD to be recorded.

Select "AUTO CHAPTER" and select the interval between chapter marks from the list below.

- OFF:** Automatic chapter marking is not used.
- 5 MIN:** The interval is set to 5 minutes.
- 10 MIN:** The interval is set to 10 minutes.
- 15 MIN:** The interval is set to 15 minutes.
- 30 MIN:** The interval is set to 30 minutes.

INDEX PICTURE

You can set the time that the thumbnail image is registered in the title menu of DVD-RW (VR mode). Select "INDEX PICTURE" and select from the list below.

- 0 SEC:** The image of a recording start point is registered.
- 1 MIN:** The image 1 minute after a recording start is registered.
- 3 MIN:** The image 3 minutes after a recording start is registered.



Note

- You cannot select the thumbnail image for Video mode.

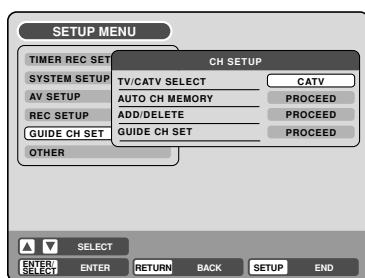
Setting the channel

This DVD/VCR is equipped with a channel memory feature that allows you to skip channels up or down to the next channel set in memory, hence skip over unwanted channels.

Before selecting channels, they must be programmed into the DVD/VCR's memory. In addition to normal VHF and UHF channels, this DVD/ VCR can receive up to 113 Cable TV channels. To use this DVD/VCR with an antenna, set the TV/CATV menu option to the TV mode. When shipped from the factory, this menu option is in the CATV mode.

Preparation:

- Turn ON the TV and set it to the video input mode.
- Select "**CH SETUP**". For the procedure, see steps **1** to **3** in "Using the SETUP MENU" on page 23.



TV/CATV SELECT

Select "TV/CATV SELECT" and select "TV" or "CATV".

TV: VHF/UHF channels

CATV: CABLE TV channels

AUTO CH MEMORY

The VCR can receive a maximum of 181 channels by presetting the channels into memory.

When you select "AUTO CH MEMORY" and press **ENTER**.

The AUTO CH MEMORY function will be activated. The channel display will count up and, when finished, the screen returns to normal.

ADD/DELETE (channels)

You can add the channels you want or delete the channels you do not want manually. Select "ADD/DELETE" and select "ADD" or "DEL." for each channel.

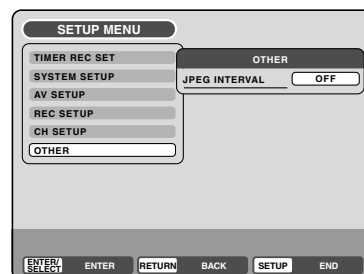
- Press **▲** or **▼** to select the channel. The **numeric keys** can also be used for selection.
- When you want to delete the selected channel, press **►** to select "DEL" and press **ENTER**.
- When you want to use the selected channel, press **◀** to select "ADD" and press **ENTER**.

Setting other items

You can set the switching interval between played back images in the slide show mode.

Preparation:

- Turn ON the TV and set it to the video input mode.
- Select "**OTHER**". For the procedure, see steps **1** to **3** in "Using the SETUP MENU" on page 23.



JPEG INTERVAL

You can select the interval time for JPEG slide show (page 46).

Select "JPEG INTERVAL" and select the switching interval between images from the list below.

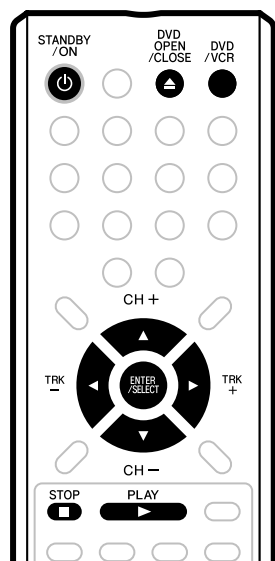
- OFF:** The slide show mode is not used.
- 5 SEC:** The interval is set to 5 seconds.
- 10 SEC:** The interval is set to 10 seconds.
- 15 SEC:** The interval is set to 15 seconds.

