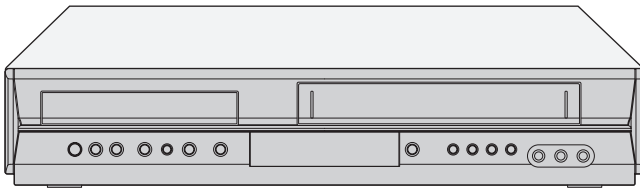


JVC

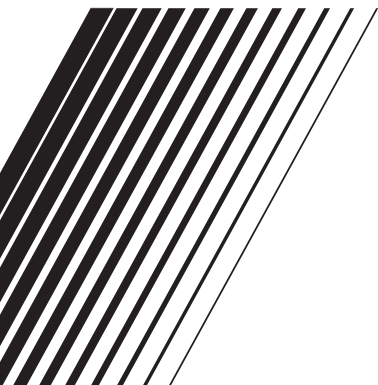


DVD PLAYER & VIDEO CASSETTE RECORDER

HR-XV45SEK



INSTRUCTIONS



EN



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.



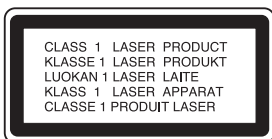
This lightning flash with arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of uninsulated dangerous voltage within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation mark 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 REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE.

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



CAUTION:

This Digital Video Disc Player employs a Laser System. To ensure proper use of this product, please read this owner's manual carefully and retain for future reference, should the unit require maintenance, contact an authorized service location-see service procedure. Use of controls, adjustments or the performance of 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: VISIBLE AND INVISIBLE LASER RADIATION WHEN OPEN AND INTERLOCKS DEFEATED.

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

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

VIDEO Plus+[®]

VIDEO Plus+ and PlusCode are registered trademarks of Gemstar Development Corporation. The VIDEO Plus+ system is manufactured under license from Gemstar Development Corporation.

Notes on copyrights:

It is forbidden by law to copy, broadcast, show, broadcast via cable, play in public, or rent copyright material without permission.

This product features the copy protection function developed by Macrovision. Copy protection signals are recorded on some discs.

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.

SERIAL NUMBER: The serial number is found on the back of this 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. _____


Important notes on controlling this unit

This unit uses one set of controls to operate both DVD and VCR. The following buttons are helpful in successfully controlling each part.

1. **POWER Button**
Press the POWER button on the remote control or front panel to turn on this unit.
2. **DVD Button**
Press DVD button on the remote control when you want to control the DVD.
The DVD indicator will light on the front panel display to show that the DVD is selected.
3. **VCR Button**
Press the VCR button on the remote control when you want to control the VCR.
The VCR indicator will light on the front panel display to show that the VCR is selected.
4. **DVD/VCR Button**
Press the DVD/VCR button on the front panel to toggle control between the DVD and the VCR.

Contents

Introduction 4

Symbol Used in this Manual	4
About the  Symbol Display	4
Notes on Discs	4
Handling Discs	4
Storing Discs	4
Cleaning Discs	4
Types of Playable Discs	5
Regional code	5
Disc-related terms	6
Front Panel	7
Display Window	7
Remote Control	8
Rear Panel	9

Installation and Setup 10

Connecting to a TV & Decoder (or Satellite)	10
Connecting to Optional Equipment	11
Before Operation-VCR part	12-16
Tuning in a video channel on your TV	12
Using your VCR for the very first time	12
Setting the clock Manually	13
To set the colour system	13
How to using the main menu	14
Tuning in TV Stations Automatically	14
Tuning in TV Stations Manually	15
Changing the order of TV Stations	16
Deleting TV stations	16
Before Operation-DVD part	17-21
On-Screen Display	17
Initial Settings	18-21
General Operation	18
LANGUAGE	18
• Menu Language	18
• Disc Audio / Subtitle / Menu	18
DISPLAY	19
• TV Aspect	19
• Display Mode	19
AUDIO	19
• Dolby Digital / DTS / MPEG	19
• Sample Freq. (Frequency)	19
• Dynamic Range Control (DRC)	19
• Vocal	19
OTHERS	20
• PBC	20
• Auto Play	20
• DivX(R) VOD	20
LOCK (Parental Control)	21
• Rating	21
• Password (Security Code)	21
• Area Code	21

