



DRAFT

Pioneer *sound.vision.soul*

DVD Recorder & VCR

DVR-RT502



Register Your Product on
www.pioneerelectronics.ca (for Canada)

Operating Instructions

RW
COMPATIBLE





Thank you for buying this Pioneer product.

Please read through these operating instructions so you will know how to operate your model properly. After you have finished reading the instructions, put them away in a safe place for future reference.



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

CAUTION

**RISK OF ELECTRIC SHOCK
DO NOT OPEN**

CAUTION:

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



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

D1-4-2-3_En

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

D1-4-2-6-1_En

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.

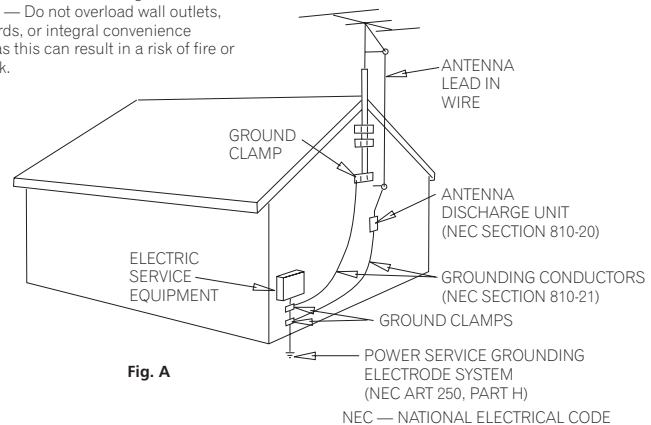


Fig. A

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 DECOUVRETT.

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 STANDBY/ON 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

CAUTION:

This product is a class 1 laser product, but this product contains a laser diode higher than Class 1. To ensure continued safety, do not remove any covers or attempt to gain access to the inside of the product. Refer all servicing to qualified personnel.

CLASS 1 LASER PRODUCT
LASER KLASSE 1
クラス1レーザー製品

The following caution label appears on your unit.
Location: inside of the unit

CAUTION CLASS 3B VISIBLE AND INVISIBLE LASER RADIATION WHEN OPEN, AVOID EXPOSURE TO THE BEAM.

ATTENTION RADIATIONS LASER VISIBLES ET INVISIBLES DE CLASSE 3B QUAND OUVERT. ÉVITEZ TOUT EXPOSITION AU FAISCEAU.

ADVARSEL KLASSE 3B SYNLIG OG USYNLIG LASERSTRÅLING VED ÅBNING. UNDGÅ UDSÆTTELSE FOR STRÅLING.

WARNING KLASSE 3B SYNLIG OCH OSYNLIG LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD. UNDVIK ATT UTSÄTTA DIG FÖR STRÅLEN.

VORSICHT BEI GEÖFFNETER ABDECKUNG IST SICHTBARE UND UNSICHTBARE LASERSTRÄHLUNG DER KLASSE 3B IM GERÄTEINNEREN VORHANDEN. AUGEN NICHT DEM LASERSTRAHLAUSSETZEN!

PRECAUCIACIÓN CUANDO SE ABRE HAY RADIACIÓN LÁSER DE CLASE 3B VISIBLE E INVISIBLE. EVITE LA EXPOSICIÓN A LOS RAYOS LÁSER.

VARO! AVATTAESSA OLET ALLTINA NÄKYVÄLLE JA NÄKYMÄTTÖMÄLLE LUOKAN 3B LASERSÄTEILYLLE. ÄLÄ KATSO SÄTEESEEN.

注意 ここを開くと CLASS 3B の可視レーザー光及び不可視レーザー光が出ます。ビームを直接見たり、触れたりしないこと。

DRW2282-A

D3-4-2-1-8_A_En



Contents

01 Before you start

Features	8
Discs which can be played back	9
Discs on which video can be recorded	10
Recording format	10
Disc playback in other players	11

02 Controls and displays

Front panel	12
Rear panel	12
Display window	13
Remote control	14
Putting the batteries in the remote control	15
Remote control basics	15
Using the remote control	15
Power Source	15

03 Connecting up

Antenna connection	16
Cable TV connections	18
Connections with the TV or audio component	20

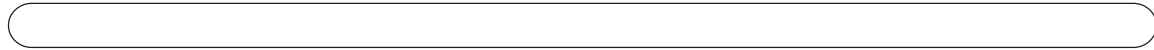
04 Getting started

Auto clock setting / Setting the video channel	22
SETUP MENU	23
Using the SETUP MENU	23
Setting the language	24
OSD LANGUAGE	24
DVD MENU	24
AUDIO	24
SUBTITLE	24
Setting the parental control	25
Selecting parental control	25
Temporarily cancelling parental control	25
Setting the clock	26
CLOCK (manually)	26
AUTO CLOCK	26
STANDARD TIME (Time zone)	26
DAYLIGHT SAVING TIME	26
Setting the disc	27
REFORMAT	27
NEW DISC FORMAT	27
FINALIZE	28
PROTECT DISC	28

UNDO FINALIZE	28
DIMMER (Brightness of the display window)	29
DISPLAY/CALL (Turning the screen display "ON" or "OFF")	29
Setting the screen	29
TV SCREEN	29
STILL MODE	29
LINE1 INPUT / LINE2 INPUT	30
Setting the image quality	30
BRIGHTNESS	30
BLACK LEVEL CONTROL (PLAY)	30
Setting the audio	30
DRC	30
EXTERNAL AUDIO INPUT	31
SAP (Second Audio Program)	31
DOLBY DIGITAL OUTPUT	31
Setting the recording	31
INITIAL REC TO	31
INITIAL REC MODE	31
AUTO CHAPTER	31
INDEX PICTURE	31
BLACK LEVEL CONTROL (REC)	31
Setting the channel	32
TV/CABLE SELECT	32
AUTO CH MEMORY	32
ADD/DELETE (channels)	32
Setting other items	32
JPEG INTERVAL	32
DIVX® VOD	32

05 Playback








Playback procedure	33
Playback by selecting a title	34
Checking media information	35
Special playback	36
Fast forward playback	36
Review playback	36
Still playback	36
Frame advance	36
Slow motion playback	36
Locating a chapter or track	36
Commercial skip / Locating a specific scene	37
Repeat playback	38
One touch repeat	38
A-B repeat playback	38
Title, Chapter repeat playback	38
Title selection / DVD menu	39
Changing angles / Zooming	40
Changing soundtrack language	41
Changing the subtitle language	41
The CD Track Info screen	42



Playing back a selected track	42	Erasing a scene (Edit title)	68
Random playback	43	Combining the title	70
Repeat playback of selected track	43	Erasing a playlist	71
Repeat playback of all tracks	43	Editing an original title	72
Playing back programs	43	Adding a chapter mark	72
Playing back track by specifying the time	43	Combining chapters	74
MP3/WMA*/JPEG/DivX®** playback	44	Changing an original title name	74
Using the BROWSER screen	44	Erasing a scene (Edit title)	75
When the file to be displayed is selected	44	Erasing an original title	76
Playing back MP3/WMA files	45	Changing a disc name	77
Playing back JPEG files	46	Using the keyboard screen	78
Playing back DivX® video files	47		
Progressive scan	48	08 Dubbing	
Different scanning modes	48	Dubbing a tape onto a disc	80
Loading and unloading a cassette tape	49	Dubbing a disc onto a tape	81
Loading	49	Dubbing only the specified titles or the playlist	81
Unloading	49	Dubbing using other equipment	82
Cassette tape playback	50	When a video is recorded using this unit	82
Forward/Reverse picture search mode	50		
Special playback	51	09 Additional information	
Picture search	51	Language code list	83
Still picture	51	Screen sizes and disc formats	83
Slow motion	51	Glossary	84
Frame by frame picture	51	Error/Warning message list	86
Adjusting tracking condition	51	Troubleshooting	88
Repeat playback	51	Handling discs	90
Commercial skip	51	Storing discs	90
To display VCR operation status	51	Damaged discs	90
ZERO RETURN function / Video index search system	52	Cleaning the pickup lens	90
		Handling video tapes	90
06 Recording		Storing video tapes	90
Read this before recording on disc	53	Video head cleaning	91
Recording a TV program	55	Moving the recorder	91
One-touch Timer Recording (OTR)	57	Resetting the recorder	91
VCR Plus+® programming system	58	Hints on installation	91
Timer recording	60	Specifications	92
Chase playback	63		
Stereo recording and playback	64		
		* WMA (Windows Media™ Audio) compatibility	
07 Editing		<i>Microsoft, Windows Media, and the Windows logo are</i>	
Editing the disc	65	<i>trademarks, or registered trademarks of Microsoft</i>	
Editing a playlist	66	<i>Corporation in the United States and/or other coun-</i>	
Creating a playlist	66	<i>tries.</i>	
Changing a title name	67	* <i>DivX, DivX Certified, and associated logos are trade-</i>	
		<i>marks of DivX, Inc. and are used under license.</i>	

Media mark

Each applicable media are indicated using the symbol shown below.

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





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-RAM, 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 **RAM** **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** **RAM** **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/DivX® playback** **CD**

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

- **Progressive scan**

RAM **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. Check your TV/monitor for compatibility with this feature.

- **Chase Playback** **RAM**

You can begin playback from the beginning of a program currently being recorded. You will find this function of great advantage on long programs, as you do not have to wait for the end of recording to begin playback.

Recording function

- **Timer recording**

RAM **VR mode** **Video mode** **DVD-R** **VCR**
You can program the recorder to record up to 12 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 license from Gemstar Development Corporation.*

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

RAM **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** **RAM** **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** **RAM** **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** **RAM** **VR mode**

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

- **Combining titles** **RAM** **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**

RAM **VR mode** **Video mode** **DVD-R** **VCR**
With just this one unit, you can dub whatever 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.



Before you start

01

Discs which can be played back

In this unit, use only discs that meet the standard, such as those bearing the below logo marks on the disc label surface. If you use a non-standard disc, we cannot guarantee playback. Even if such a disc can be played back, we cannot guarantee the image or sound quality. The DVD logo is a registered trademark.

Media type	Logo mark
DVD-Video	
DVD-RAM*1 Ver.2.0 Ver.2.1	
DVD-RW Ver.1.0, Ver.1.1, Ver.1.2 Ver.1.1 CPRM support Ver.1.2 CPRM support	
DVD-R Ver.2.0, Ver.2.1	
Audio CD*2	
CD-R/CD-RW	

*1 When using cartridge-type DVD-RAM discs, it will be necessary to remove the disc from the cartridge.