Chapter 5

Playback

playback procedure

DVD-Video VR mode Video mode DVD-R CD



Preparation:

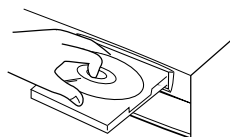
- Turn ON the TV and set to the video input mode.
- Press **DVD/VCR** to select the DVD mode. (The DVD indicator will light.)

1 Press OPEN/CLOSE.

The disc tray will open.

2 Place a disc onto the tray.

Hold the disc, position it with the printed label side up, align it with the guides, and place it in its proper position.



3 Press OPEN/CLOSE to close the disc tray.

"READING" appears on the screen and some discs start playback automatically.

- A menu screen may appear on the TV screen, if the disc has a menu feature. In this case, press **▲**, **▼**, **◀**, **▶** or **ENTER** to operate a menu feature.

4 Press PLAY to start playback.

5 Press STOP to end playback.

- The DVD/VCR memorizes the stopped point, depending on the disc. "■" appears on the screen for approx. 4 seconds. "▶" keeps blinking in the display until the playback is stopped completely. Press **PLAY** to resume playback (from the scene point).
- If you press **STOP** again ("■" appears on the screen), the DVD/VCR will clear the stopped point.

6 Then press OPEN/CLOSE.

The disc tray opens. Remove the disc and press **STANDBY/ON**.

The disc tray closes automatically and the DVD/VCR turns off.



Note

- If a non-compatible disc is loaded, "INCORRECT DISC", "REGION CODE ERROR" or "PARENTAL ERROR" will appear on the TV screen according to the type of loaded disc. In this case, check your disc again (See pages 9 and 25).
- Some discs may take a minute or so to start playback.
- A prohibition symbol "⊞" may appear at the upper right of the screen. This symbol means either the feature you tried is not available on the disc, or the DVD/VCR can not access the feature at this time. This does not indicate a problem with the DVD/VCR.
- When you set a single-faced disc label downwards (ie. the wrong way up) and press **PLAY** or **OPEN/CLOSE**, "READING" will appear and then it will change to "NO DISC".
- Some playback operations of DVDs may be intentionally fixed by software producers. Since this DVD/VCR plays DVDs according to the disc contents the software producers designed, some playback features may not be available. Also refer to the instructions supplied with the DVDs.
- When playing DTS-encoded Audio CDs, excessive noise will be heard from the analog stereo outputs. To avoid possible damage to the audio system, the consumer should take proper precautions when the analog stereo outputs of the DVD/VCR are connected to an amplification system.

Playback by selecting a title

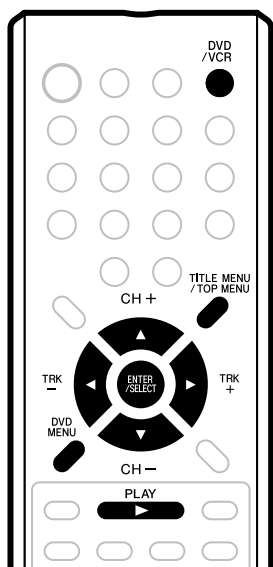
VR mode **Video mode** **DVD-R**

When playing back a recorded disc, you can display the title menu and select the title to be played back.



Note

- For a disc recorded in the Video mode, the "REC DATE", "TIME", "CHANNEL" and "REC MODE" will not appear in the title menu.
- When a disc that has been recorded in the Video mode is finalized, a title list is automatically created that can be played back even with other DVD players. Consequently, the menu before finalizing is different from that of after finalizing.