Operation 22

Playing a tape	22-24
• CM (Commercial Message) Skip	22
• OPR (Optimum Picture Response)	22
Instant Timer Recording	23
VIDEO Plus+ Programming	24
Timer recording using On Screen Display	25-26

Playing a DVD or Video CD 27-29

General Features	27
Moving to another TITLE	27
Moving to another CHAPTER/TRACK	27
Search	27
Changing the Audio Channel	27
Still Picture and Frame-by-Frame Playback	28
Slow Motion	28
Random	28
Repeat A-B	28
Repeat	28
3D Surround	28
Time Search	28
Zoom	29
Marker Search	29

Special DVD Features 29

Title Menu	29
Disc Menu	29
Camera Angle	29
Changing the Audio Language	29
Subtitles	29

Playing an Audio CD or MP3 Disc 30

Audio CD and MP3 Disc Features	31
Pause	31
Moving to another Track	31
Repeat Track/All/Off	31
Search	31
Random	31
Repeat A-B	31
3D Surround	31

Programmed Playback 32

Repeat Programmed Tracks	32
Erasing a Track from Program List	32
Erasing the Complete Program List	32

Viewing a JPEG Disc 33

Slide Show	33
Still Picture	33
Moving to another File	33
Zoom	33
To rotate picture	33
To listen to MP3 music watching picture	33

Playing a DVD VR format Disc 34

Maintenance and Service 34

Playing a DivX Movie Disc 35

Additional Features-VCR part 36-37

On Screen Display	36
Tape Counter Memory Stop	36
Video Doctor (Self-Diagnosis)	36
Hi-Fi Stereo Sound System	37
Wide Screen Compatibility 16:9	37
To set the decoder	37

Additional Features 38

Last Scene Memory	38
Screen Saver	38

Copying from DVD To VCR 38

Recording from another video recorder 38

Reference 39

Language Codes	39
Country Codes	39
Troubleshooting	40
Specification	41
Precautions	42

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 DVD player. 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.

DVD DVD and finalized DVD±R/RW

VCD Video CDs


CD Audio CDs

MP3 MP3 Discs

JPEG JPEG Discs

DivX DivX Discs

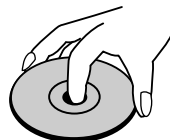
About the Symbol Display

“” 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.

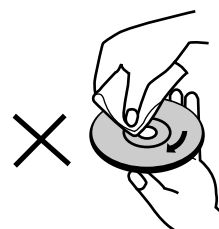
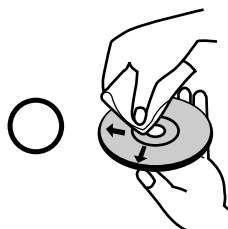


Storing Discs

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.

Selecting the Viewing Source

You must select one of your output sources (DVD or VCR) to view on the TV screen.

• If you want to view DVD deck output source:

Press DVD until DVD indicator in the display window lights and output source of DVD deck is viewed on the TV screen.





• If you want to view VCR deck output source:

Press VCR until VCR indicator in the display window lights and output source of VCR deck is viewed on the TV screen.

Notes:

- If you insert a disc while the DVD+VCR is in the VCR mode, the DVD+VCR will switch to DVD mode automatically.
- If you insert a cassette tape without prevention tab while the DVD+VCR is in the DVD mode, the DVD+VCR will switch to VCR mode automatically.

Types of Playable Discs

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

In addition, this unit plays DivX file, DVD -R, DVD +R, DVD -RW, DVD +RW, SVCD, and CD-R / CD-RW that contains audio titles, MP3 or JPEG files.