*2 This unit is designed to playback music Compact Discs (CD) that conform to the CD standard. CDs that contain (copy-restriction) signals to protect copyrights cannot be played back.

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

About DualDisc playback

A DualDisc is a new two-sided disc, one side of which contains DVD content -video, audio, etc.- while the other side contains non-DVD content such as digital audio material. The non-DVD, audio side of the disc is not compliant with the CD Audio specification and therefore may not play. It is possible that when loading or ejecting a DualDisc, the opposite side to that being played will be scratched. Scratched discs may not be playable. The DVD side of a DualDisc plays in this product. DVD-Audio content will not play. For more detailed information on the DualDisc specification, please refer to the disc manufacturer or disc retailer.

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.

Region management information

This unit is designed and manufactured to support the region management information that is recorded on a DVD disc. If the region number written on the DVD disc does not correspond to the region number of this unit, this unit cannot play that disc.

- The region number of this unit is "1".
- The unit will play DVD-Video discs marked with labels containing "1" or "ALL".

Example:

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 "⊞" 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.

Discs which cannot be played back

The discs listed below cannot be played back in general. Even if one of these can be played back, it may not be played back correctly. If a disc is played back by mistake, extensively loud sounds may blow the speakers or may damage the hearing of those in hearing range. Do not playback the discs listed below.

CDG, Photo-CD, CD-ROM, CD-TEXT, CD-EXTRA, VCD, SVCD, SACD, PD, CDV, DVD-ROM, DVD+R/RW, DVD audio, DVD-R DL (dual layer), DVD+R DL (dual layer), DVD-R (VR mode), etc.

The below DVD-Video may not be played back.

- DVD-Video that do not have the region number "1" or "ALL".
- PAL or SECAM DVD-Video.
- Prohibited or business-use DVD-Video.

CD-R/CD-RWs cannot be played back for the following reasons.

- Compatibility of the disc and this unit.
- Compatibility of the disc and the recorder used.
- Unfinalized discs.

Do not playback the following discs. Playback of these discs may cause a failure.

- Discs on which paper, labels or stickers are affixed.
- Discs that have sticky areas left by adhesive tape.
- Special-shaped discs.

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.

9

En



Discs on which video can be recorded

To record video with this unit, use the discs below:

Media type	Logo mark
DVD-RAM Ver.2.0 Ver.2.1	
DVD-RW Ver.1.0, Ver.1.1, Ver.1.2 Ver.1.1 CPRM support Ver.1.2 CPRM support (1~6x SPEED)	
DVD-R Ver.2.0, Ver.2.1 (1~16x SPEED)	

DVD-RAM

- When using cartridge-type DVD-RAM discs, it will be necessary to remove the disc from the cartridge.
- Use only DVD-RAM discs that comply with DVD-RAM standard Version 2.0 or 2.1.
The recorder cannot record on a disc formatted in any other standard. When using such a disc, initialize it by using the disc-format function of this recorder.
- The recorder may not record, dub, or edit some DVD-RAM discs, because they are edited/recorded with another manufacture's equipment or PC, contain a large number of titles, or have little remaining capacity. Also, a DVD-RAM disc may not be edited or recorded if its title contains still pictures.
- When you load a DVD-RAM disc for PC, "INCORRECT DISC" may appear on screen. In this case please format the disc to use with this recorder.
- DVD-RAM discs formatted in UDF2.0 on a PC are not compatible with this recorder. Before using these discs, initialize them on this recorder.
- This recorder complies with current copyright protection technology and can copy a disc only when the disc permits copying once. When there is no indication on the disc, copying will not be allowed.
Such an indication on a disc is required also for the Library Management database.

DVD-RW

- The disc can be erased and used again about 1,000 times.
- Only the VR mode can be used for Ver.1.0 discs.
- With Ver.1.1/1.2 discs, you can record by selecting the VR mode or Video mode.
- When you record in the VR mode, you can repeatedly record and erase. By erasing unnecessary titles, you effectively increase remaining time.
- When you record in the Video mode, you can record until the disc becomes full.
- When you use the Video mode, you can newly record on the disc by formatting the disc. However, if the disc is formatted, all the recorded contents will be erased.

DVD-R

- You can record on the disc only in the Video mode.
- You can record until the disc becomes full.
- Finalizing the discs allows playback on other DVD players. However, the finalized discs can no longer be recorded.
- Discs can be recorded to repeatedly until they are finalized.



Note

- There are some players that cannot playback discs that were recorded with this unit. We cannot guarantee the playback with other units.
- This unit can record on DVD-RAM/RW/R discs that are 8 cm in diameter.
- This unit cannot record on CD-R or CD-RW.
- This unit may not be able to record to or playback from discs that have been recorded on other units due to the recording conditions, surface dirt or scratches.
- Other units may not be able to record to or playback from discs that have been recorded on the unit due to the recording conditions, surface dirt or scratches.

Recording format

This unit has two modes for formatting discs for recording: VR mode and Video mode.
When a blank, new disc is loaded into this unit, the automatic format function starts to format the disc. (For the disc format setting in this step, see page 27.)

VR mode

- This mode can be used for DVD-RAM/RW.
- In this mode, the discs can be recorded and edited repeatedly.
- The disc recorded in this mode can be played back with other DVD-RW-compatible players.
- When a Ver.1.1 CPRM or Ver. 1.2 disc is used, you can record a "Copy Once" program (see page 54).

Video mode

- This mode can be used for DVD-R and DVD-RW (Ver.1.1/1.2).
- When you finalize the disc after recording, the disc recorded with this unit can be played back with other DVD players.
- Recording, editing or playback of an unfinalized disc can be done only with this unit. However, there is some limitation to editing operations.
- In this mode, you cannot record a "Copy Once" program (see page 54).
- When you record a TV program of a bilingual broadcast, only one of the audio modes can be recorded. You have to select it.

Format modes that can be used each disc

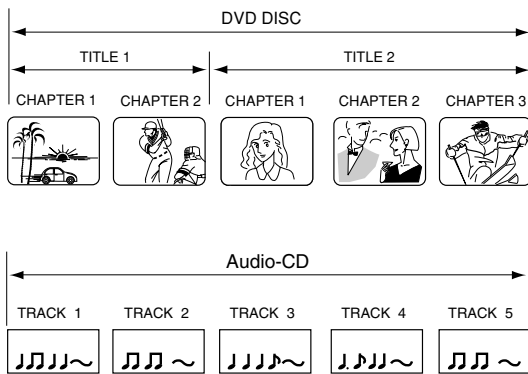
The usable format depends on the media type as shown in the below table.

Media type	Format	Available functions
DVD-RAM (Ver.2.0/2.1)	VR mode	Playback, recording and editing (Original/playlist)
DVD-RW (Ver.1.0)	VR mode	Playback, recording and editing (Original/playlist)
DVD-RW (Ver.1.1/1.2)	VR mode	Playback, recording and editing (Original/playlist)
	Video mode	Playback and recording Editing (with limitation)
DVD-R (Ver.2.0/2.1)	Video mode	Playback and recording Editing (with limitation)



Title/Chapter/Track

A DVD-Video has large partitions called "Titles", and smaller partitions within them called "Chapters". A music CD has other partitions called "Tracks". A number is allotted to each partition and these numbers are called "title numbers", "chapter numbers" or "track numbers".



When recording in the VR mode

One-time recording is set to 1 title (1 chapter). However, if you stop recording temporarily or erase scenes by editing, the chapter will automatically be partitioned. The interval between chapters can be specified. (See page 31.)

When recording in the Video mode

One-time recording is set to 1 title. In recording, chapters are set automatically. The interval between chapters can be specified. (See page 31.)

Note

- The title, chapter and track are numbered, but some discs may not record the numbers.
- Recording on DVD-R/RW in the Video mode is a new standard approved at the 2000 DVD forum. Conformity to this standard varies with each DVD player manufacturer. Some models of DVD player or DVD-ROM drive, therefore, will not playback recorded videos.

Disc playback in other players

A disc recorded in this unit can be finalized. The disc can be played back in other players that can playback DVD-RW and DVD-R.

For more information on finalization, see "FINALIZE" in "Setting the disc" (page 28).

When recording in the VR mode

Even if a disc recorded in the VR mode is finalized, you can record or edit by cancelling the finalization. (See "UNDO FINALIZE" on page 28.)

When you playback the disc with another player, make sure that the DVD player supports DVD-RW and bears the following mark.



When recording in the Video mode

When a disc recorded in the Video mode is finalized, it cannot be recorded onto any more. Therefore, before finalization, be sure to perform all desired recording. After finalization, a title list that can be used by the DVD player is automatically created.

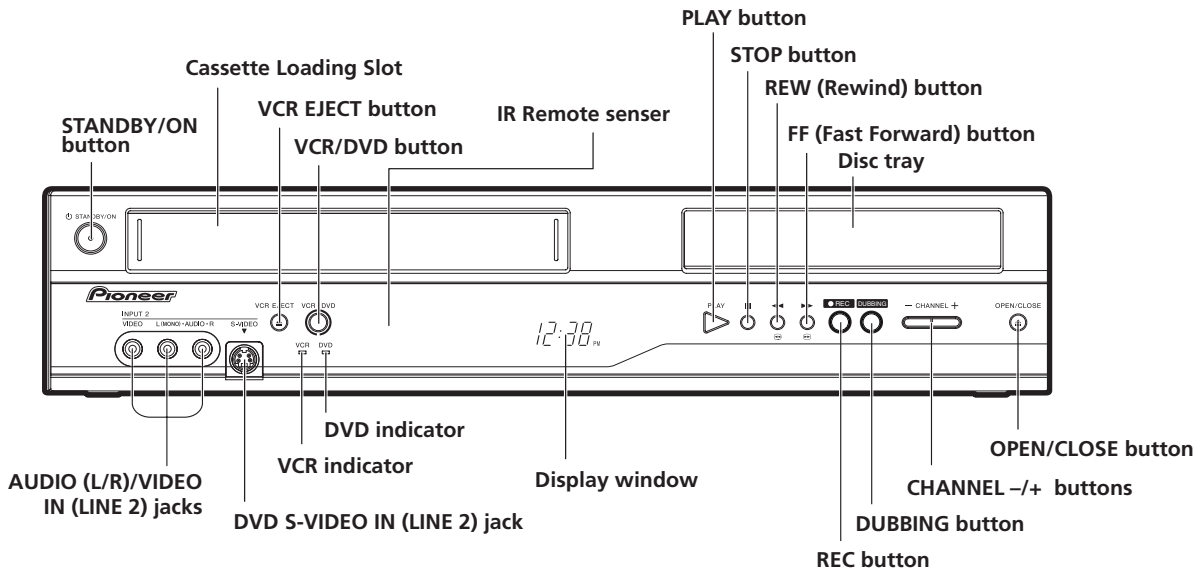
Note

- The finalization process may require from a few minutes up to 1 hour depending on the disc type and the amount of free space on the disc.
- A DVD-RW Ver.1.1/1.2 recorded in the Video mode cannot be recorded or edited after finalization, but if you format the disc by erasing all the content, you can again record on this disc.
- A finalized disc may not play because of the condition of the DVD or the compatibility with the player used for playback.
- Some players may not playback the discs recorded with this unit. We cannot guarantee the playback using other players.