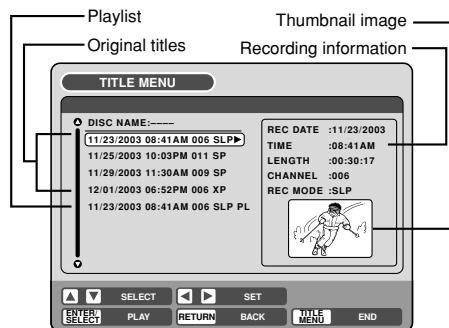


Preparation:

- Turn ON the TV and set to the video input mode.
- Load a recorded DVD.
- Press **DVD/VCR** to select the DVD mode. (The DVD indicator will light.)

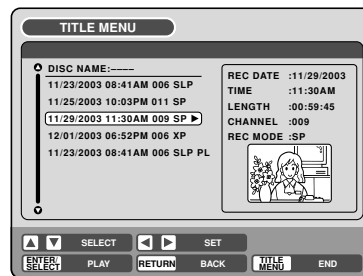
1 Press TITLE MENU.

The title menu will appear.



If there are many original titles and playlists... Before pressing **TITLE MENU**, press **DVD MENU** until "VR ORG" or "VR PL" will appear on the upper right of the TV screen, then press **TITLE MENU**. The first original title or playlist will be highlighted.

2 Press ▲ or ▼ to select the title you want to playback.



3 Press ENTER.

The selected title is played back.



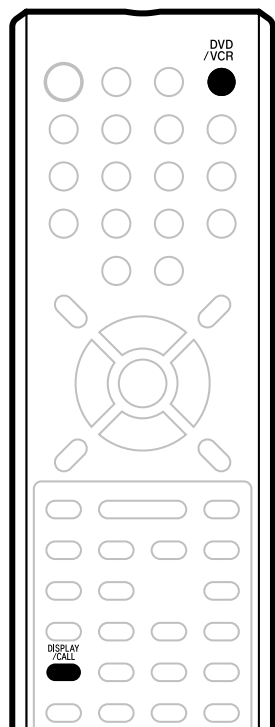
Note

- If you don't display the title menu and press **PLAY**, the first title is played back.
- The title menu is used not only for playing back titles but also for editing various discs and titles. For details of editing operation, see page 61.
- If you create a playlist, an original title and playlist appear in the title menu. For creating a playlist, see page 64.
- In case the disc includes more than 10 titles, you can turn to the next or the previous page. Press ◀, then press ▼ or ▲ to display next/previous page. To return to normal use, press ▶.
- You cannot switch to the VCR mode when the title menu is showing. Press **TITLE MENU** to clear the title menu, then press **DVD/VCR** to switch to the VCR mode.

Checking media information

DVD-Video **VR mode** **Video mode** **DVD-R** **CD**

Various information on the loaded disc can be displayed on the TV screen.

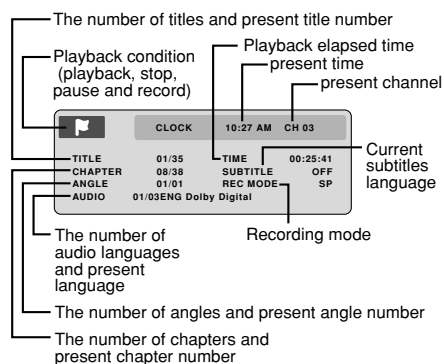


Preparation:

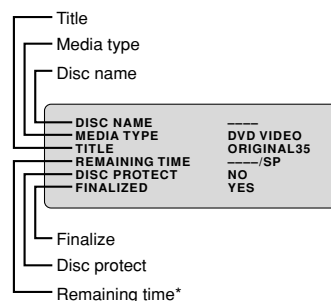
- Turn ON the TV and set it to the video input mode.
- Load the disc.
- Press **DVD/VCR** to select the DVD mode. (The DVD indicator will light.)

1 Press DISPLAY/CALL.

Media information will appear.



2 Press DISPLAY/CALL while the media information above is displayed. The next media information will appear.



*The remaining time displayed during recording may be different from the actual remaining time. When you want to check the correct remaining time, stop recording and display the media information again.