RW COMPATIBLE This indicates a product feature that is capable of playing DVD-RW discs recorded with Video Recording format.

Notes:

- Depending on the conditions of the recording equipment or the CD-R/RW (or DVD -R, DVD +R, DVD -RW, DVD +RW) disc itself, some CD-R/RW (or DVD -R, DVD +R, DVD -RW, DVD +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) since they may result in malfunctions.

Notes on DVDs and Video CDs

Some playback operations of DVDs and Video CDs may be intentionally programmed by software manufacturers. This unit plays DVDs and Video CDs according to disc content designed by the software manufacturer, therefore some playback features may not be available or other functions may be added.

Manufactured under license from Dolby Laboratories. "Dolby", and the double-D symbol are trademarks of Dolby Laboratories.

DTS and DTS Digital Out are trademarks of Digital Theater Systems, Inc.

Regional code

This DVD player is designed and manufactured for playback of region "2" encoded DVD software. This unit can play only DVD discs labeled "2" or "ALL".



Notes on Regional Codes

- Most DVD discs have a globe with one or more numbers in it clearly visible on the cover. This number must match your DVD player's regional code or the disc cannot play.
- If you try to play a DVD with a different region code from your player, the message "Check Regional Code" appears on the TV screen.

Disc-related terms

DVD \pm R / DVD \pm RW

DVD -R and DVD +R are two different standards for recordable DVD drives and discs. This format allows information to be recorded onto the DVD disc only once. DVD +RW and DVD -RW are 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. There are no dual layer single sided recordable discs.

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.

DivX

DivX is the name of a revolutionary new video codec which is based on the new MPEG-4 compression standard for video. You will be able to play DivX movies using this DVD player.

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.

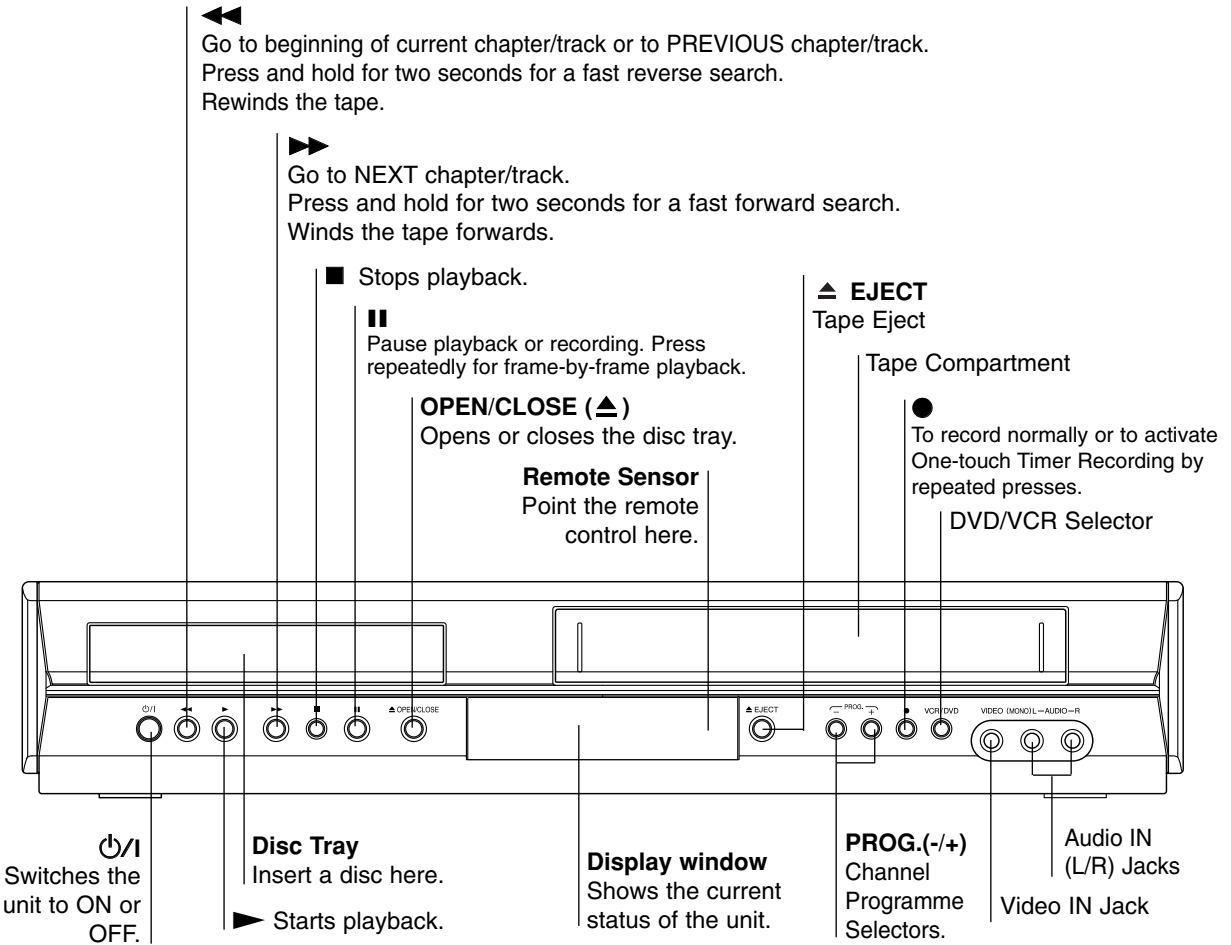
Scene (VCD)

