



DVD RECORDER

OWNER'S MANUAL

MODEL : DR7400

Before connecting, operating or adjusting this product,
please read this instruction booklet carefully and completely.





CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN



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



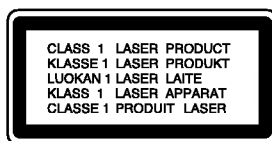
This lightning flash with arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of uninsulated dangerous voltage within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



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 product.

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

WARNING: Do not install this equipment in a confined space
such as a bookcase or similar unit.



CAUTION:

This product employs a Laser System.

To ensure proper use of this product, please read this owner's manual carefully and retain it for future reference. Should the unit require maintenance, contact an authorized service center.

Performing controls, adjustments, or carrying out procedures other than those specified herein may result in hazardous radiation exposure.

To prevent direct exposure to laser beam, do not try to open the enclosure. Visible laser radiation when open. DO NOT STARE INTO BEAM.

CAUTION:

CLASS 2M VISIBLE AND INVISIBLE LASER RADIATION
WHEN OPEN AND INTERLOCKS DEFEATED DO NOT
STARE INTO THE BEAM OR VIEW DIRECTLY WITH
OPTICAL INSTRUMENTS.

CAUTION: The apparatus should not be exposed to water
(dripping or splashing) and no objects filled with liquids, such
as vases, should be placed on the apparatus.



This product is manufactured to comply with
the radio interference requirements of EEC
DIRECTIVE 89/336/EEC, 93/68/EEC and
73/23/EEC.

POWER: This DVD Recorder operates on a mains supply of
110-240V~, 50/60Hz.

WIRING: This DVD Recorder is supplied with a BSI 1363
approved 13 amp mains plug, fused at 5 amp. When replacing
the fuse always use a 5 amp BS 1362, BSI or ASTA approved
type. Never use this plug with the fuse cover omitted. To obtain
a replacement fuse cover contact your dealer. If the type of plug
supplied is not suitable for the mains sockets in your home,
then the plug should be removed and a suitable type fitted.
Please refer to the wiring instructions below:

WARNING: A mains plug removed from the mains lead of this
DVD Recorder must be destroyed. A mains plug with bared
wires is hazardous if inserted in a mains socket.

Do not connect either wire to the earth pin, marked with the
letter E or with the earth symbol \perp or coloured green or green
and yellow. If any other plug is fitted, use a 5 amp fuse, either
in the plug, or at the distribution board.

IMPORTANT: The wires in this mains lead are coloured in
accordance with the following codes:

- **BLUE: NEUTRAL, BROWN: LIVE** - As the colours of the
wires in the mains lead of this DVD Recorder may not
correspond with the coloured marking identifying the terminals
in your plug, proceed as follows: The wire which is coloured
blue must be connected to the terminal which is marked with
the letter N or coloured black. The wire which is coloured brown
must be connected to the terminal which is marked with the
letter L or coloured red.

CAUTION concerning the Power Cord

**Most appliances recommend they be placed upon a
dedicated circuit;**

That is, a single outlet circuit which powers only that appliance
and has no additional outlets or branch circuits. Check the
specification page of this owner's manual to be certain.

Do not overload wall outlets. Overloaded wall outlets, loose
or damaged wall outlets, extension cords, frayed power
cords, or damaged or cracked wire insulation are dangerous.
Any of these conditions could result in electric shock or fire.
Periodically examine the cord of your appliance, and if its
appearance indicates damage or deterioration, unplug it,
discontinue use of the appliance, and have the cord replaced
with an exact replacement part by an authorized servicer.

Protect the power cord from physical or mechanical abuse,
such as being twisted, kinked, pinched, closed in a door, or
walked upon. Pay particular attention to plugs, wall outlets,
and the point where the cord exits the appliance.

SERIAL NUMBER:

You can find the serial number on the back of the unit. This
number is unique to this unit and not available to others. You
should record requested information here and retain this
guide as a permanent record of your purchase.

Model No. _____

Serial No. _____



Disposal of your old appliance

1. When this crossed-out wheeled bin symbol is
attached to a product it means the product is
covered by the European Directive 2002/96/EC.
2. All electrical and electronic products should be
disposed of separately from the municipal waste
stream via designated collection facilities appointed
by the government or the local authorities.
3. The correct disposal of your old appliance will help
prevent potential negative consequences for the
environment and human health.
4. For more detailed information about disposal of
your old appliance, please contact your city office,
waste disposal service or the shop where you
purchased the product.

Contents

Introduction	4-8
Symbol Used in this Manual	4
Notes on Discs	4
Recordable and Playable Discs	5
Playable Discs	5
Disc-related terms	6
Front and Rear Panel	7
Remote Control	8
Remote Control Operation	8
Hookup and Settings	9-23
Connections to Your TV and Aerial	9
Connecting to an Amplifier	9
Accessory Audio/Video (A/V) Connections	10
Auto Set Up	11
About DVD Recorder Initial Setup menu	11
Using the Initial Setup menu	12
TV Setup	12-14
Auto Scan	12
Program Edit	13
Manual Setting	13
Auto Install	14
Recording Setup	14
Record Mode Set	14
Overwrite	14
Chapter Mark	14
General Setup	15
TV Display	15
Angle Mark	15
OSD (On-Screen Display) Language	15
Last Memory	15
Clock Setting	15
Video Setup	16
Quality	16
Audio Setup	16-17
Post DRC (Dynamic Range Control)	16
SPDIF Setup	16
Dolby Digital	17
3D Surround	17
Preference	18-19
TV Type	18
Audio/Subtitle/Disc Menu Language	18
Parent Control	18-19
Default	19
Using the Disc Operation menu	20-22
Disc Erase	20
Finalize	21
Disc Protect	21
Make Edits Compatible	21
Adapt	22
Disc Information	22
General Explanation of On-Screen Display	23
Using the On-Screen Display	23
Playback	24-30
Playing a DVD, Video CD, or Audio CD	24-27
Playing an MP3 File	28
Viewing a JPEG File	29
Using the thumbnail menu for JPEG file	30
Using Playlist with MP3 or JPEG files	30
Recording	31-34
About DVD recording	31
Basic Recording from a TV	32
OTR (One Time Recording)	32
Timer Recording	33
Checking Timer Recording Details	34
Recording from an External Input	34
Editing	35-42
Title List and Chapter List Menu Overview	35
Deleting a Title	36
Naming a Title	36
Changing Title Thumbnails	37
Divide One Titles Into Two	37
Adding Chapter Markers	38
Deleting Chapter Markers	38
Hide a Chapter	38
Using the Disc Edit menu	39-42
Naming a Title	39
Erasing a Title	40
Protect a Title	40
Changing Title Thumbnails	40
Editing a Title by Chapter	41
Adding Chapter Markers	41
Deleting Chapter Markers	42
Hide a Chapter	42
Overwriting Recording	42
Reference	43-47
Controlling Your TV with the Supplied Remote Control	43
Language Codes	44
Area Codes	44
Troubleshooting	45-46
Specifications	47

Introduction

To ensure proper use of this product, please read this owner's manual carefully and retain for future reference.

This manual provides information on the operation and maintenance of your recorder. Should the unit require service, contact an authorized service location.

Symbol Used in this Manual



The lightning flash symbol alerts you to the presence of dangerous voltage within the product enclosure that may constitute a risk of electric shock.



The exclamation point alerts you to the presence of important operating and maintenance / servicing instructions.



Indicates hazards likely to cause harm to the unit itself or other material damage.

Note:

Indicates special notes and operating features.

Tip:

Indicates tips and hints for making the task easier.

A section whose title has one of the following symbols is applicable only to the disc represented by the symbol.

+RW	DVD+RW disc
+R	DVD+R disc
DVD	DVD-Video disc
VCD	Video CDs
ACD	Audio CDs
MP3	MP3 files
JPEG	JPEG files

About the ∅ Symbol Display

"∅" may appear on your TV display during operation and indicates that the function explained in this owner's manual is not available on that specific DVD video disc.

Notes on Discs

Handling Discs

Do not touch the playback side of the disc. Hold the disc by the edges so that fingerprints do not get on the surface. Never stick paper or tape on the disc.

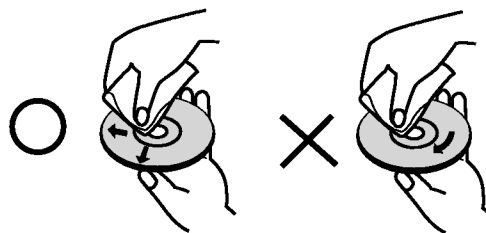


Storing Discs

After playing, store the disc in its case. Do not expose the disc to direct sunlight or sources of heat and never leave it in a parked car exposed to direct sunlight.

Cleaning Discs

Fingerprints and dust on the disc can cause poor picture quality and sound distortion. Before playing, clean the disc with a clean cloth. Wipe the disc from the center out.