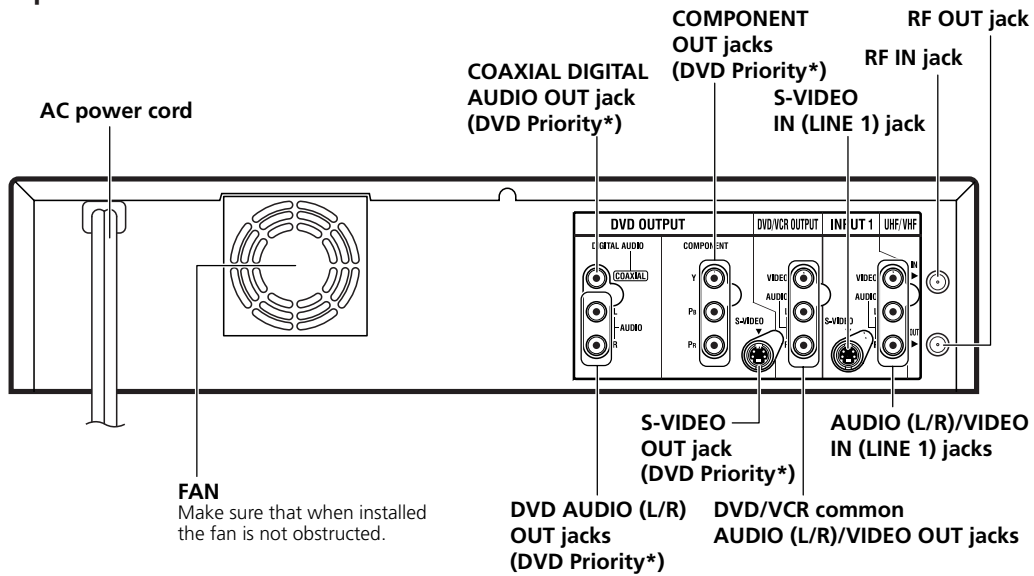


Chapter 2 Controls and displays

Front panel



Rear panel



*With these jacks, DVD image output will be prioritized. (See page 19.)

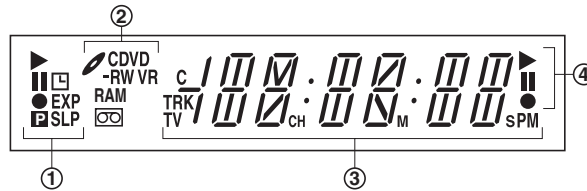




Controls and displays

02

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/EP	4 DVD recording modes. XP, SP, LP or EP is selected in turn by pressing the REC MODE/SPEED repeatedly.
	SP/EP	2 VCR recording modes. SP or EP 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.
		Appears when a DVD-RAM is inserted.
		Appears when a DVD-RW in VR mode is inserted. When the disc is set to video mode, VR does not appear.
③		10:00 Clock display (Colon [:] flashes).
	01H00M00S	Counter display in hour/minute/second.
	C 36CH	Cable TV channel display.
	2CH	TV channel display.
	TRK 002	Track number display for CD.
	TV	Appears when the tuner built into this unit is not selected. When you press TV/VIDEO, TV disappears.
	PM	Display for afternoon (out in the morning).
	L1/L2	The external input channel (L1 or L2) display.
	Err	Error display.
	④	
		DVD or CD is temporarily stopped.
		Lights during DVD recording.

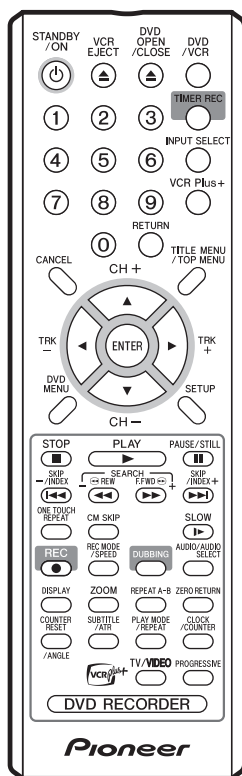
Note

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

13

En

Remote control



- 1 STANDBY/ON** (page 22)
Turns power on/off.
- 2 VCR EJECT** (page 49)
Ejects the cassette tapes.
- 3 DVD OPEN/CLOSE** (page 33)
Opens or closes the tray.
- 4 DVD/VCR** (pages 80, 81)
Switches to operation between VCR and DVD.
- 5 0-9**
Use for direct TV channel selection of TV (page 55); setting the input (pages 37, 78); entering a password (page 25); entering a Pluscode for VCR Plus+ timer programming (page 59).
- 6 TIMER REC** (pages 60, 62)
Sets the unit to start recording at a preset time.
- 7 INPUT SELECT** (page 82)
Switches between the external inputs.

8 VCR Plus+ (page 59)
Display the VCR Plus+ program screen.

9 RETURN (pages 23, 45)
Closes the menu window.

10 CANCEL
Cancels input data in the setting mode (page 25); deletes the timer recording program (pages 60, 62).

11 TITLE MENU/TOP MENU (pages 34, 39, 42, 66)
Selects titles of a DVD disc.

12 CH +/- (page 55)
Use to select TV channels.
▲ / ▼ (pages 23, 33, 37, 61)
Up/down cursor buttons

13 TRK +/- (page 51)
Use to adjust the VCR manual playback tracking.

◀ / ▶ (pages 33, 37, 61)
Left/right cursor buttons

14 ENTER (pages 23, 33, 37, 59, 61)
Use to select menu options.

15 DVD MENU (page 39)
Displays the menu of the DVD disc.

16 SETUP (pages 23, 59, 61)
Displays the setup menu.

17 STOP (pages 33, 50, 56)
Stops playback or recording.

18 PLAY (pages 33, 50)
Starts playback.

19 PAUSE/STILL (pages 36, 51)
Pauses recording or playback (press again to restart).

20 SKIP ◀◀ / ▶▶ (page 36)
Skips forward or back chapters.

21 INDEX -◀◀ / ▶▶ (page 52)
Searches for INDEX marks on a tape

22 REW/SEARCH - (pages 36, 50, 51)
Rewind/review playback

23 F.FWD/SEARCH + (pages 36, 50, 51)
Fast forward/forward search playback

24 ONE TOUCH REPEAT (page 38)
Repeats playback of the last 10 seconds of video.

25 CM SKIP (pages 37, 51)
Skips commercial breaks.

26 SLOW (pages 36, 51)
Starts slow motion playback.

27 REC (pages 55, 57, 82)
Starts recording.

28 REC MODE/SPEED (pages 55, 57)
Selects the recording mode.

29 DUBBING (page 80)
Copies VCR to DVD or DVD to VCR.

30 AUDIO/AUDIO SELECT
Switches sound between mono and stereo (page 64); changes the language of the DVD (page 41).

31 DISPLAY (pages 35, 52)
Displays VCR or DVD operation status.

32 ZOOM (page 40)

33 REPEAT A-B (page 38)
Repeats playback between A and B.

34 ZERO RETURN (page 52)
Stops the tape when the counter reaches 00_H00_M00_S.

35 COUNTER RESET (page 52)
Resets the counter to 00_H00_M00_S.

36 ANGLE (page 40)
Changes the DVD playback angle.

37 SUBTITLE (page 41)
Selects subtitles of the DVD disc.

38 ATR (page 51)
Digital auto tracking for VCR playback.

39 PLAY MODE (page 37)
Selects the playback mode.

40 REPEAT (pages 38, 51)
Selects the repeat playback mode.

41 CLOCK/COUNTER (page 52)
Changes the front panel display mode.

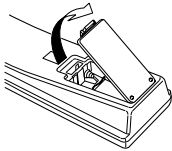
42 TV/VIDEO (pages 22, 56)
Switches input between the TV and VIDEO.

43 PROGRESSIVE (page 48)
Activates the progressive scanning mode.

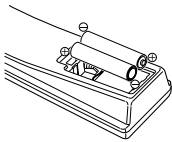


Putting the batteries in the remote control

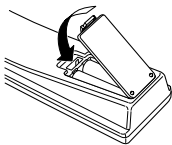
1 Open the battery compartment cover on the back of the remote control.



2 Insert two AAA/R03 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.

Remote control basics

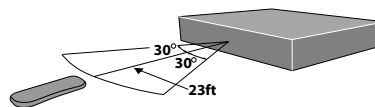
- Press **STANDBY/ON** to turn the DVD/VCR on or off.
- Press **CH +** or **CH -** to move through the channels one channel at a time.

- The **▲ / ▼ / ◀ / ▶** are also used to navigate on-screen menu system.
- You can directly access specific channels using **numeric keys**.
- Each press of **DVD/VCR**, switches the screen between the DVD screen (DVD mode) and the VCR screen (VCR mode).

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.