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.

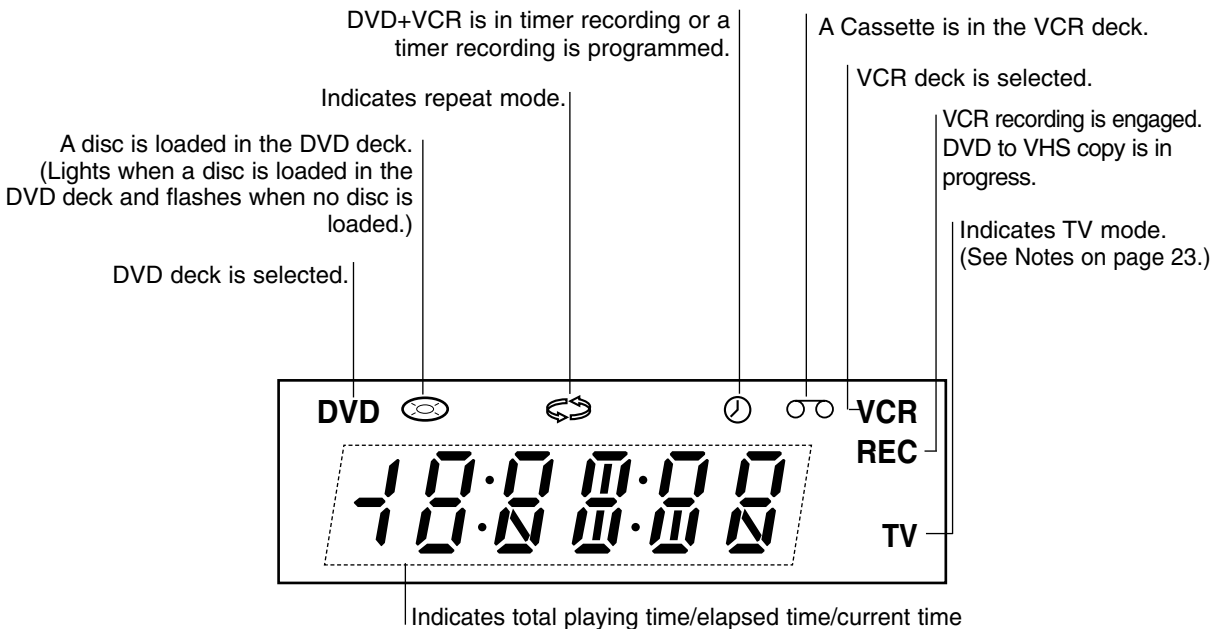
Track

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.