Do not use strong solvents such as alcohol, benzene, thinner, commercially available cleaners, or anti-static spray intended for older vinyl records.

Moisture Condensation

Never operate this product immediately after moving it from a cold location to a warm location. Leave it for two or three hours without operating it. If you use this product in such a situation, it may damage discs/tapes and internal parts.

Recordable and Playable Discs



DVD+RW (Digital Video Disc + ReWritable)

- These Discs can be recorded on repeatedly. Recordings can be erased, then you can record again on the same Disc.
- Playable on DVD+RW compatible players (automatically finalization)
- The edited contents is playable on DVD+RW compatible players only after finalizing
- Recordings can be edited the title/chapter



DVD+R (Digital Video Disc + Recordable)

- These Discs can be recorded only once. After you finalize a DVD+R, you cannot record on it or edit it any more.
- Playable on DVD+R compatible players (after finalization)
- Any edited contents are not be compatible on DVD+R compatible players. (Hide, chapter combine, added chapter mark, etc.)
- Limited title/chapter editing features.

The recommendable recordable DVD discs

DVD+R	DVD+RW
SONY (2.4x, 4x, 8x, 16x)	SONY (2.4x)
TDK (4x)	TDK (2.4x)
Mitsubishi (4x, 8x)	Philips (4x)
Ricoh (2x, 4x, 8x)	Ricoh (2.4x)
	HP (2.4x, 4x)

Note:

If a DVD+RW discs is recorded using a personal computer or other DVD recorder, you cannot format the disc using this recorder. So if you want to use the disc on this recorder, you must format the disc using the original recorder.

Playable Discs



DVD (8 cm / 12 cm disc)

- Discs such as movies that can be purchased or rented



Video CD (VCD) (8 cm / 12 cm disc)

- VIDEO CDs or CD-Rs/CD-RWs in VIDEO CD/Super VIDEO CD format



Audio CD (8 cm / 12 cm disc)

- Music CDs or CD-Rs/CD-RWs in music CD format that can be purchased



CD-R/CD-RW (8 cm / 12 cm disc)

- CD-R/CD-RW discs that contain audio titles, MP3 or JPEG files.

Notes:

- Depending on the conditions of the recording equipment or the CD-R/RW (or DVD±R/±RW) disc itself, some CD-R/RW (or DVD±R/±RW) discs cannot be played on the unit.
- Do not attach any seal or label to either side (the labeled side or the recorded side) of a disc.
- Do not use irregularly shaped CDs (e.g., heart-shaped or octagonal). Doing so may result in malfunctions.
- Depending on the recording software & the finalization, some recorded discs (CD-R/RW or DVD±R/RW) may not be playable.
- DVD±R/RW and CD-R/RW discs recorded using a personal computer or a DVD or CD Recorder may not play if the disc is damaged or dirty, or if there is dirt or condensation on the Recorder's lens.
- If you record a disc using a personal computer, even if it is recorded in a compatible format, there are cases in which it may not play because of the settings of the application software used to create the disc. (Check with the software publisher for more detailed information.)

Disc-related terms

DVD +R / DVD +RW

DVD +R is two different standards for recordable DVD drives and discs. This format allows information to be recorded onto the DVD disc only once.

DVD +RW is two standards for re-writable media, meaning the DVD content can be erased and re-recorded. Single-sided discs can hold 4.38 Gigabytes and double-sided discs hold twice as much.

VCD (Video CD)

A VCD holds up to 74 minutes (650 MB disc) or 80 minutes (700 MB disc) of MPEG-1 full-motion video along with quality stereo sound.

MPEG

MPEG is an international standard for video and audio compression. MPEG-1 is used in encoding video for VCD and provides for multichannel surround sound coding such as PCM, Dolby Digital, DTS and MPEG audio.

MP3

MP3 is a popular compression format used for digital audio files that yields very high near-CD quality.

JPEG

Joint Pictures Expert Group. JPEG is a compressed file format that allows you to save images with no limit on the number of colors.

PBC: Playback Control (Video CD only)

Playback control is available for Video CD (VCD) version 2.0 disc formats. PBC allows you to interact with the system via menus, search functions, or other typical computer-like operations. Moreover, still pictures of high resolution can be played if they are included in the disc. Video CDs not equipped with PBC (Version 1.1) operate in the same way as audio CDs.

Title (DVD video discs only)

A title is generally a distinct section of a DVD disc. For example the main feature could be title 1, a documentary describing how the film was made could be title 2, and cast interviews could be title 3. Each title is assigned a reference number enabling you to locate it easily.

Chapter (DVD video discs only)

A chapter is a segment of a title such as a scene in a film or one interview in a series. Each chapter is assigned a chapter number, enabling you to locate the chapter you want. Depending on the disc, chapters may not be recorded.

Scene (VCD)

On a video CD with PBC (playback control) functions, moving pictures and still pictures are divided into sections called "scenes". Each scene is displayed in the menu screen and assigned a scene number, enabling you to locate the scene you want. A scene is composed of one or several tracks.

Track

A distinct element of audiovisual information, such as the picture or sound track for a specific language (DVD), or a musical piece on a video or audio CD. Each track is assigned a track number, enabling you to locate the track you want. DVD discs allow one track of video (with multiple angles) and several tracks of audio.

Regional code of the recorder and DVDs

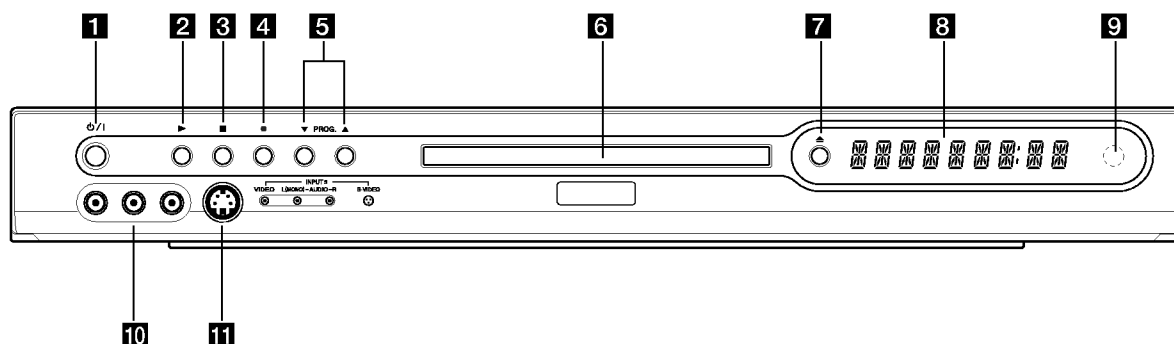


This recorder is designed and manufactured for playback of Region 2 encoded DVD software. The region code on the labels of some DVD discs indicates which type of the recorder can play those discs. This unit can play only DVD discs labeled 2 or ALL. If you try to play any other discs, the message "Incorrect region code. Can't play back" will appear on the TV screen. Some DVD discs may not have a region code label even though their playback is prohibited by area limits.

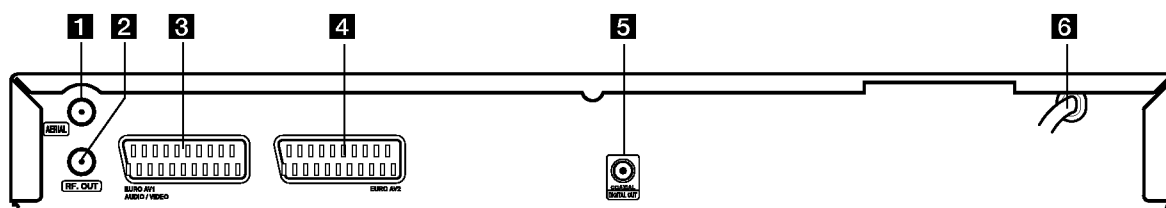
Notes on DVDs and Video CDs

Some playback operations of DVDs and Video CDs may be intentionally fixed by software manufacturers. As this unit plays DVDs and Video CDs according to disc content designed by the software manufacturer, some playback features of the unit may not be available or other functions may be added. Refer also to the instructions supplied with the DVDs and Video CDs. Some DVDs made for business purposes may not be played on the unit.