3 Press DISPLAY/CALL again while the media information above is displayed. The media information will disappear.

Note

- The displayed information varies with the type of media.
- Some information may not appear due to media type or operating conditions.

Special playback

DVD-Video

VR mode

Video mode

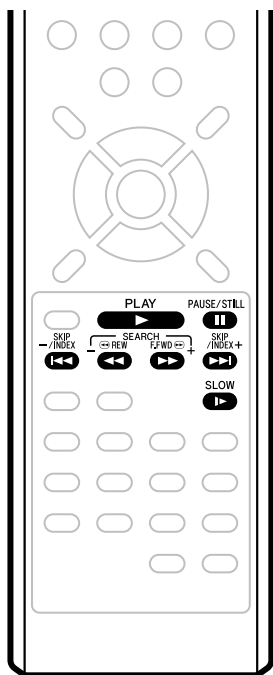
DVD-R

CD



Note

- There may be a slight delay between pressing the button and the function activation.



Note

- The unit is capable of holding a still video image or On screen display image on your television screen indefinitely. If you leave the still video image or on screen display image displayed on your TV for an extended period of time, you risk permanent damage to your television screen. Projection televisions are very susceptible.
- Fast forward and review playback does not work with a MP3/WMA/JPEG-CD.
- Frame advance and slow motion does not work with a CD.

Fast forward playback

Press **F.FWD** during normal playback.

Each press of **F.FWD** will increase the speed of the search ►► (x2), ►►► (x12), ►►►► (x24), ►►►►► (x60).

(The speed of the search is increased up to only 2 steps in Audio CD.)

- To resume normal playback, press **PLAY**.

Review playback

Press **REW** during normal playback.

Each press of **REW** will increase the speed of the search ◀◀ (x2), ◀◀◀ (x12), ◀◀◀◀ (x24), ◀◀◀◀◀ (x60).

(The speed of the search is increased up to only 2 steps in Audio CD.)

- To resume normal playback, press **PLAY**.

Still playback

Press **PAUSE/STILL** during normal playback.

To resume normal playback, press **PLAY**.

Frame advance

Press **PAUSE/STILL** during still playback.

One frame is advanced each time you press **PAUSE/STILL**.

To resume normal playback, press **PLAY**.

Slow motion playback

Press **SLOW** during normal playback or still playback.

Each press of **SLOW** will change the speed of the slow "►► 1/2", "►► 1/4", "►► 1/8".

- To resume normal playback, press **PLAY**.
- To resume the still playback, press **PAUSE/STILL**.

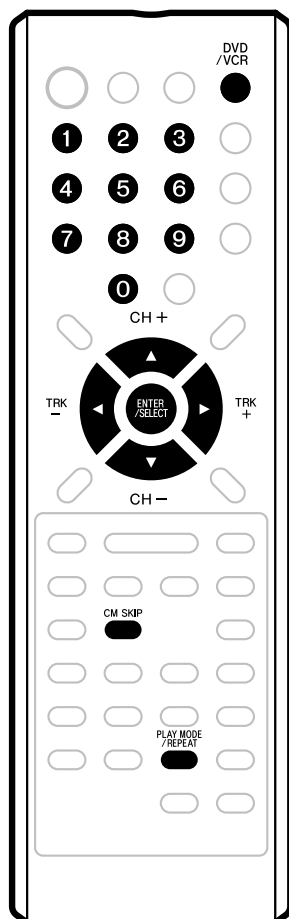
Locating a chapter or track

Press **SKIP** (►►►) Forward or **SKIP** (◀◀◀) Reverse during playback to locate a chapter that you want to watch.

Each time you press the button, a chapter or track is skipped.

Commercial skip / Locating a specific scene

DVD-Video VR mode Video mode DVD-R



Note

- You cannot switch to the VCR mode when the play mode screen is showing. Press **PLAY MODE** to clear the play mode screen, then press **DVD/VCR** to switch to the VCR mode.