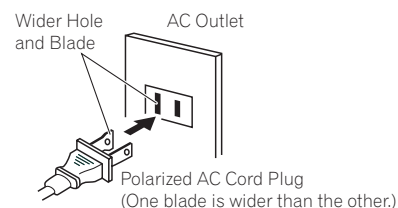
Power Source

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

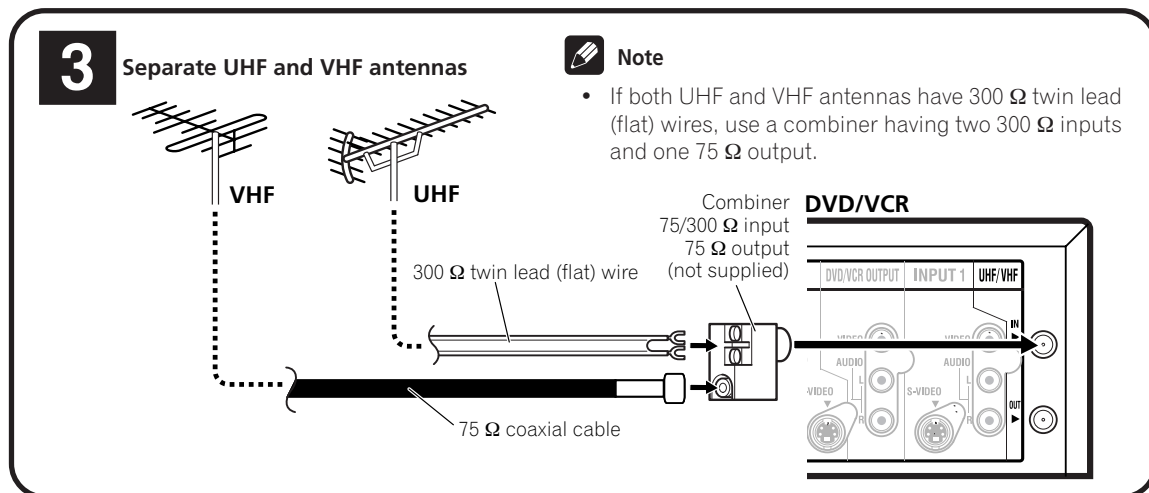
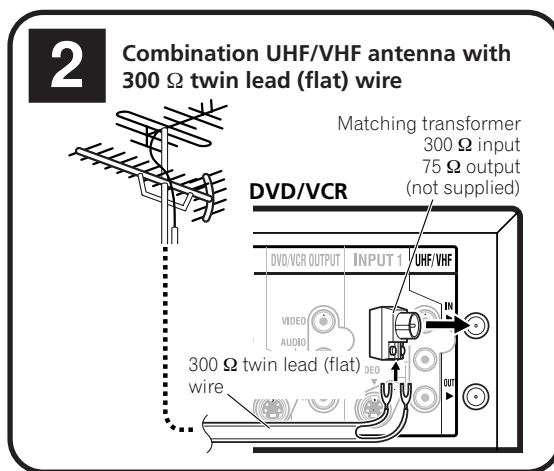
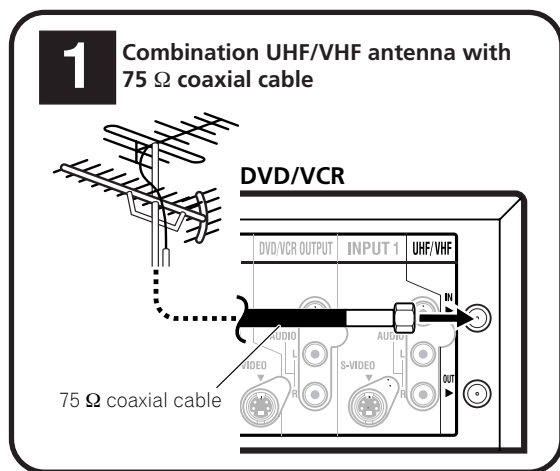
- Before making or changing any rear panel connections, make sure that all components are switched off and unplugged from the wall outlet.

Antenna connection

If you are using an antenna system, follow these instructions. If you are a Cable TV 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.





Connecting up

03

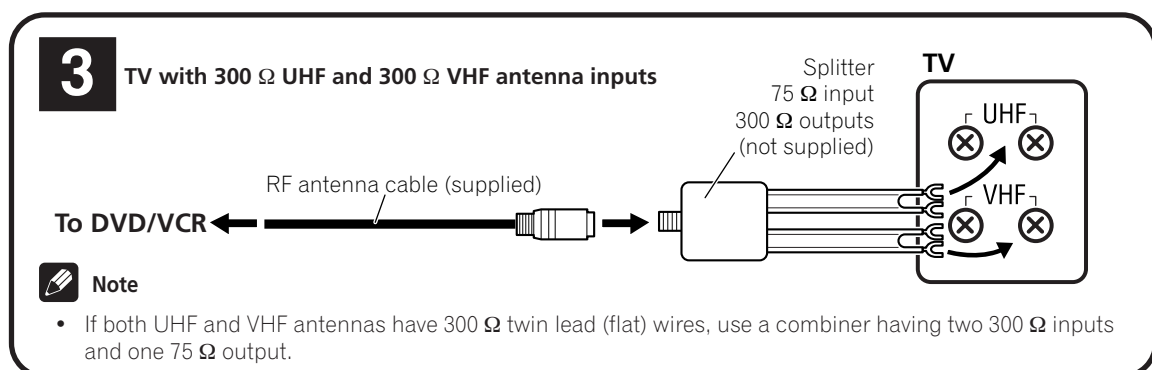
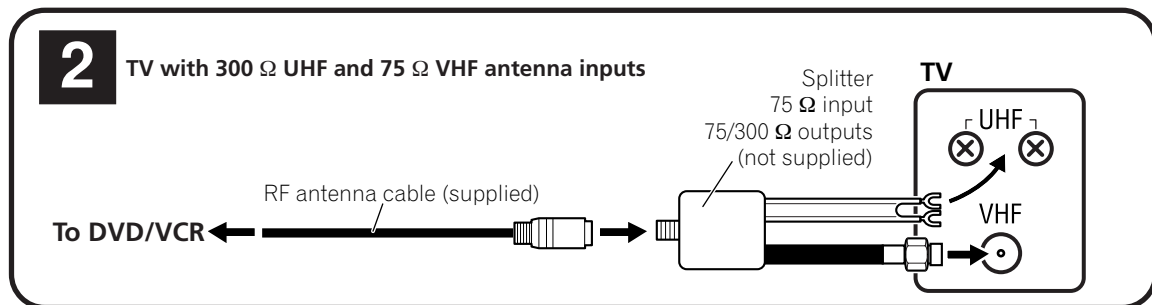
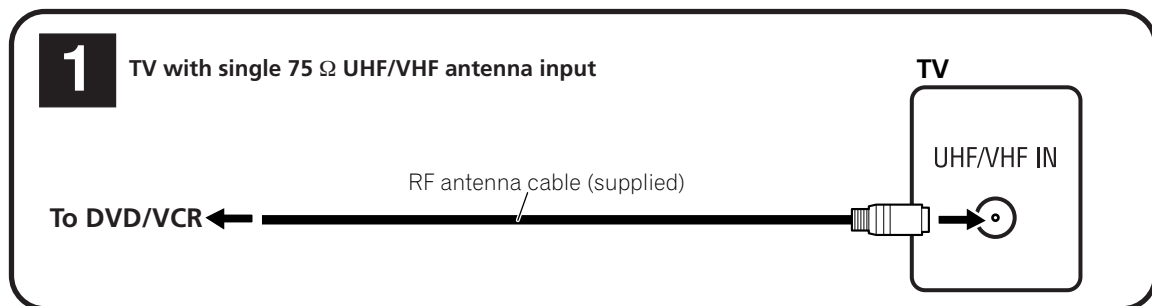
DVD/VCR TO TV CONNECTION

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/CABLE menu option to the "TV" mode.



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.

17

En





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)

Note

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

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.

3 DVD/VCR

Converter/descrambler

Incoming cable

TV

Audio/Video IN

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).

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

- 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.





Connecting up

03

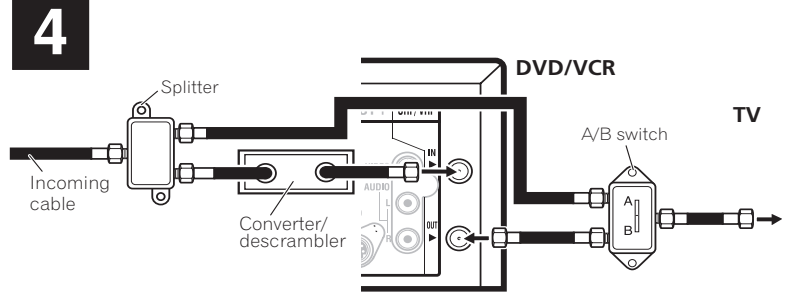
Important

- **Make sure the TV/CABLE menu option is set to the "CABLE" 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 TV 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



Prevents

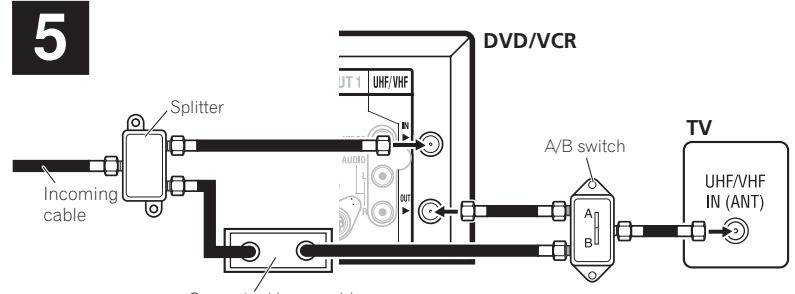
TV

- 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.

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

5

Allows



Prevents

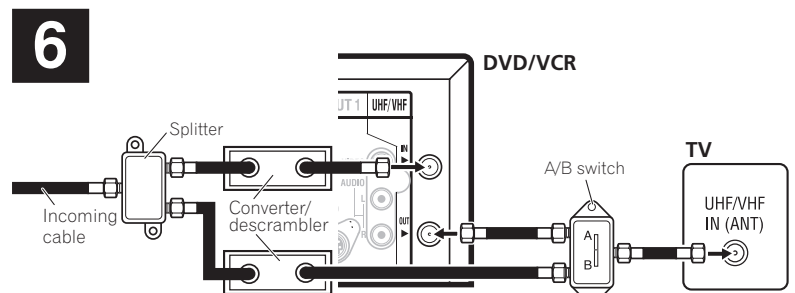
TV

- 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.

- Recording scrambled channels.

6

Allows



Prevents

TV

- 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.

- Using the DVD/VCR tuner to select channels.

19

En



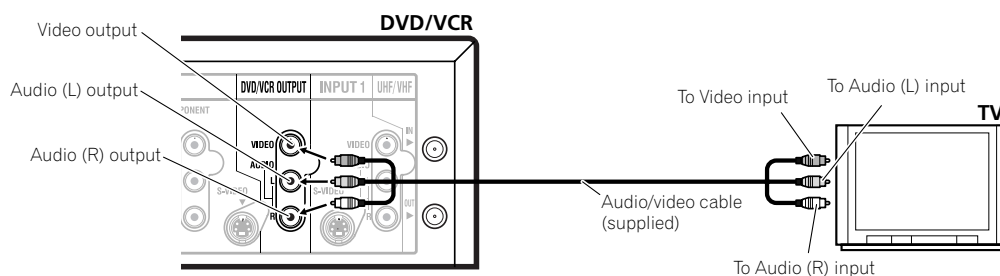


Connections with the TV or audio component

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.