Front and Rear Panel

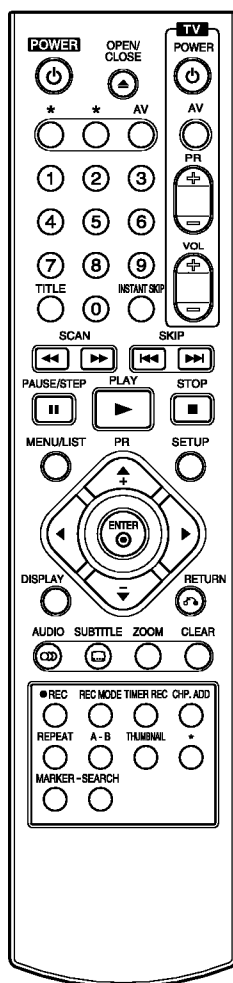


- 1 POWER button**
Switches the recorder ON or OFF.
- 2 PLAY (▶)**
Starts playback.
- 3 ■ (STOP)**
Stops playback or recording.
- 4 ● (REC)**
Starts recording. Press repeatedly to set the recording time.
- 5 PROG. (▼/▲)**
Scans up or down through memorized channels.
- 6 Disc Tray**
Insert a disc here.
- 7 ▲ (OPEN/CLOSE)**
Opens or closes the disc tray.
- 8 Display window**
Shows the current status of the recorder (clock, program number, etc.).
- 9 Remote Sensor**
Point the recorder remote control here.
- 10 VIDEO IN/AUDIO IN (Left/Right)**
Connect the audio/video output of an external source (Audio system, TV/ Monitor, VCR, Camcorder, etc.).
- 11 S-VIDEO IN**
Connect the S-Video output of an external source (TV/ Monitor, VCR, Camcorder, etc.).



- 1 AERIAL**
Connect the aerial to this terminal.
- 2 RF. OUT**
Passes the signal from the AERIAL to your TV/monitor
- 3 EURO AV 1 AUDIO/VIDEO**
Connect to a TV with SCART jack.
- 4 EURO AV 2**
Connect the audio/video output of an external source (Set Top Box, VCR, etc.).
- 5 COAXIAL (Digital audio out jack)**
Connect to digital (coaxial) audio equipment.
- 6 AC Power Cord**
Plug into the power source.

Remote Control



0-9 numerical buttons: Selects numbered options in a menu.

◀ / ▶ / ▲ / ▼ (left/right/up/down): Selects an option in the menu.

PR ▲ / ▼ (up/down): Scans up or down through memorized channels.

A-B: Repeat sequence.

AUDIO: Selects an audio language (DVD) or an audio channel (CD).

AV: Changes the input to use for recording (Tuner, SCART 1, SCART 2, Front AV).

CHP. ADD: Inserts a chapter marker when playing/recording.

CLEAR: Removes a track number on the Program List or a mark on the Marker Search menu.

DISPLAY: Accesses On-Screen Display.

ENTER

- Acknowledges menu selection.
- Displays information while viewing a TV program.

INSTANT SKIP: Skips 30 seconds forward on the disc (about the length of a typical TV: commercial).

MARKER: Marks any point during playback.

MENU/LIST: Accesses menu on a DVD disc.

OPEN/CLOSE (▲): Opens and closes the disc tray.

PAUSE/STEP (II) : Pause playback or recording temporarily, press again to exit pause mode.

PLAY (▶): Starts playback.

POWER: Switches the recorder ON or OFF.

REC (●): Starts recording. Press repeatedly to set the recording time.

REC MODE: Selects the recording mode (HQ, SQ, LQ or EQ).

REPEAT: Repeat chapter, track, title, all.

RETURN (↶)

- Removes the menu.
- Displays the menu of a video CD with PBC.

SCAN (◀◀ / ▶▶): Search backward or forward.

SEARCH: Displays Marker Search menu.

SETUP: Accesses or removes the Setup menu.

SKIP (◀◀ / ▶▶): Go to next chapter or track. Returns to beginning of current chapter or track or go to previous chapter or track.

STOP (■): Stops playback or recording.

SUBTITLE: Selects a subtitle language.

THUMBAIL: Selects a thumbnail picture for the current title and chapter for use in the Title List.

TIMER REC: Displays Timer Record menu.

TITLE: Displays the disc's Title menu, if available.

TV Control Buttons

- POWER: Turns the TV on or off.
- AV: Selects the TV's source.
- PR +/-: Selects TV's channel.
- VOL +/-: Adjusts TV's volume.

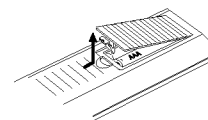
ZOOM: Enlarges video image.

Remote Control Operation

Point the Remote Control at the remote sensor and press the buttons.

Remote Control Battery Installation

Remove the battery cover on the rear of the Remote Control, and insert two R03 (size AAA) batteries with + and - matched correctly.



⚠ Caution

Do not mix old and new batteries. Never mix different types of batteries (standard, alkaline, etc.).

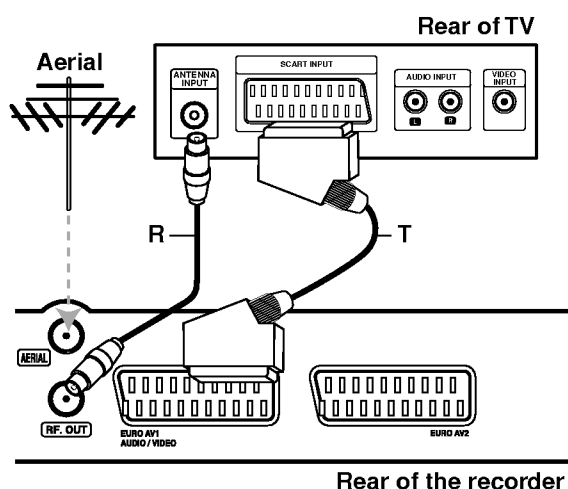
Hookup and Settings

Connections to Your TV and Aerial

1. Remove the aerial cable plug from your TV set and insert it into the aerial socket at the back of the recorder.
2. Connect the RF. OUT jack on the recorder to the aerial input jack on the TV using the 75-ohm Coaxial Cable supplied (**R**). The RF. OUT jack passes the signal through from the AERIAL jack.
3. Connect the EURO AV1 AUDIO/VIDEO scart jack on the recorder to the corresponding in jacks on the TV using the scart cable (**T**).

⚠ Caution

- Make sure the recorder is connected directly to the TV. Tune the TV to the correct video input channel.
- Do not connect your recorder via your VCR. The DVD image could be distorted by the copy protection system.



Connecting to an Amplifier

Connecting to an amplifier equipped with two channel digital stereo (PCM) or to an Audio/Video receiver equipped with a multi-channel decoder (Dolby Digital™, MPEG 2, or DTS)

1. Connect one of the recorder's DIGITAL AUDIO OUT jacks to the corresponding in jack on your amplifier. Use an optional digital audio cable.
2. You will need to activate the recorder's digital output. (See "Audio Setup" on page 16-17).

Digital Multi-channel sound

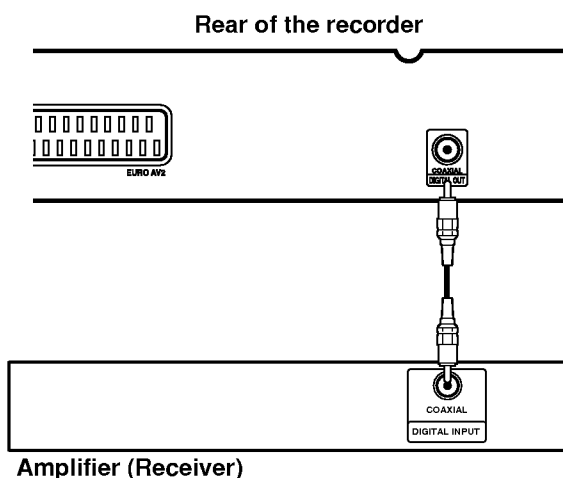
A digital multi-channel connection provides the best sound quality. For this you need a multi-channel Audio/Video receiver that supports one or more of the audio formats supported by your recorder (MPEG 2, Dolby Digital and DTS). Check the receiver manual and the logos on the front of the receiver.

⚠ Caution:

Due to the DTS Licensing agreement, the digital output will be in DTS digital out when DTS audio stream is selected.

Notes:

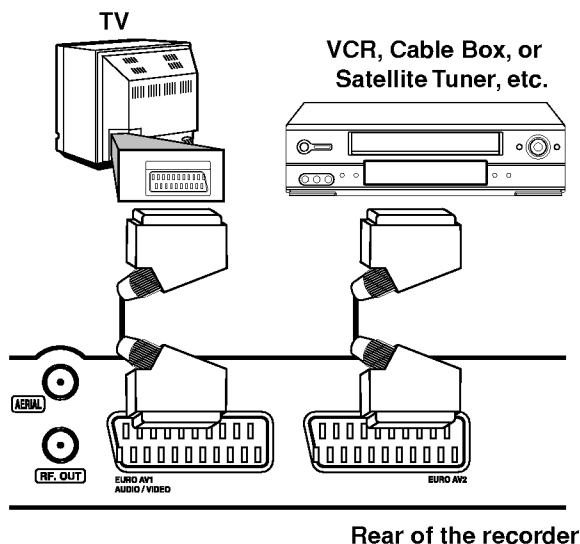
- If the audio format of the digital output does not match the capabilities of your receiver, the receiver will produce a strong, distorted sound or no sound at all.
- Six Channel Digital Surround Sound via digital connection can only be obtained if your receiver is equipped with a Digital Multi-channel decoder.
- To see the audio format of the current DVD in the on-screen display, press AUDIO.
- This recorder does not perform internal (2 channel) decoding of a DTS sound track. To enjoy DTS multi channel surround, you must connect this recorder to a DTS compatible receiver via one of this recorder's digital audio outputs.