Commercial skip

Use this function to skip commercials while you playback.

Press **CM SKIP** during playback.

The time jumps to a point approximately 30 seconds later and playback resumes.



Note

- With some DVD-Video, the Commercial skip operation may not work.

Locating a specific scene

Specify the time recorded on the disc, chapter or title to playback.

1 Press **PLAY MODE**.

The play mode screen will appear.



2 Press **◀** or **▶** to select "TIME SEARCH", "CHAPTER SEARCH" or "TITLE SEARCH", and press **ENTER**.

TIME SEARCH:

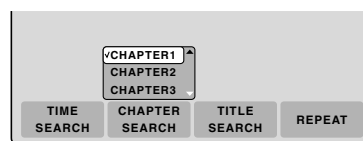
Input the time until the playback is restarted.

CHAPTER SEARCH:

Select the chapter number to be played back.

TITLE SEARCH:

Select the title number to be played back.



The screen above is displayed when "CHAPTER SEARCH" is selected.

3 When selecting "TIME SEARCH", input the time until the playback is restarted with the numeric keys. When selecting "CHAPTER SEARCH" or "TITLE SEARCH", press **▲** or **▼** to select the chapter number or title number.

4 Press **ENTER**.

The playback starts at the point you selected.

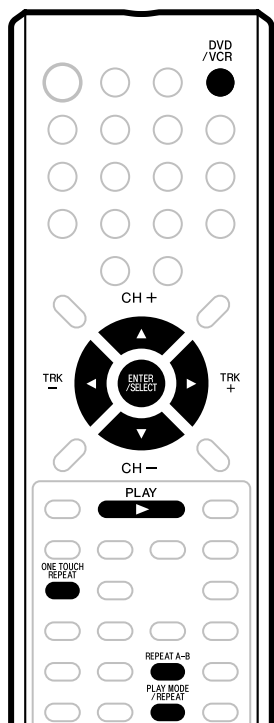


Note

- For "REPEAT", see "Title, Chapter repeat playback" (page 38).

Repeat playback

DVD-Video VR mode Video mode DVD-R



Note

- Some discs may not work with the repeat operation.
- In A-B repeat mode, subtitles near point A or B may not appear.
- A-B repeat does not work during the Title and the Chapter repeat playback.
- You may not be able to set A-B repeat, depending on the scenes of the DVD.
- A-B repeat and Title, Chapter repeat does not work with an MP3/WMA/JPEG-CD.
- You cannot switch to the VCR mode when the play mode screen is showing. Press **REPEAT** to clear the play mode screen, then press **DVD/VCR** to switch to the VCR mode.

One touch repeat

This feature can be used to repeat the last 10 seconds of viewed material, then playback as normal.

Press **ONE TOUCH REPEAT** during playback. The video returns to a point 10 seconds before and playback resumes.

Note

- If the time from the title top is less than 10 seconds when **ONE TOUCH REPEAT** is pressed, the title top is repeated and then the video is played back.
- With some DVD-Video, the one touch repeat operation may not work.

A-B repeat playback

A-B repeat playback allows you to repeat material between two selected points.

1 Press REPEAT A-B during playback.

The start point is selected.



2 Press REPEAT A-B again.

The end point is selected. Playback starts at the point that you selected. Playback stops at the end point, returns to point A automatically, then starts again.



To resume normal playback press **REPEAT A-B** again. "OFF" appears on the screen.

Title, Chapter repeat playback

1 Press REPEAT.

The play mode screen will appear.



2 Press ◀ or ▶ to select "REPEAT" and press ENTER.



3 Press ▲ or ▼ to select "OFF", "CHAPTER" or "TITLE" from the list.

OFF:

Playback is not repeated.

CHAPTER:

The chapter in playback is repeatedly played back.