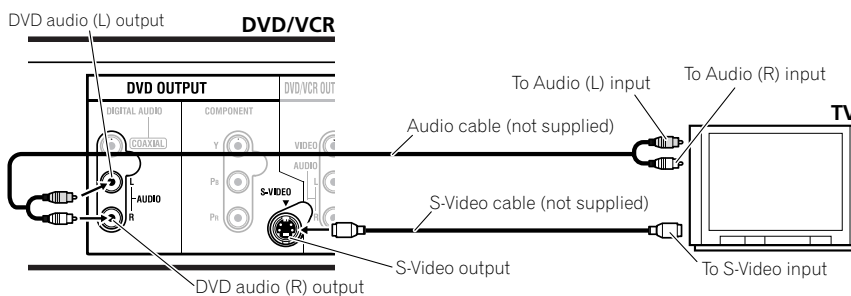
Connect to a TV with Audio/Video output

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.



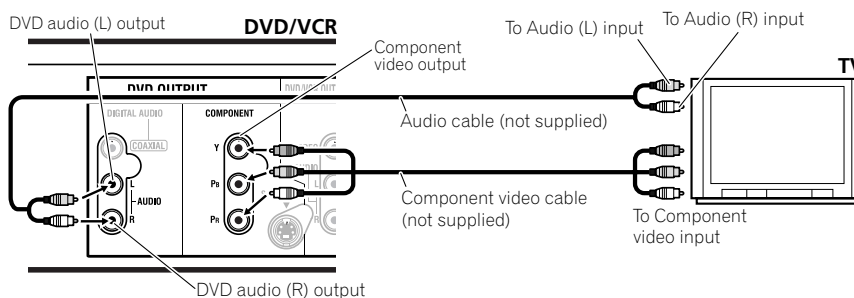
Connect to a TV with S-Video output

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

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).



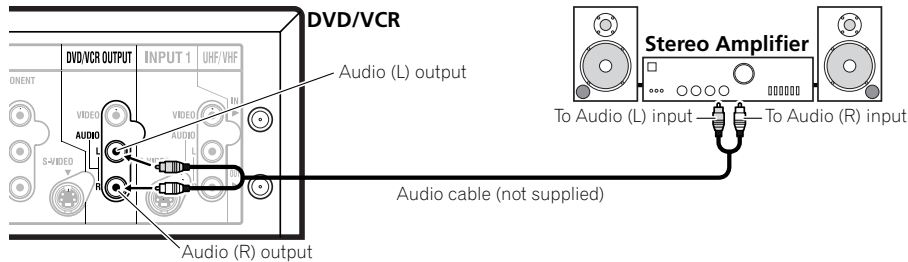


Connecting up

03

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

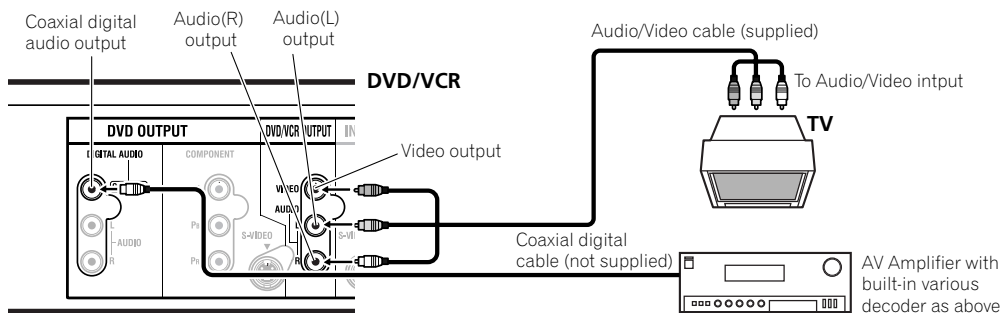
If you are using an Amplifier with a built-in digital surround as follows, you can enjoy the various audio systems such as Dolby Digital and DTS by using the optical or coaxial digital output.

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).



Note

- When you connect the recorder to other equipment, be sure to turn off the power and unplug all of the equipment from the wall outlet before any connections.
- When you connect to a TV with a component cable or S-video cable, on-screen display of VCR will not be displayed. On-screen display will be activated only when you press **DISPLAY** while VCR is playing.
- If you use 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 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.
- The coaxial digital output jack output sounds in the bitstream.

21

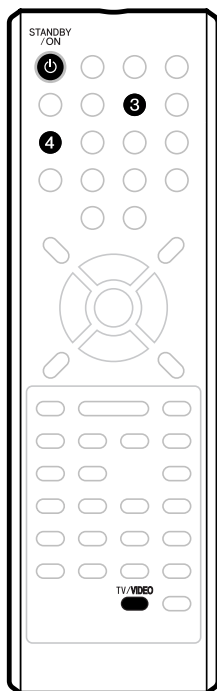
En





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.

After the clock is set automatically, you may have to set the Standard Time (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/VIDEO** to select the VIDEO position. The TV 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.

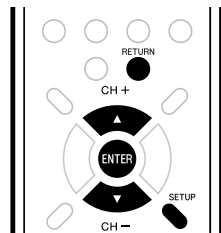
SETUP MENU

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.

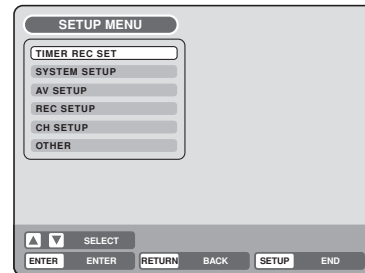


Note

- 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.
- "TIMER REC SET" cannot be selected when the clock is not set.

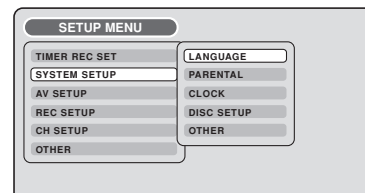
1 Press SETUP while the DVD and video tape is stopped.

The SETUP MENU screen will appear.



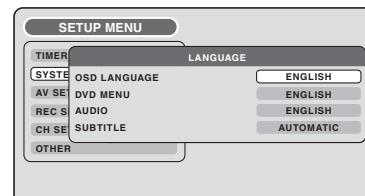
2 Press ▲ or ▼ to select the desired menu and press ENTER.

The submenu screen of the selected menu will appear.



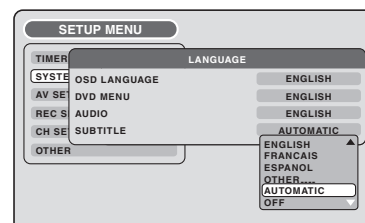
3 Press ▲ or ▼ to select the desired submenu and press ENTER.

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**.

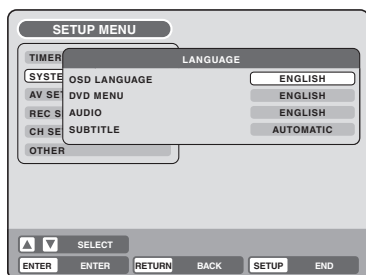


Setting the language

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 83). 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 83). 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 83). 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

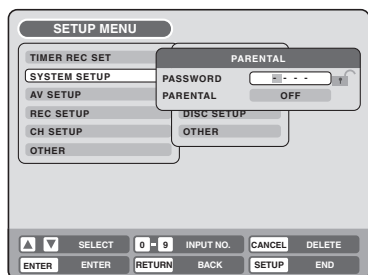
- If the selected language is not recorded on the disc, the first priority language is selected.

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.

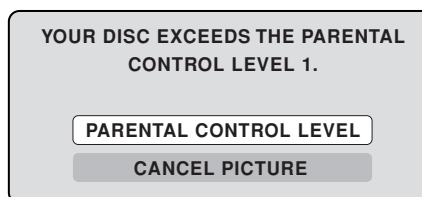
Note

- 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.
- If you forget the password, you can reset the recorder to its factory settings (see Resetting the recorder on page 91), then set a new password.

Temporarily cancelling parental control

Parental control can temporarily be canceled 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.

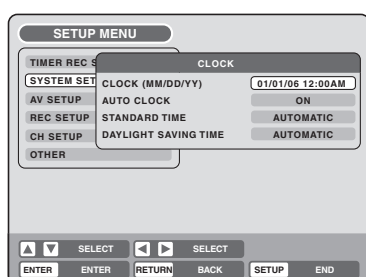


Setting the clock

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, 2006.

1 Select “CLOCK” and press ENTER.

01/01/06 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.

10/30/06 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.



Note

- In case of a power failure, the clock will continue to operate for another 30 minutes with quartz-controlled precision. To indicate that the power failure has lasted for an excessive period of time “0:00” will appear on the display. In this case readjust time and date.

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 “STANDARD TIME” 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

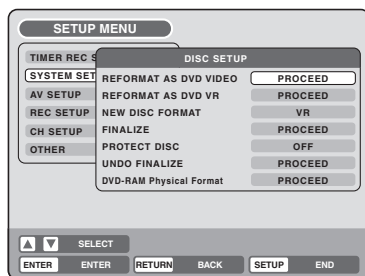
- When you want to set daylight saving time, on the first Sunday in April you set it to “ON”, and on the last Sunday in October you set it to “OFF”.
- When shipped from the factory, the “DAYLIGHT SAVING TIME” option is set to “AUTOMATIC”.
- When the clock is not set, the daylight saving time setting 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:

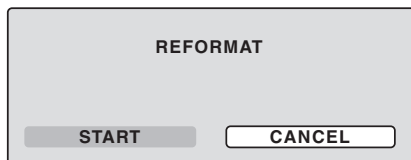
- Turn ON the TV and set it to the video input mode.
- Select **"DISC SETUP"** from **"SYSTEM SETUP"**. For the procedure, see steps **1** to **3** in "Using the SETUP MENU" on page 23.



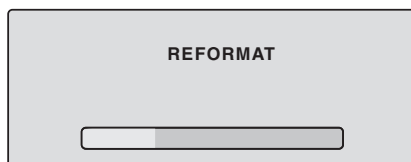
REFORMAT

You can format a recorded DVD-RAM/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". You cannot select "REFORMAT AS DVD VIDEO" when DVD-RAM is inserted. For more information see page 10. 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

- When the format finished, "REFORMATTING COMPLETED PRESS ENTER." will appear. Press **ENTER** to clear the screen.
- 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 format.
- You cannot format a DVD-RAM in the Video mode.