Accessory Audio/Video (A/V) Connections

Connecting to the EURO AV2 jack

Connect a VCR or similar recording device to the EURO AV2 jack of this recorder.

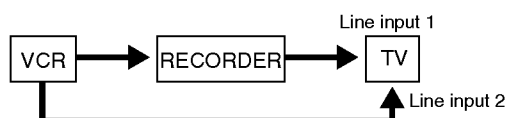


Tip:

You do not need to turn on the recorder to view the signals from the connected tuner on your TV.

Notes:

- Pictures containing copy protection signals that prohibit any copying cannot be recorded.
- If you pass the recorder signals via the VCR, you may not receive a clear image on your TV screen. Be sure to connect your VCR to the recorder and your TV in the order shown below. To watch video tapes, watch the tapes through a second line input on your TV.



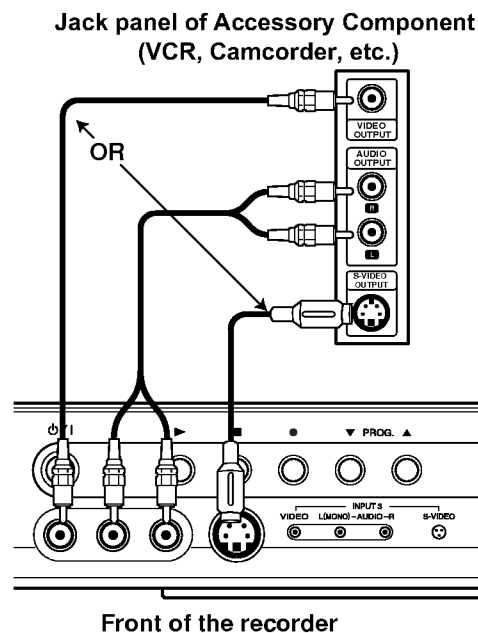
- If you are using a B Sky B tuner, be sure to connect the tuner's VCR SCART jack to the EURO AV2 jack.
- If you disconnect the recorder's mains lead, you will not be able to view the signals from the connected VCR or tuner.

Connecting to the Front Panel's Input Jacks

Connect the input jacks on the recorder's front panel to the audio/video out jacks on your accessory component, using audio/video cables.

Note:

If you use the S-VIDEO IN jack on the front panel, the VIDEO IN jack on the front panel is not available.



Auto Set Up

After the POWER is pressed for the first time to turn on the unit, the [Initial Setup Wizard] function sets the clock, OSD language and tuner channels automatically.

Follow the step-by-step questions until the setup is complete.

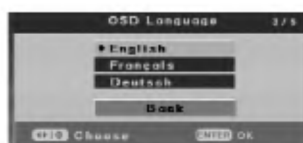
1. Press ENTER to move next step.



2. Enter the necessary information for date and time.
◀ / ▶ (left/right) buttons: Moves the cursor to the previous or next column.
▲ / ▼ (up/down) or number buttons: Changes the setting at the current cursor position.
ENTER button: Confirms your setting.



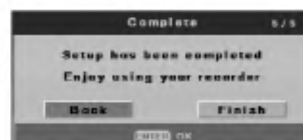
3. Select a language for the Setup menu and on-screen display. Press ▲ / ▼ to select a language then press ENTER.



4. The recorder will automatically cycle through all available channels in the area and place them in the tuner's memory.



5. Press ENTER while [Finish] is highlighted to finish setup.



About DVD Recorder Initial Setup menu

By using the Setup Displays, you can make various adjustments to items such as picture and sound.

1. Press SETUP and the [DVD Recorder Initial Setup] menu appears.



- [Timer REC] (Timer Recording)
For unattended recording, you can 7 programs within a period of 1 month. (page 33)
- [Disc Oper] (Disc Operation)
You can do following functions: Erase, finalize, protect, make comp, adapt, check disc information. (page 20-22)
- [Disc Edit]
You can do following edit functions for titles: Label, Erase, Protect, Chapter Edit, Thumbnail. (page 39-42)
- [Init Setup] (Initial Setup)
By using the Initial Setup, you can make various adjustments to items such as picture and sound, as well as select a language for the subtitles. (page 12-19)

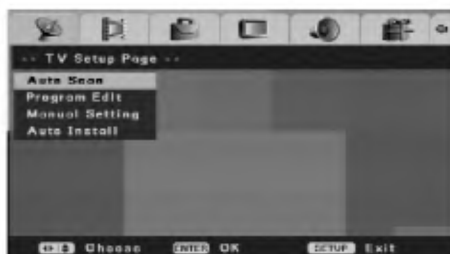
2. Use ◀ / ▶ to select an option then press ENTER.

Using the Initial Setup menu

1. Press SETUP and the [DVD Recorder Initial Setup] menu appears.
2. Use ◀ / ▶ to select [Init Setup] option then press ENTER. Initial Setup Menu appears.



3. Use ▲ / ▼ / ◀ / ▶ to select an option.



4. Press ENTER to confirm your selection.
5. Press SETUP to exit the Setup menu.

Notes:

- Press ◀ to go back to the previous level.
- To return to the [DVD Recorder Initial Setup] menu, select [◀] option on the [Initial Setup] menu then press ENTER.

TV Setup

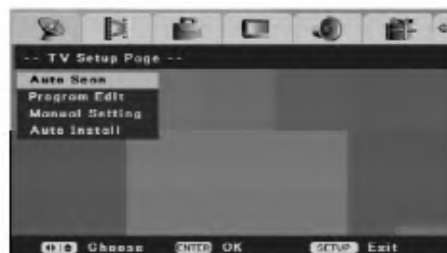
Auto Scan

This recorder is equipped with a frequency synthesized tuner capable of receiving up to 99 TV channels.

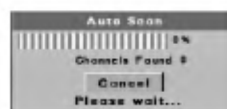
Preparation:

- Connect the recorder to the desired type of aerial, as shown in "Connections to Your TV and Aerial" on page 9.

1. Select the [Auto Scan] option.



2. Press ENTER to begin the channel search. The tuner will automatically cycle through all available channels in the area and place them in the tuner's memory.



3. Press SETUP to exit the Setup menu.

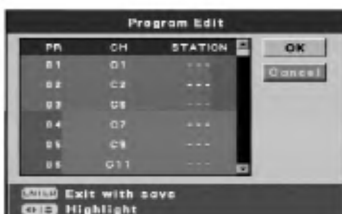
Program Edit

You can edit a channel manually (add, delete, name, move, etc.).

1. Select [Program Edit] option on the [Initial Setup] menu.



2. Press ENTER.
The [Program Edit] menu appears.



3. Use ▲ / ▼ / ◀ / ▶ to select a PR number then press ENTER.



4. CLEAR button: Deletes a program you do not need.

▲ / ▼ (up / down) buttons: Sorts the program positions on the Program Edit menu. Press ▲ / ▼ to move the selected program position to a new location then press ENTER.

REC (●) button: Edits the program.

- While channel number is highlighted, press ▲ / ▼ to set the channel manually.
- While channel station name is highlighted, press ENTER to changes the station name. The display for entering characters appears. To enter characters, see page 39.

5. To exit [Program Edit] menu, press ENTER while [OK] or [Cancel] is highlighted.
The Initial Setup Menu appears.
[OK] Exits with save the editing.
[Cancel] Exits without save the editing.

Manual Setting

You can perform a search to select and store TV channels manually.

1. Select [Manual Setting] option on the [Initial Setup] menu.



2. Press ENTER.
The [Manual Setting] menu appears.



- [PR] Selects a PR number.
 - [CH] Selects the Channel number. Press AV to select "S-" or "C-". You can use number buttons to select channel number.
 - [CH Fine Tune] Fine tunes the channel to obtain a clearer picture.
 - [Manual Scan] Searches for a channel automatically. Searching stops when the recorder tunes in a channel.
 - [SECAM] Check for the SECAM channel setting by pressing ENTER. Release the check mark for PAL channel setting.
 - [Nicam] Check for the NICAM broadcast by pressing ENTER. Normally, Check mark is appears on the display. If the sound from NICAM broadcast is not clear, press ENTER so check mark disappears.
 - [Skip] If there is not check mark, current channel is memorized. If you want to delete the channel from memory, press ENTER so check mark appears.
3. Enter the necessary information for date and time.
◀ / ▶ (left/right) buttons: Changes the setting at the current cursor position.
▲ / ▼ (up/down) buttons: Moves the cursor to the previous or next column.
ENTER button: Confirms the setting and returns to the [Initial Setup] menu.
STOP button: Exits the menu.