TITLE:

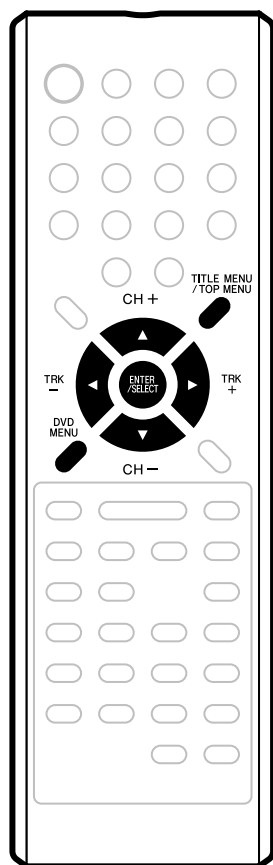
The title in playback is repeatedly played back.

4 Press ENTER.

To cancel the repeat playback, select "OFF" in step 3.

Title selection / DVD menu

DVD-Video



Note

- Depending on the DVD, you may be unable to select the title, and a "title menu" may simply be called a "menu" or "title" in the instructions supplied with the disc.

Title selection

Two or more titles are recorded on some discs. If the title menu is recorded on the disc, you can select the

desired title.

1 Press **TITLE MENU/TOP MENU** during playback.

The title menu appears on the screen.

- Press **TITLE MENU/TOP MENU** again to resume playback at the scene when you pressed **TITLE MENU/TOP MENU**.

2 Press **▲ / ▼** or **◀ / ▶** to select the desired title.

3 Press **ENTER**.

The playback of the selected title will start.

DVD menu

Some DVDs allow you to select the disc contents using the menu. When you playback these DVDs, you can select the subtitle language, soundtrack language, etc. using the DVD menu.

1 Press **DVD MENU** during playback.

The DVD menu appears on the screen.

- Press **DVD MENU** again to resume playback at the scene when you pressed **DVD MENU**.

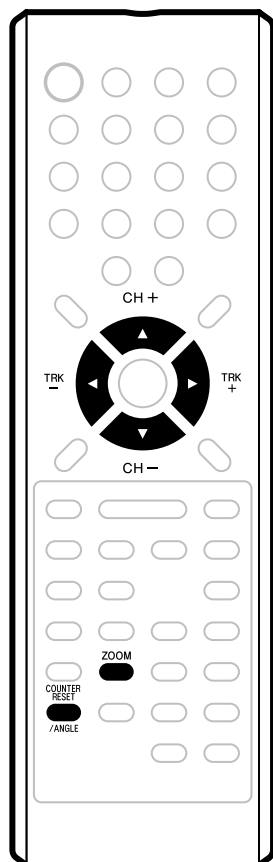
2 Press **▲ / ▼** or **◀ / ▶** to select the desired item.

3 Press **ENTER**.

The menu continues to another screen. Repeat steps 2 and 3 to set the item completely.

Changing angles / Zooming

DVD-Video VR mode Video mode DVD-R



Changing angles

When playing back a disc recorded with multi-angle facility, you can change the angle that you are viewing the scene from.

1 Press ANGLE during playback.

The current angle will appear.

2 Press ANGLE repeatedly until the desired angle is selected.

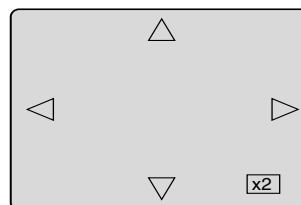
Zooming

This unit will allow you to zoom in on the frame image. You can then make selections by switching the position of the frame.

1 Press ZOOM during playback.

The center part of the image will be zoomed in.

Each press of ZOOM will change the **ZOOM** "x2", "x3" and "x4".



2 Press ▲ / ▼ or ◀ / ▶ to view a different part of the frame.

You may move the frame from the center position to UP, DOWN, LEFT or RIGHT direction.

3 In the zoom mode press ZOOM repeatedly to return to a 1:1 view "x1".



Note

- Depending on the DVD, you may not be able to change the angles even if multi-angles are recorded on the disc.
- You can use the Pause, Slow, Search or Skip feature in the zoom mode.