NEW DISC FORMAT

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

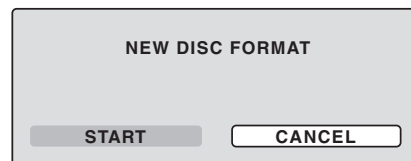
If you use the DVD-RW (Ver.1.1/1.2), you can select the mode to be used for automatic format.

Select "NEW DISC FORMAT" and select the mode from the list below.

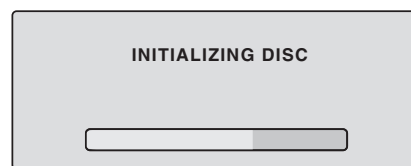
VR: Format the disc in the VR mode.

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.

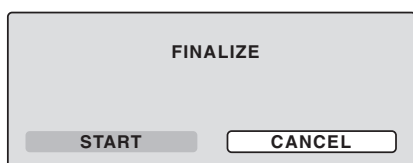
Note

- When the Initialization finished, "FORMATTING COMPLETED PRESS ENTER." will appear. Press **ENTER** to clear the screen.
- If a recorded disc has scratches or contamination on it, the "NEW DISC FORMAT" screen may appear. If this happens, select "CANCEL".

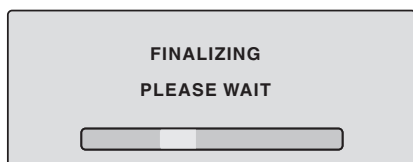
FINALIZE

To play a DVD(-R/RW) 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 finalizing, the cursor will move repeatedly. When the finalization finished, "FINALISING COMPLETED PRESS ENTER" will appear. Press **ENTER** to clear the screen.
- 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.
- 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-RAM and DVD-RW (in VR mode) can be protected.

Select "PROTECT DISC" and select "ON" to protect the disc.

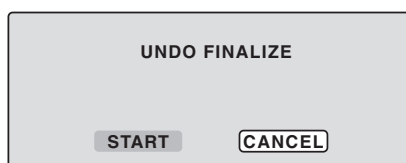
To cancel the disc protection, select "OFF".

UNDO FINALIZE

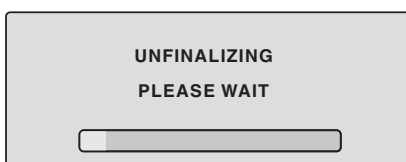
You can cancel the finalization of a finalized DVD-RW (in VR mode).

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

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 unfinalizing, the cursor will move repeatedly. When cancelling finalization is complete, "UNDO FINALISING COMPLETED PRESS ENTER" will appear. Press **ENTER** to clear the screen.
- 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 canceled, you cannot select "UNDO FINALIZE".

DVD-RAM Physical Format

Physically formats a DVD-RAM disc. Whenever you use a new disc for the first time, be sure to format it.

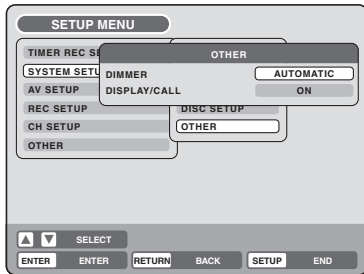
Note

- The physical format process may require about 1 hour according to disc condition.
- Select Physical Format when the DVD-RAM disc cannot be recognized after reformatting the disc.
- Select Physical Format for DVD-RAM disc that has been used on PC before using.

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:

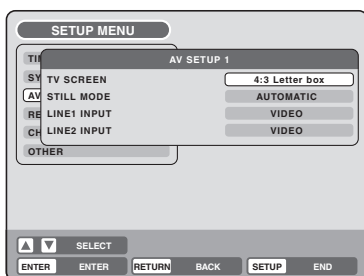
Nothing but the SETUP MENU and error messages appear.

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

- For the screen sizes and disc formats, see page 83.
- 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 to the S-Video input jack as priority.

VIDEO

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

BLACK LEVEL CONTROL (PLAY)

To select the black level of playback pictures, set your preference and monitor's ability.

ON: Enhanced grey scale (0 IRE cut off)

OFF: Standard grey scale (7.5 IRE cut off)



Note

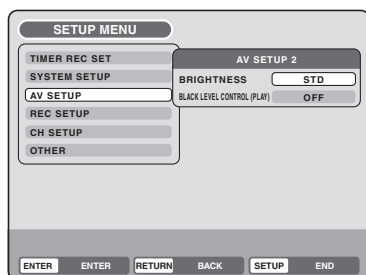
The BLACK LEVEL CONTROL (PLAY) function only works when playing back DVD-Video, DVD-RAM/RW/R and JPEG/DivX®-CD.

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.

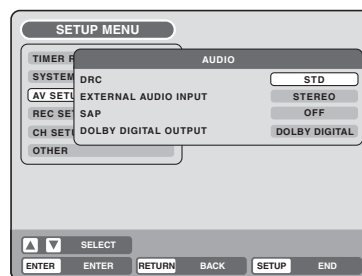


Setting the audio

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.



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.

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 activate SAP. Select "OFF" to cancel.

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.

DOLBY DIGITAL OUTPUT

Select from the following methods of outputting the audio of discs that were recorded with Dolby Digital.

DOLBY DIGITAL: Outputs in Dolby Digital sound.

PCM: Converts the sound to PCM and outputs it.



Note

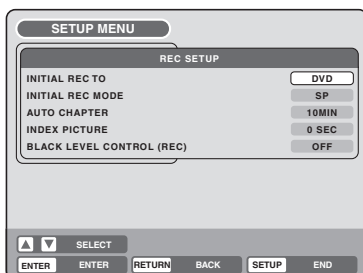
Select PCM if you are connected to an audio amplifier and the amplifier is not Dolby Digital compatible.

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 EP.



Note

- For the DVD recording mode, see page 53. And for the VCR recording mode, see page 49.

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 of a recording at 1 minute start point will be registered.

3 MIN:

The image of a recording at 3 minutes start point will be registered.



Note

- You cannot select the thumbnail image for Video mode.

BLACK LEVEL CONTROL (REC)

You can set the black level for when you record.

OFF: Records at the level of the input source.

ON: Lowers the level 7.5IRE and records.

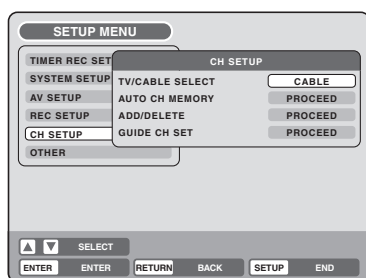
Setting the channel

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/CABLE menu option to the TV mode. When shipped from the factory, this menu option is in the CABLE 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/CABLE SELECT

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

TV: VHF/UHF channels

CABLE: 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.

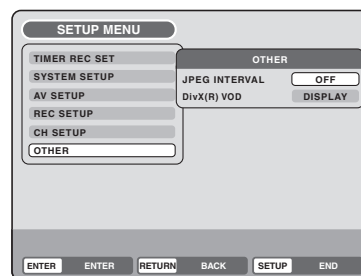
- Press **▲** or **▼** to select the channel. The **numeric keys** can also be used for selection.
- When you want to delete the selected channel, press **▶** to select "DEL" and press **ENTER**.
- When you want to use the selected channel, press **◀** to select "ADD" and press **ENTER**.

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.

DivX® VOD

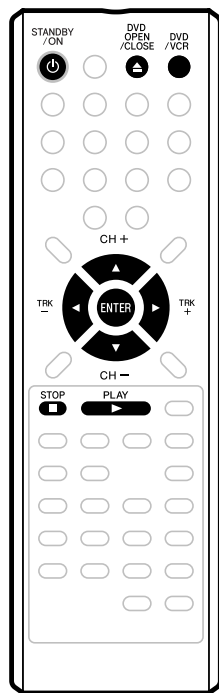
This unit is designed and manufactured to support the DivX® VOD (Video On Demand) DRM (Digital Rights Management). You can display the registration code of VOD.



Chapter 5 Playback

Playback procedure

DVD-Video RAM 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.)

Note

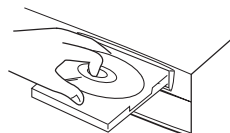
- It is possible to switch to the VCR mode while DVD is played back.

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 window 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

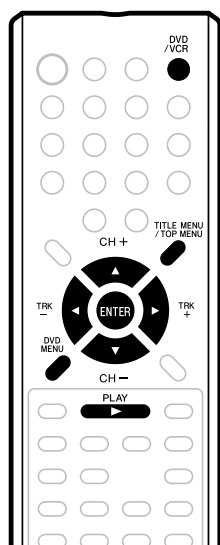
- If a non-compatible disc is loaded, "INCORRECT DISC", "REGION CODE ERROR" or "PARENTAL ERROR" will appear on the TV screen according to the type of loaded disc. In this case, check your disc again (See pages 9 and 25).
- Some discs may take a minute or so to start playback.
- A prohibition symbol "⊘" 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.
- Playability of 'DualDisc'
 - The DVD-Audio content on DVD side of a DualDisc cannot be played with this product.
 - The DVD-Video content on DVD side of a DualDisc may or may not be played with this product.
 - Since audio content on 'non-DVD' side of a DualDisc is not compliant with the Compact Disc Digital Audio specification, it may or may not be played with this product.
 - If you need further information about playability of DualDisc, please see 'Service & Support' on the Pioneer web site (www.pioneerelectronics.com).



Playback by selecting a title

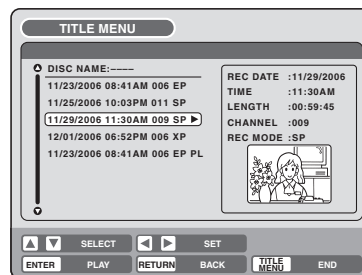
RAM VR mode Video mode DVD-R

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



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

In case the disc includes more than 9 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 ▶.



3 Press ENTER.

The selected title is played back.



Note

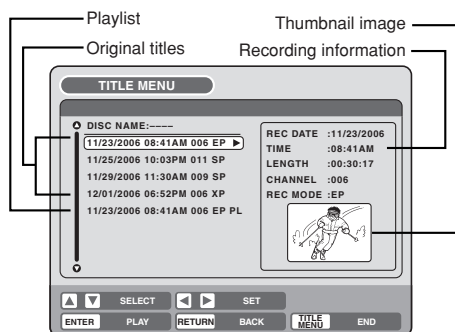
- If you don't display the title menu and press **PLAY**, the first title is played back.
- When a title is played by selecting it from the title menu, only the title selected is played.
- When a disc that has been recorded in the Video mode is finalized, a title list is automatically created that can be played back even with other DVD players. Consequently, the menu before finalizing is different from that of after finalizing.