Auto Install

Re-configure initial settings.

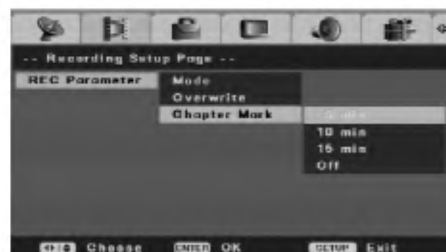
Select [Auto Install] option on the [Initial Setup] menu then press ENTER. [Initial Setup Wizard] menu screen appears.

See "Auto Set Up" on page 11.



Chapter Mark

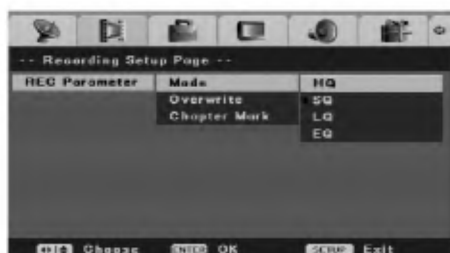
Chapter markers are put in specified setting. You can change this interval to 5 minutes, 10 minutes or 15 minutes. If you select [Off], switch off automatic chapter marking altogether with the [Off] setting.



Recording Setup

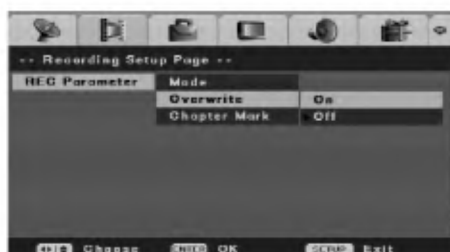
Record Mode Set

You can set the picture quality for recording; HQ (High Quality), SQ (Standard Quality), LQ (Low Quality), EQ (Extend Quality).



Overwrite

To overwrite a new video recording on a previously recorded title, set [Overwrite] option to [On]. This feature is not available for DVD+Rs, that always record at the end of the disc.



General Setup

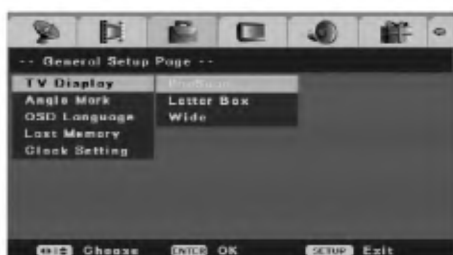
TV Display

Selects the aspect ratio of the connected TV.

[Pan Scan] Select when a standard 4:3 TV is connected. The video material formatted in the Pan & Scan style is played back in that style (Both sides of the picture are cut off).

[Letter Box] Select when a standard 4:3 TV is connected. Displays theatrical images with masking bars above and below the picture.

[Wide] Select when a 16:9 wide TV is connected.

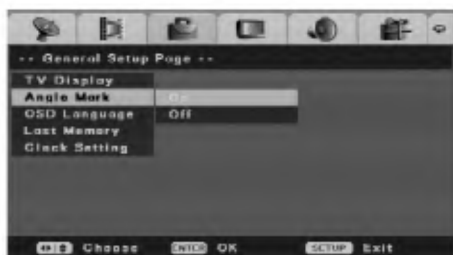


Angle Mark

Some DVDs feature scenes filmed at different angles, which you can select using On-Screen Display. You can have the recorder alert you when multiple angles are available by displaying an Angle Mark icon on screen.

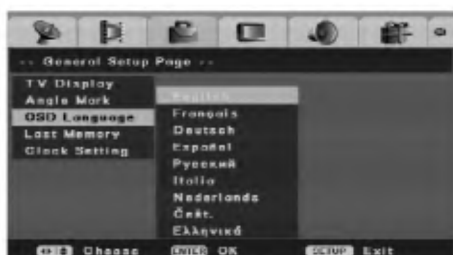
[On] Displays an Angle Mark icon on screen.

[Off] Angle Mark icon is not displayed.



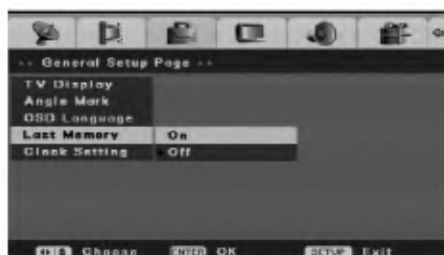
OSD (On-Screen Display) Language

Select a language for the Setup menu and on-screen display.



Last Memory

This recorder memorizes the user settings for the last disc that you have viewed. Settings remain in memory even if you remove the disc from the recorder or switch off the recorder. If you load a disc that had its settings memorized, the latest stop position is automatically recalled. To use this effect, set [Last Memory] option to [On].

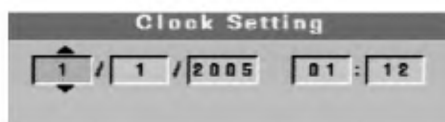


Clock Setting

1. Select [Clock Setting] option on the [Initial Setup] menu.



2. Press ENTER.



3. Enter the necessary information for date and time.
◀ / ▶ (left/right): Moves the cursor to the previous or next column.
▲ / ▼ (up/down) or number buttons: Changes the setting at the current cursor position.
4. Press ENTER to confirm your setting.

Video Setup

Quality

Set video quality in the aspects of brightness, contrast, hue, or saturation.

1. Select [Quality] option then press ► on the [Initial Setup] menu



2. Press ▲ / ▼ to select the desired option then press ENTER. The status bar appears.

Example: Brightness



3. Press ◀ / ▶ to select the desired position then press ENTER to confirm your setting.

Audio Setup

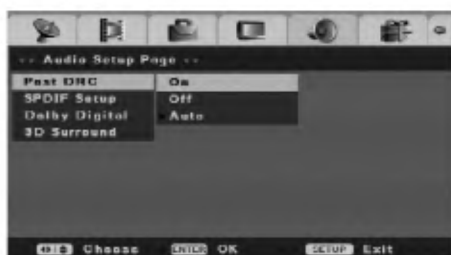
Post DRC (Dynamic Range Control)

Makes the sound clear when the volume is turned down when playing a DVD that conforms to [Post DRC].

[On] Makes low sounds clear even if you turn the volume down.

[Off] Normally select this.

[Auto] Decreases Dynamic value automatically.



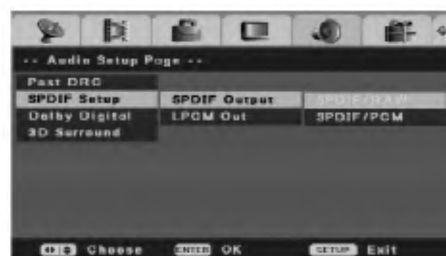
SPDIF Setup

- SPDIF (Digital Audio) Output

Selects the signal type when using the DIGITAL OUT jack.

[SPDIF RAW] Select this when the recorder is connected to an audio component without a built-in Dolby Digital, DTS or MPEG decoder.

[SPDIF/PCM] Select this when the recorder is connected to an audio component with a built-in Dolby Digital, DTS or MPEG decoder.

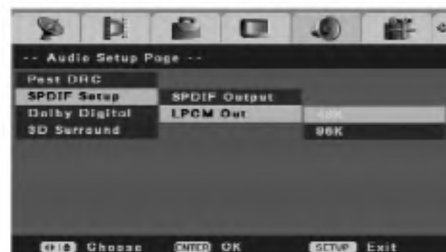


- LPCM Out

Selects the sampling frequency of the digital audio signal.

[48K] The audio signals of DVD VIDEOS are always converted to 48 kHz/16 bit.

[96K] All types of signals, including 96 kHz/24 bit, are output in their original format.



Dolby Digital

- Dual Mono

You can select a audio channel of Dolby Digital.

[Stereo] The left channel sound (L) is heard from the left speaker and the right channel sound (R) is heard from the right speaker.

[L-Mono] The left channel sound (L) is heard from both speakers.

[R-Mono] The right channel sound (R) is heard from both speakers.

[Mix-Mono] The mixed sound (both left and right channel) is heard from both speakers.



- Dynamic

This setting optimizes the dynamics of the sound with low volume playback for less disturbance in quiet environments. This only works for Dolby Digital audio on DVD video discs.

1. Select [Dolby Digital] option then press ► on the [Initial Setup] menu
2. Press ▲ / ▼ to select the [Dynamic] option then press ENTER. The status bar appears.

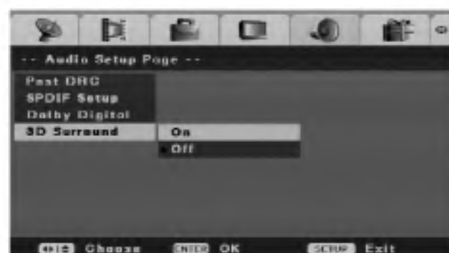


3. Press ▲ / ▼ to select then press ENTER to tune dynamic range compress.
The high of dynamic range compress, the gap between Treble and bass will be not Obvious.

3D Surround

This unit can produce a 3D Surround effect, which simulates multi-channel audio playback from two conventional stereo speakers, instead of the five or more speakers normally required to listen to multi-channel audio from a home theater system.

To use this effect, set [3D Surround] option to [On].



Preference

TV Type

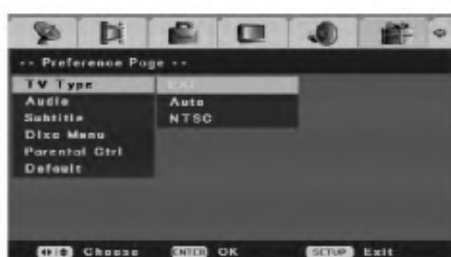
You must select the appropriate system mode for your TV system.

- When the selected system does not coincide with the system of your TV, normal color picture may not be displayed.

[PAL] When this recorder is connected with PAL-TV.

[Auto] When this recorder is connected with Multi system TV.

[NTSC] When this recorder is connected with NTSC-TV.



Audio/Subtitle/Disc Menu Language

Select a language for the disc's Menu, Audio, and Subtitle.

[Original] Refers to the original language in which the disc was recorded.

[Others] To select another language, press number buttons then ENTER to enter the corresponding 4-digit number according to the language code list in the reference chapter (see page 44).



Parent Control

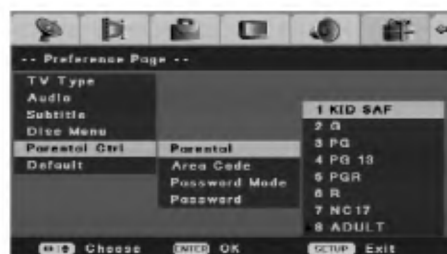
Playback of some DVD VIDEOS can be limited according to a predetermined level, such as the age of the users. Scenes may be blocked or replaced with different scenes.

Select [Parental Ctrl] on the setup menu.

- Parental

Selects the limitation level.

Rating one (1) has the most restrictions and rating eight (8) is the least restrictive.



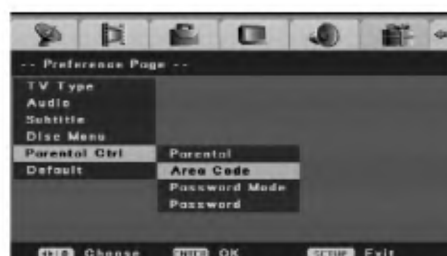
Note:

Password needs to change the parental level if [Password Mode] option is set to [On].

- Area Code

Selects a code for an area as the playback limitation level. See "Area Code" (page 44).

1. Select [Parental Ctrl] option then press ► on the [Initial Setup] menu



2. Press ▲ / ▼ to select the [Area Code] option then press ENTER. [Area Code] menu appears.



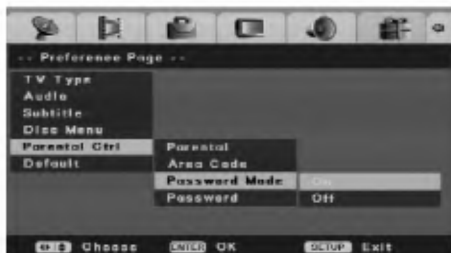
3. Press ▲ / ▼ to enter the first character of the area and press ►.
4. Press ▲ / ▼ to enter the second character and press ENTER.

- Password Mode

Activates or disables the Parental Control feature.

[On] To play back a rated movies or to change setting an Parental Control options (Parantal, Area Code, etc.), you must enter the 4-digit password.

[Off] Parental control is not active and the disc plays in full.



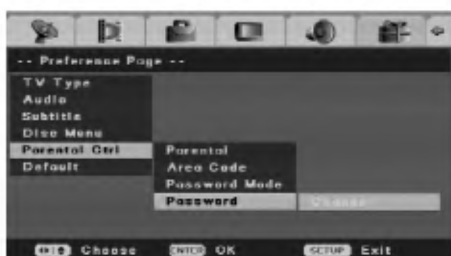
Note:

Password needs to change the setting.

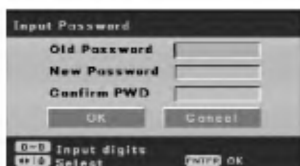
- Password

Changes the password for Parental Control features.

1. Select [Parental Ctrl] option then press ► on the [Initial Setup] menu
2. Press ▲ / ▼ to select the [Password] option then press ►.



3. Press ENTER while [Change] is highlighted. [Input Password] menu appears.



4. Enter old four-digit password using the number buttons.
If you have not entered a password yet, [Old Password] column is disabled.
5. Enter new four-digit password using the number buttons. Enter the password again to confirm, and press ENTER while [OK] is selected.
The password is stored.

If you forget your password

If you forget your password, to clear the current password, follow the procedure below.

1. Press SETUP to display the [DVD Recorder Initial Setup] menu.
2. Use the Number buttons to enter the 6-digit number "210499". Confirm message will appear.
3. Select [Yes] then press ENTER. The 4-digit password is cleared. Enter a new code.

Default

Select this to reset the recorder to all its default settings. The [Parental Control] settings remain as stored. [Initial Setup Wizard] menu screen appears. See "Auto Set Up" on page 11.



Using the Disc Operation menu

1. Press SETUP and the [DVD Recorder Initial Setup] menu appears.
2. Use ◀ / ▶ to select [Disc Oper] option then press ENTER. Disc Operation Menu appears.



3. Use ▲ / ▼ to select an option.



4. Press ENTER to confirm your selection.
5. To exit the menu, press SETUP or select [◀ Exit] option on the [Disc Oper] menu then press ENTER.

Disc Erase

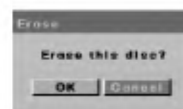
If you load a completely blank disc, The recorder will erase the disc automatically.

Also, you can erase the DVD+RW from the Setup menu as below.

1. Select [Erase] option on the [Disc Oper] menu.



2. Press ENTER. [Erase] menu appears.



3. Use ◀ / ▶ to select [OK] then press ENTER. It takes a few moments to erase the disc.



Caution

If you want to erase the disc, everything recorded on the disc will be erased.

Finalize

Finalizing 'fixes' the DVD+R recordings in place so that the disc can be played on a regular DVD player or computer equipped with a suitable DVD-ROM drive. Finalizing a disc creates a menu screen for navigating the disc. This is accessed by pressing MENU/LIST or TITLE.

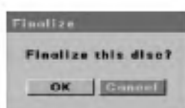
⚠ Caution

Once you have finalized a DVD+R disc, you cannot edit or record anything else on that disc.

1. Select [Finalize] option on the [Disc Oper] menu.



2. Press ENTER. [Finalize] menu appears.



3. Select [OK] then press ENTER.
The recorder starts finalizing the disc.

Note:

How long finalization takes depends on how much is recorded on the disc, and the number of titles on the disc.

Tip

If [Protect] option is set to active, the finalize is not available. To finalize, set the disc to [Unprotect].

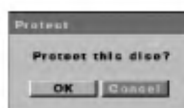
Disc Protect

Use the [Protect] option to prevent accidental recording, editing or deleting of the disc loaded.

1. Select [Protect] option on the [Disc Oper] menu.



2. Press ENTER. [Protect] menu appears.



3. Select [OK] then press ENTER.
The disc is protected. So you cannot record, erase, and edit.
If you need to unlock the disc to make edits, select [Unprotect] on the [Disc Oper] menu.

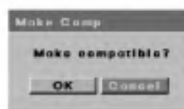
Make Edits Compatible

Use the [Make Comp] option when the current DVD+RW is not compatible with other DVD Players because you have added Chapter Markers.

1. Select [Make Comp] option on the [Disc Oper] menu.



2. Press ENTER. [Make Comp] menu appears.



3. Select [OK] then press ENTER.

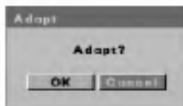
Adapt

Disc recorded on other recorder will not use on your recorder. You can use the disc after adapting the disc at your recorder.