Preparation:

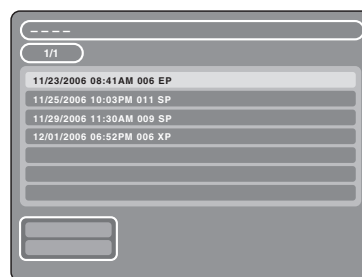
- Turn ON the TV and set to the video input mode.
- Load a recorded DVD.
- Press **DVD/VCR** to select the DVD mode. (The DVD indicator will light.)

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" appear on the upper right of the TV screen, then press **TITLE MENU**. The first original title or playlist will be highlighted.



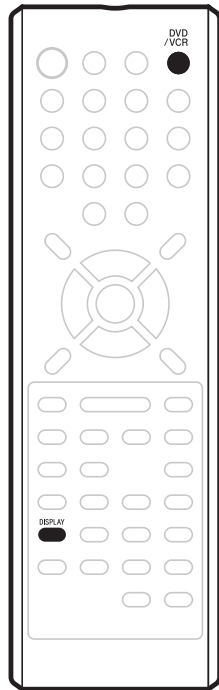
- The title menu is used not only for playing back titles but also for editing various discs and titles. For details of editing operation, see page 65.
- If you create a playlist, an original title and playlist appear in the title menu. For creating a playlist, see page 66.
- You cannot switch to the 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.
- The recording information of discs that have been recorded on other recorders may not be displayed.



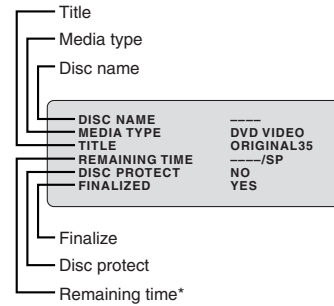
Checking media information

DVD-Video RAM VR mode Video mode DVD-R

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



2 Press DISPLAY 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 remaining time, stop recording and display the media information again.

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

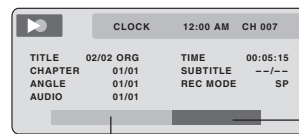
*If you press DISPLAY during chase playback, the information screen is displayed. The symbols indicate that the player is in chase playback. The progress bar shows the current position of playback and the position of recording. Normally the recording position is shown as being at 100%. Items other than these appear the same as on a normal information 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.)

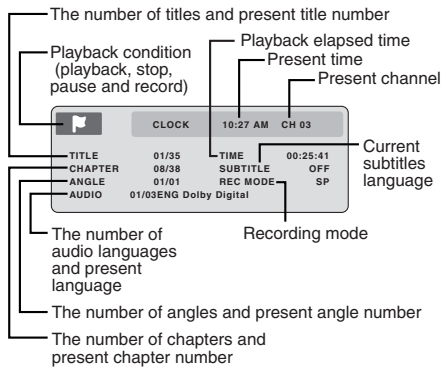
1 Press DISPLAY.

Media information will appear.



Current recording position (Fixed at 100%)

Current Playback position



Note

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

In stop mode, some information does not appear.



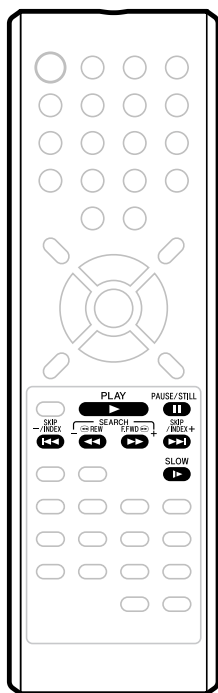


Special playback

DVD-Video RAM VR mode Video mode DVD-R CD

Note

- There may be a slight delay between pressing the button and the function activation.
- 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 MP3/WMA/JPEG-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), **▶▶▶▶▶** (x100).

(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), **◀◀◀◀◀** (x100). (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" and "▶▶ 1/8".

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

Locating a chapter or track

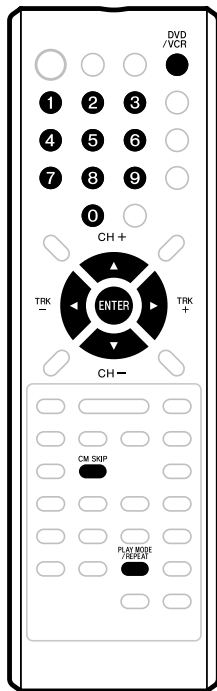
Press **SKIP** (▶▶) Forward or **SKIP** (◀◀) Reverse during playback to locate a chapter that you want to watch. Each time you press the button, a chapter or track is skipped.

- When you press **SKIP** (◀◀) once, playback starts from the beginning of the current chapter or track. If you want to play the preceding chapter or track, press **SKIP** (◀◀) twice in quick successions.



Commercial skip / Locating a specific scene

DVD-Video RAM VR mode Video mode DVD-R



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:

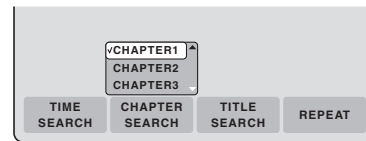
Input the time until the playback is restarted.

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

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

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.

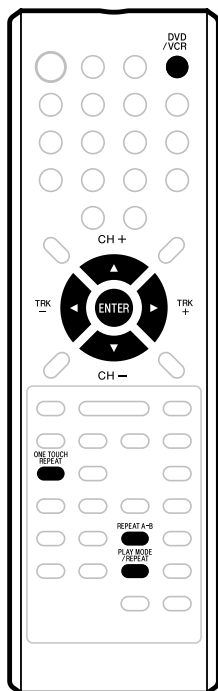
Note

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



Repeat playback

DVD-Video RAM VR mode Video mode DVD-R CD



Note

- Some discs may not work with the repeat operation.
- 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.
- 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, Title repeat and Chapter repeat will not work with an MP3/WMA/JPEG-CD.
- Chapter repeat will not work with a DivX® 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 and Title, Chapter repeat playback does not work with a CD.

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.

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.

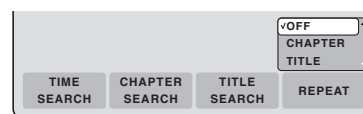
Title, Chapter repeat playback

1 Press REPEAT during playback.

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 is played back repeatedly.

TITLE:

The title is played back repeatedly.

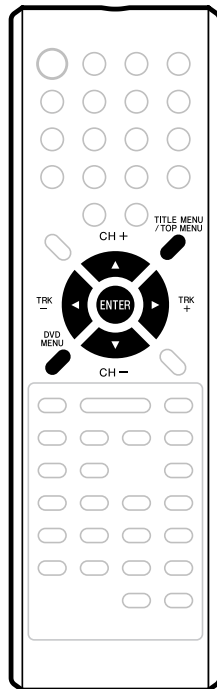
4 Press ENTER.

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



Title selection / DVD menu

DVD-Video



DVD menu

Some DVDs allow you to select the disc contents using the menu. When you playback these DVDs, you can select the subtitles 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 where 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.

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 where 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.



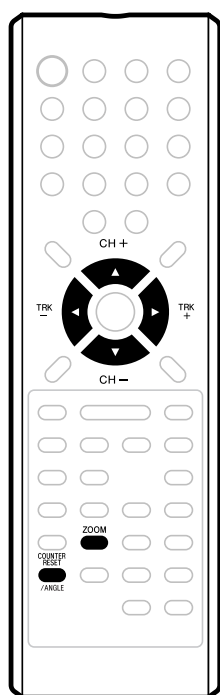
Note

- Depending on the DVD, you may not be able to select the title, and a "title menu" may simply be called a "menu" or "title" in the instructions supplied with the disc.
- Depending on the DVD, you may not be able to resume playback at the scene where you pressed **TOP MENU/TITLE MENU** or **DVD MENU**.



Changing angles / Zooming

DVD-Video RAM 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.

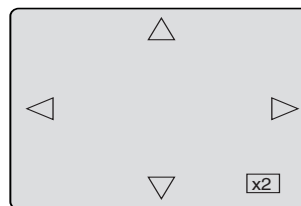
Zooming

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

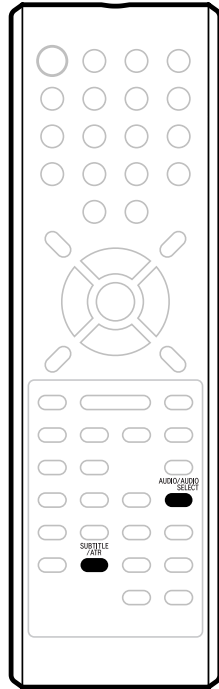
- Depending on the DVD, you may not be able to change the angles even if multi-angles are recorded on the disc.
- You can use the Pause, Slow, Search or Skip feature in the zoom mode.
- Zoom function does not work with a DivX® CD.





Changing soundtrack language / Subtitles

DVD-Video



Changing soundtrack language

You can select the language when you play a multilingual disc.

1 Press AUDIO during playback.

The current soundtrack language will appear.

2 Press AUDIO repeatedly until the desired language is selected.

The on-screen display will disappear after a few seconds.

Turning the subtitles On and Off

When playing back a disc recorded with subtitles, you can turn the subtitles on or off.

Press **SUBTITLE** during playback until "Subtitle OFF" appears.

Changing the subtitle language

You can select the language when playing back a disc recorded with multilingual subtitles.

Press **SUBTITLE** repeatedly during playback until your desired language appears.

The on-screen display will disappear after a few seconds.

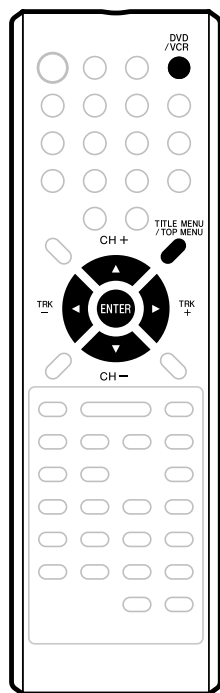
Note

- If the desired language is not heard after pressing the button several times, the language is not recorded on the disc.
- Changing soundtrack or subtitle language is cancelled when you open the disc tray. The initial default language or available language will be heard and seen if the disc is played back again.
- Depending on the DVD you may be unable to turn on, turn off, or change the subtitles, even if they are recorded on the disc. While playing the DVD, the subtitles may change while opening or closing the disc tray, or while changing the title.
- In some cases, the subtitles language is not changed to the selected one immediately.

The CD Track Info screen

CD

This section describes the TRACK INFO screen where music CDs can be played back using the various operations.



Note

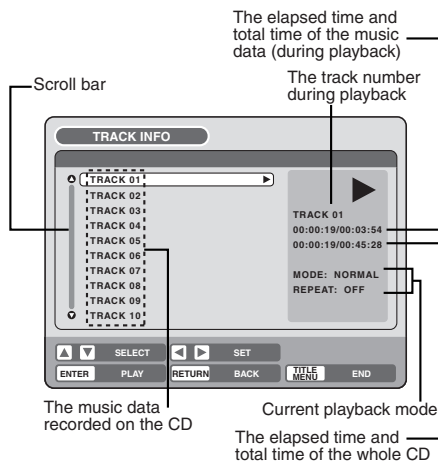
- In case the disc includes more than 10 tracks, you can turn to the next or the previous page. Press ◀, then press ▼ or ▲ to display next/previous page. To return to normal use, press ▶.
- You cannot switch to the VCR mode when the TRACK INFO screen is showing. Press **TITLE MENU/TOP MENU** to clear the TRACK INFO screen, then press **DVD/VCR** to switch to the VCR mode.

Preparation:

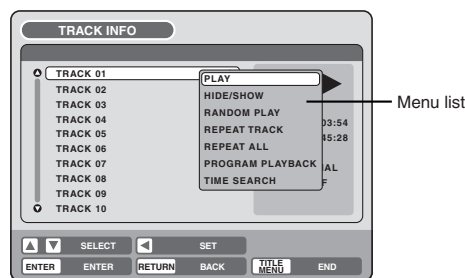
- Turn ON the TV and set to the video input mode.
- Load the music CD.
- Press **DVD/VCR** to select the DVD mode. (The DVD indicator will light.)

Press **TITLE MENU/TOP MENU**.

The TRACK INFO screen will appear.



Press ▶. The menu list will appear.



Playing back a selected track

- 1 Press ▲ or ▼ to select the track number you want to playback and press ▶.
- 2 Press ▲ or ▼ to select "PLAY" from the menu list and press ENTER.
The selected track will be played back.

Excluding specified track

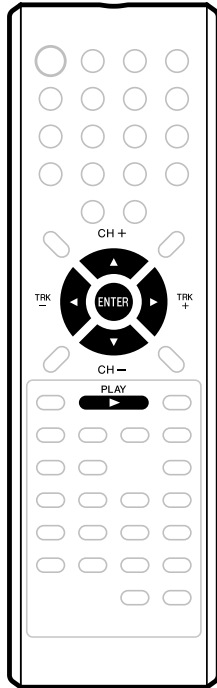
- 1 During stop, press ▲ or ▼ to select the track number you do not want to playback and press ▶.
- 2 Press ▲ or ▼ to select "HIDE/SHOW" from the menu list and press ENTER.
The selected track will not be played back. ("H" appears at the side of the track number.)

When you want to cancel the exclusion, press ▲ or ▼ to select the track number with "H" and press ▶. Press ▲ or ▼ to select "HIDE/SHOW" from the menu list and press **ENTER**, "HIDE" will be canceled.



Random, repeat and program play

CD



Note

- "RANDOM PLAY" and "TIME SEARCH" will not appear in the menu list for CD-R/CD-RW discs containing MP3 or WMA files.

Random playback

1 Press ▲ or ▼ to select "RANDOM PLAY" from the menu list and press ENTER.

2 Press PLAY.

Music is played back in random order.

To cancel random playback, select "RANDOM PLAY" from the menu list again, and press **ENTER**.

Repeat playback of selected track

1 Press ▲ or ▼ to select the track number you want to repeat playback and press ►.

2 Press ▲ or ▼ to select "REPEAT TRACK" from the menu list and press ENTER.

3 Press PLAY.

The selected track will be played back repeatedly.

To cancel repeat track playback, select "REPEAT TRACK" from the menu list again, and press **ENTER**.

Repeat playback of all tracks

1 Press ▲ or ▼ to select "REPEAT ALL" from the menu list and press ENTER.

2 Press PLAY.

All tracks on CD will be played back repeatedly.

To cancel the repeat all playback, select "REPEAT ALL" from the menu list again, and press **ENTER**.

See also A-B Repeat on page 38.

Playing back programs

You can specify the playback order yourself.

1 Press ▲ or ▼ to select "PROGRAM PLAYBACK" from the menu list and press ENTER.

2 Press ▲ or ▼ to select the track number that you want to change the order of and press ENTER.

The "►" mark will appear at the right side of the track number.

3 Press ▲ or ▼ to select to the track number that you want to specify and press ENTER.

The track number that you select in step 2 moves to the position that you specified.

4 Repeat steps 2 and 3 to change the playback order.

5 Press PLAY.

The tracks will be played back in the changed order.

To cancel program playback, select "EXIT PROGRAM MODE" from the menu list and press **ENTER**.

Playing back track by specifying the time

1 Press ▲ or ▼ to select "TIME SEARCH" from the menu list during playback and press ENTER.

2 Press ▲ / ▼ or ◀ / ▶ to specify the elapsed time of the track (this will be the starting point of playback) and press ENTER.

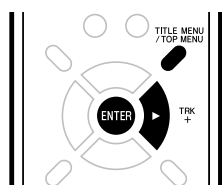
Playback will start from the specified elapsed time.

MP3/WMA/JPEG/DivX® playback

CD

MP3, WMA and DivX® files can be played back. You can also display JPEG files on the TV screen and enjoy them as a slide show.

Some discs may not play due to the condition of the recording.



Limitations on MP3/WMA/JPEG/DivX® CD playback:

- MP3/WMA/JPEG CD/DivX® is a disc that is standardized by ISO9660.
- The directory and file names of the MP3/WMA/JPEG/DivX® CD must correspond to the ISO standardized file names.
- This unit can read 200 files per directory. If one directory has more than 200 files, it reads up to 200 files, the remaining files will be omitted.
- MP3/WMA CDs cannot be used for playback for the purpose of recording.
- MP3/WMA/JPEG/DivX® CDs may be used for playback, but not for recording.
- If the CD has both audio tracks and MP3/WMA/JPEG/DivX® files, only audio tracks are played.
- It may take more than one minute for this unit to read MP3/WMA/JPEG/DivX® files depending on its structure.
- Music recorded by "Joliet Recording Specification" can be played back. Long file names will be cut.
- The music files recorded by "Hierarchical File System" (HFS) cannot be played.
- The MP3/WMA/JPEG/DivX® files recorded on DVD disc cannot be playback.

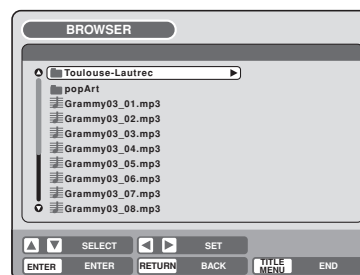
Preparation:

- Turn ON the TV and set to the video input mode.
- Load the disc storing MP3, WMA, JPEG or DivX®.
- Press **DVD/VCR** to select the DVD mode. (The DVD indicator will light.)

Using the BROWSER screen

1 Press TITLE MENU.

The BROWSER screen will appear.



2 The MP3, WMA, JPEG or DivX® files and folders stored in the disc are displayed on the BROWSER screen.

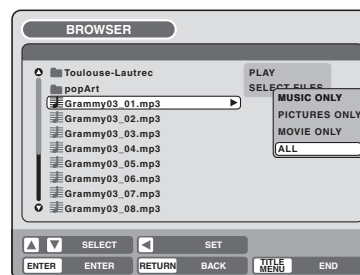
- Select a folder and press **ENTER**. The files in the folder appear.

When the file to be displayed is selected

You can select the file types to be displayed on the BROWSER screen.

1 Press ► to select "SELECT FILES" and press ENTER.

The following list will appear.



MUSIC ONLY:

Only the MP3 and WMA files appear.

PICTURES ONLY:

Only the JPEG files appear.

MOVIE ONLY:

Only the DivX® files appear.

ALL:

All files and folders appear.

2 Select one item in the above list and press ENTER.

The display will be changed to the selected display type.



Playing back MP3/WMA files

MP3 CD

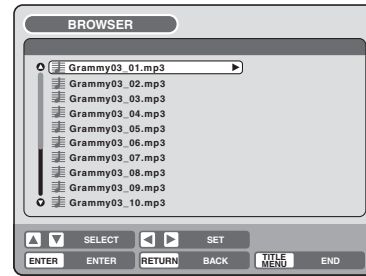
- MP3 files must have the extension letters “.mp3”.
- Standard, sampling frequency, and the bit rate: MPEG-1 Audio
32kHz, 44.1kHz, 48kHz
32kbps to 320kbps (constant bit rate or variable bit rate)
- The recommended recording setting for high quality sound is 44.1kHz sampling frequency and 128kbps of constant bit rate.

WMA CD

- When creating a WMA disc, make sure that the copyright function is off. DRM (Digital Rights Management) files cannot be played back.
- WMA files must have the extension letters “.wma”.
- Standard, sampling frequency, and the bit rate: WMA version 7 and 8
32kHz, 48kbps
44.1kHz, 48kbps to 192kbps
48kHz, 128kbps to 192kbps
- Music files recorded as mono, 48kHz, 48kbps cannot be played back in this unit.

1 Press ▲ or ▼ to select MP3 or WMA file.

- In case the disc includes more than 10 files, you can turn to the next or the previous page. (See page 42.)

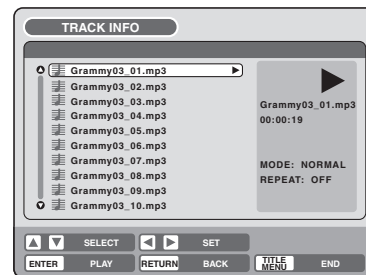


2 Carry out either of the item a or b below.

a: Press **ENTER**.

b: Press ► to select “PLAY” and press **ENTER**.

The TRACK INFO screen appears to playback the selected file. For the details of the TRACK INFO screen, see “The CD Track Info screen” on page 42.



3 To return to the BROWSER screen, press RETURN.

- To stop playback of the MP3 or WMA files, press **TITLE MENU**.