1. Select [Adapt] option on the [Disc Oper] menu.



2. Press ENTER. [Adapt] menu appears.



3. Select [OK] then press ENTER.

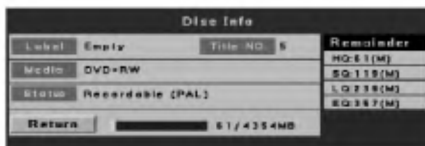
Disc Information

You can view the informations for loaded DVD+R/RW disc. (Disc Label, Media, Title number, Status, Remaining time)

1. Select [Disc Info] option on the [Disc Oper] menu.




2. Press ENTER. [Disc Info] menu appears.



3. To return to the [Disc Oper] menu, press SETUP, RETURN, or ENTER.

General Explanation of On-Screen Display

This manual gives basic instructions for operating the recorder. Some DVDs require specific operation or allow only limited operation during playback. When this occurs, the symbol  appears on the TV screen, indicating that the operation is not permitted by the recorder or is not available on the disc.

Displaying Information While Watching TV





During viewing the TV, press DISPLAY to display/remove the information displayed on-screen.



Indicates channel number, station name, and audio signal (STEREO, MONO) received by the tuner.



Indicates current date and time.

Using the On-Screen Display

The On-Screen Display contains many playback features. To see the On-Screen Display, press DISPLAY while a disc is playing. The On-Screen Display appears across the top of the screen. Each feature is illustrated with an icon. Use the  /  /  /  buttons to move through the different icons in the On-Screen Display.











When an icon is highlighted, use the  /  buttons to scroll through the choices displayed in the text box under the icons.

The On-Screen Display features are only available if the disc was created with that particular feature (i.e., if you select the Subtitle icon, you won't be able to change the subtitle language unless the author of the disc created the disc with subtitles). You can display various information about the disc loaded on-screen.










For details about each item, see the pages in parentheses.



DVD

-  : Title number (Current / Total) (page 24)
-  : Chapter number (Current / Total) (page 24)
-  : Elapsed playing time of title (page 25)
-  : Audio encoding and language (page 26)
-  : Subtitle number (page 26)
-  : Angle number (Current / Total) (page 26)
-  : Repeat mode (page 25)
-  : A-B repeat mode (page 25)
-  : Sound effect mode (page 27)
-  : On-Screen Display language

VCD ACD

-  : Track number (Current / Total) (page 24)
-  : Elapsed playing time of track (page 25)
-  : Audio channel (page 26)
-  : PBC mode (Video CD only) (page 24)
-  : Repeat mode (page 25)
-  : A-B repeat mode (page 25)
-  : Edit program playback (Audio CD only) (page 27)
-  : Random Playback (Audio CD only) (page 25)
-  : On-Screen Display language

Playback

Playing a DVD, Video CD, or Audio CD

Playback Setup

- Turn the TV on and select the video input source connected to the recorder.
- Audio system: Turn the audio system on and select the input source connected to the recorder.

1. Load your chosen disc in the tray, with the playback side down.

If a menu screen is displayed

The menu screen may be displayed first after loading a DVD or Video CD which contains a menu.

DVD

Use the ◀ / ▶ / ▲ / ▼ buttons to select the title/chapter you want to view, then press ENTER to start playback.

Press TITLE or MENU/LIST to return to the menu screen.

VCD

- Use the number buttons to select the track you want to view.

Press RETURN (↵) to return to the menu screen.

- Menu setting and the exact operating procedures for using the menu may differ depending on the disc. Follow the instructions on the each menu screen. You may also set PBC to OFF on the On-Screen Display. See page 24.

2. To stop the playback, press STOP (■).
The unit records the stopped point, depending on the disc. "■■■" appears on the screen briefly. Press PLAY (▶) to resume playback (from the scene point). If you press STOP (■) again or unload the disc ("■" appears on the screen.), the unit will clear the stopped point.
Press OPEN/CLOSE (▲) to remove the disc.
Press OPEN/CLOSE (▲) to close disc tray or press POWER (⏻), the disc tray closes automatically and unit turns off.

Notes:

- If Parental Control is set and the disc is not within the Rating settings (not authorized), the 4-digit code must be entered and/or the disc must be authorized (see "Parental", on page 18).
- DVDs may have a Region Code.
Your recorder will not play discs that have a region code different from your recorder. The region code for this recorder is 2 (two).

- To view TV channel or video input source during Audio CD playback, press STOP (■).
- Unless stated otherwise, all operations described use the remote control. Some features may also be available on the Setup menu.

On and off the PBC function **VCD**

PBC stands for Playback Control and refers to special menus and navigation features that are available on some Video CDs.

1. Press DISPLAY and press ◀ / ▶ to select the PBC icon.
2. Press ▲ / ▼ to set the PBC mode to [On] or [Off].
[On] Video CDs are played according to the PBC, if available.
[Off] Video CDs are played the same way as Audio CDs.

Moving to another TITLE

+RW +R DVD

When a disc has more than one title, you can move to another title as follows:

1. Press DISPLAY during playback then use ◀ / ▶ to select the title icon then press ENTER.
2. Press the appropriate numbered button (0-9) or ▲ / ▼ to select a title number.

Tip:

You can also select title in stop mode. Press DISPLAY twice and title icon appears. Use number button to select a title number then press ENTER. The title's playback starts.

Moving to another CHAPTER/TRACK

When a title on a disc has more than one chapter or a disc has more than one track, you can move to another chapter/track as follows:

- Press SKIP ◀◀ or ▶▶ briefly during playback to select the next chapter/track or to return to the beginning of the current chapter/track.
- Press SKIP ◀◀ twice briefly to step back to the previous chapter/track.
- To go directly to any chapter/track during playback, press DISPLAY and press ◀ / ▶ to select the chapter/track icon. Then, input the chapter/track number or use ▲ / ▼.

Search

1. Press SCAN (◀◀ or ▶▶) during playback.
2. Press SCAN (◀◀ or ▶▶) repeatedly to select the required speed.
DVD; 5 steps (forward and backward)
Video CD, Audio CD; 3 steps (forward and backward)
3. To exit SEARCH mode, press PLAY.

Still Picture and Frame-by-Frame

Playback **+RW** **+R** **DVD** **VCD**

1. Press PAUSE/STEP (||) during playback. Advance the picture frame-by-frame by pressing PAUSE/STEP (||) repeatedly.
2. To exit still motion mode, press PLAY.

Pause **ACD**

1. Press PAUSE/STEP (||) during playback.
2. To return to playback, press PLAY (▶) or press PAUSE/STEP (||) again.

Slow Motion **+RW** **+R** **DVD** **VCD**

1. Press PAUSE/STEP (||) during playback.
The recorder will now go into PAUSE mode.
2. Use the SCAN (◀◀ or ▶▶) to select the required speed.
DVD; 4 steps (forward and backward)
Video CD; 3 steps (forward only)
3. To exit Slow Motion mode, press PLAY (▶).

Repeat

Press REPEAT to select a desired repeat mode.

- [CH] repeats the current chapter. (DVD)
- [TT] repeats the current title. (DVD)
- [ALL] repeats the all tracks. (Video CD, Audio CD)
- [Track]: repeats the current track. (Video CD, Audio CD)
- [Off] does not play repeatedly.

Note:

On a Video CD with PBC, you must set PBC to OFF on the On-Screen Display to use the Repeat function. See page 24.

Repeat A-B

To repeat a sequence.

1. Press A-B at your chosen starting point. "A -" appears briefly on the TV screen.
2. Press A-B again at your chosen end point. "A-B" appears briefly on the TV screen and the repeat sequence begins.
3. Press A-B again to cancel.

Time Search

To start playing at any chosen time on the disc:

1. Press DISPLAY during playback. The Time icon shows the elapsed playing time.
2. Press ◀ / ▶ to select the time Time icon and "0:00:00" appears.
3. Input the required start time in hours, minutes, and seconds from left to right.
Playback starts from the selected time.

Note:

On a Video CD with PBC, you must set PBC to OFF on the On-Screen Display to use the Repeat function. See page 24.

Zoom **+RW** **+R** **DVD** **VCD**

The Zoom function allows you to enlarge the video image and to move through the enlarged image.

1. Press ZOOM during playback or still playback to activate the Zoom function.
Each press of the ZOOM button changes the TV screen in the sequence shown below.
x2 size → x4 size → normal size
2. Use the ◀ / ▶ / ▲ / ▼ buttons to move through the zoomed picture.
3. To resume normal playback, press ZOOM repeatedly until the normal picture appears.

Note:

The zoom function may not work for some DVDs.

Random **ACD**

1. Press DISPLAY and press ◀ / ▶ to select the Random icon.
2. Use ▲ / ▼ to select [On] or [Off] then press ENTER.
[On] The unit automatically begins Random Playback.
[Off] To return to normal playback.

Tip:

By pressing SKIP ▶▶ during Random playback, the unit selects another track and resumes Random playback.

Marker Search **+RW** **+R** **DVD** **VCD**

To enter a Marker

You can start playback from up to 12 memorized points. To enter a marker, press MARKER at the desired point on the disc. The Marker icon appears on the TV screen briefly. Repeat to enter up to 12 markers.

To Recall or Clear a Marked Scene

1. During disc playback, press SEARCH. The marker search menu appears on the screen.
2. Use ◀ / ▶ / ▲ / ▼ to select a marked scene that you want to recall or clear.
3. Press ENTER and playback starts from the marked scene. Or, press CLEAR and the marked scene is erased from the marker search menu.
4. Press RETURN to exit the menu.



Checking the Contents of DVD Video Discs: Menus

DVDs may contain menus that allow you to access special features. To open the disc menu, press MENU/LIST. Then, press the appropriate number button to select an option. Or, use the ◀ / ▶ / ▲ / ▼ buttons to highlight your selection, then press ENTER.

Title Menu **DVD**

1. Press TITLE.
If the current title has a menu, the menu will appear on the TV screen. Otherwise, the disc menu may not appear.
2. The menu may contain camera angles, spoken language and subtitle options, and chapters for the title.

Disc Menu **DVD**

1. Press MENU/LIST.
The disc menu is displayed.
2. To remove the disc menu, press MENU/LIST again.

Camera Angle **DVD**

If the disc contains scenes recorded at different camera angles, you can change to a different camera angle during playback.

1. Press DISPLAY and press ◀ / ▶ to select the Angle icon.
2. Use ▲ / ▼ to select a desired angle.

Tip:

The ANGLE indicator will blink on the TV screen at scenes recorded at different angles to indicate that angle switching is possible.

Changing the Audio Soundtrack

DVD **+RW** **+R**

Press AUDIO repeatedly during playback to hear a different audio language or audio soundtrack if available.

Note:

Some discs feature both Dolby Digital and DTS soundtracks. There is no analog audio output when DTS is selected. To listen to the DTS soundtrack, connect this recorder to a DTS decoder via one of the digital outputs. See page 9 for connection details.

Changing the Audio Channel **VCD** **ACD**

Press AUDIO repeatedly during playback to hear a different audio channel.

Subtitles **DVD**

Press SUBTITLE repeatedly during playback to see the different subtitle languages.

Instant Skip **+RW** **+R** **DVD**

Each press INSTANT SKIP skips forward 30 seconds.

Note:

If ⓪ appears, the feature is not available on the disc.

Last Condition Memory **DVD**

This recorder memorizes the user settings for the last disc that you have viewed. Settings remain in memory even if you remove the disc from the recorder or switch off the recorder. If you load a disc that had its settings memorized, the latest stop position is automatically recalled.

Notes:

- Settings are stored in memory for use any time.
- Settings are stored in memory only when [Last Memory] option is set to [On] on the setup menu.
- This recorder does not memorize settings of a disc if you switch off the recorder before commencing to play it.

Sound Effect **+RW +R DVD VCD**

You can choose among 7 sound mode.

1. Press DISPLAY and press ◀ / ▶ to select the Sound Mode icon.
2. Use ▲ / ▼ to select a desired sound mode then press ENTER.

Using the Program Play Feature **ACD**

To use the Program Playback option, you must enter the order in which you want the tracks on the Audio CD to play by creating a program.

1. Press DISPLAY and press ◀ / ▶ to select the Program icon.
2. Press and ENTER and the Program screen appears.
3. Use the number and ▲ / ▼ / ◀ / ▶ buttons to enter the track number.
4. Continue adding tracks as explained in steps 3 until your program is complete.



- Use CLEAR button to delete the track number.
 - Use SKIP (◀◀ or ▶▶) button to move to previous or next page.
5. You can play your program by highlighting Play and pressing ENTER.

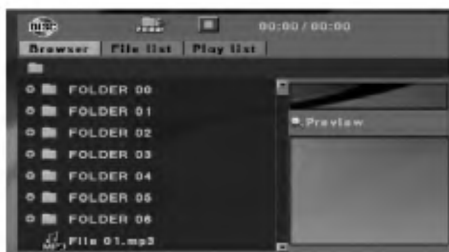
Note:

The program will be erased when you stop the playback, remove the disc from the recorder or the recorder is turned off.

Playing an MP3 File

The recorder can play MP3 files on CD-ROM, CD-R/RW or DVD±R/RW discs. Before playing MP3 files, read "About MP3 audio files" on the right.

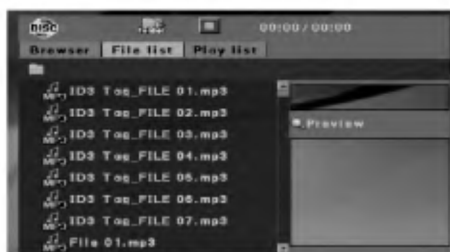
1. Load a disc that contains MP3 files.
The Browser menu appears on the TV screen.



2. On the [Browser] menu, use ▲ / ▼ and ENTER to open a folder contains MP3 files. The file and sub folder list for the folder appears. To disappears MP3 files and sub folders, select the folder then press ENTER again.
3. Press ▲ / ▼ to select an MP3 file then press ENTER. Playback starts.
4. To stop playback at any time, press STOP.

Tips:

- You can select an MP3 file on the [File list] menu. Press ◀ repeatedly to select [File list] word on top of the menu then press ENTER and the all files except folders will display.



- To view the TV program and exit the menu, press STOP repeatedly. To return to the [Browser] menu, press MENU/LIST.
- To show other pages, press SKIP ◀◀ or ▶▶ briefly in stop mode (when "■" appears on the menu.)

About MP3 audio files

MP3 file compatibility with this recorder is limited as follows:

- Sampling frequency: within 8 - 48 kHz
- Bit rate: within 8 - 320kbps
- The recorder cannot read an MP3 file that has a file extension other than ".mp3".
- CD-R physical format should be "ISO 9660" and "JOLIET".
- If you record MP3 files using software that cannot create a file system (eg. Direct-CD) it is impossible to playback MP3 files. We recommend that you use Easy-CD Creator, which creates an ISO 9660 file system.
- File names should have a maximum of 8 letters and must incorporate an .mp3 extension.
- They should not contain special letters such as / ? * : " < > | etc.
- The total number of folders and files on the disc should be less than 4,500 and the total number of files in a folder should be less than 500.

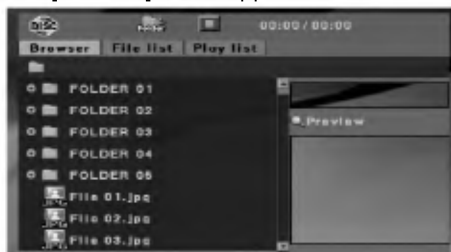
This recorder requires discs and recordings to meet certain technical standards in order to achieve optimal playback quality. Pre-recorded DVDs are automatically set to these standards. There are many different types of recordable disc formats (including CD-R containing MP3 files) and these require certain pre-existing conditions (see above) to ensure compatible playback.

Customers should note that permission is required in order to download MP3 files and music from the Internet. Our company has no right to grant such permission. Permission should always be sought from the copyright owner.

Viewing a JPEG File

The recorder can play JPEG files on the CD-R/RW or DVD±R/RW. Before playing JPEG recordings, read "About JPEG image files" on page 30.

1. Load a disc that contains JPEG file.
The [Browser] menu appears on the TV screen.



2. On the [Browser] menu, use ▲ / ▼ and ENTER to open a folder contains JPEG files. The file and sub folder list for the folder appears. To disappears JPEG files and sub folders, select the folder then press ENTER again.
3. Press ▲ / ▼ to select a JPEG file then press ENTER. Slide Show starts.
4. To return to the [Browser] menu during Slide Show, press MENU/LIST.

Tips:

- You can select an JPEG file on the [File list] menu. Press ◀ repeatedly to select [File list] word on top of the menu then press ENTER and the all files except folders will display.



- To view the TV program and exit the menu, press STOP repeatedly. To return to the [Browser] menu, press MENU/LIST.
- To show other pages, press SKIP ◀◀ or ▶▶ briefly in stop mode (when "■" appears on the menu.)

To Pause the Slide Show

1. Press PAUSE/STEP (⏸) during slide show.
2. When you want to continue slide show, press PLAY (▶) or PAUSE/STEP (⏸).

Skip Images

While viewing a picture, press SKIP (◀◀ or ▶▶) once to advance to the next file or return to the previous file.

Rotate Images

Use ◀ / ▶ while viewing a picture to flip the picture clockwise or counterclockwise.

To flip the picture

Press ▲ / ▼ during showing a picture to flip the picture horizontally or a vertically.

Still Picture

1. Press PAUSE/STEP during slide show.
The recorder will now go into PAUSE mode.
2. To return to the slide show, press PLAY or press PAUSE/STEP again.

Zoom

1. Press ZOOM during viewing picture.
The recorder will now go into ZOOM mode.
2. Press SCAN (◀◀ or ▶▶) in ZOOM mode to zoom in or zoom out. (50%, 100%, 150%, 200%)