Front Panel

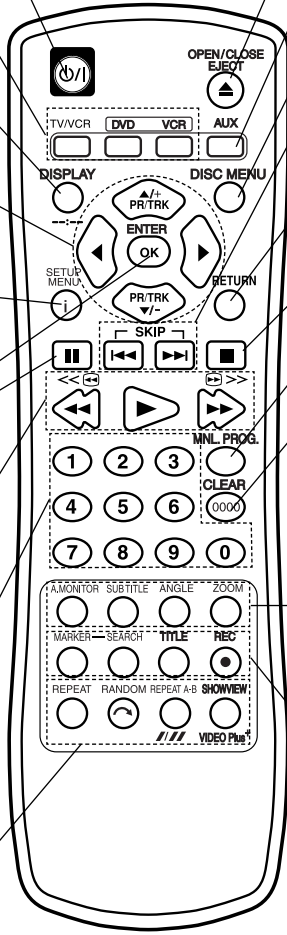


Display Window



Remote Control

- ⏻/⏷**
Switches DVD+VCR ON and OFF.
- TV/VCR ●**
To view channels selected by the VCR tuner or by the TV tuner.
- DVD ●**
Select the DVD+VCR function mode to DVD.
- VCR ●**
Select the DVD+VCR function mode to VCR.
- DISPLAY**
- - - -
- Accesses On-Screen Display (DVD).
- Shows you the current time or counter (VCR).
- ◀/▶/▲/▼**
- Selects menu options.
- PR/TRK (+/-): Selects VCR channels. Adjusts manually the tape's picture on the screen.
- SETUP/MENU (i)**
Accesses or removes DVD Setup menu and VCR menu.
- ENTER/OK**
Confirms menu selections. Displays functions on the TV screen.
- ⏸**
- Pause playback or recording.
- Press repeatedly for frame-by-frame playback.
- ◀◀ (◀◀) ●**
- For fast reverse picture search.
- Rewinds the tape during the STOP mode.
- ▶▶ (▶▶) ●**
Starts playback.
- ▶▶▶ (▶▶▶) ●**
- For fast forward picture search.
- Advances the tape during the STOP mode.
- 0-9 numerical buttons**
Selects numbered options in a menu.
- REPEAT ●**
Repeat chapter, track, title or all.
- RANDOM (◡) ●**
- Plays tracks in random order.
- CM SKIP
- REPEAT A-B ●**
Repeats sequence between two points (A and B)
- /// ●**
Selects recording speed.
- VIDEO Plus+ ●**
To display the programme menu for VIDEO Plus+ programming.



- OPEN/CLOSE, EJECT (▲)**
- Ejects the tape in the VCR deck.
- Opens and closes the disc tray.
- AUX**
Select input source for recording into tape.
- DISC MENU**
Accesses menu on a DVD disc.
- SKIP (◀◀ / ▶▶)**
Skip to beginning of current chapter or track, press twice in quick successions to go to previous chapter or track.
Skip to next chapter or track.
- RETURN**
- Removes the setup menu.
- Displays the menu of a video CD with PBC.
- Stops playback or recording.
- MNL. PROG.**
Places a track on the program list.
- CLEAR (0000)**
Removes a track number on the program menu or a mark on the MARKER SEARCH menu.
- A.MONITOR**
Selects an audio language (DVD) or an audio channel (VCD).
- SUBTITLE**
Selects a subtitle language.
- ANGLE**
Selects a DVD camera angle, if available.
- ZOOM**
Enlarges DVD video image.
- MARKER**
Marks any point during playback.
- SEARCH**
Displays Marker Search menu.
- TITLE**
Displays the disc's Title menu, if available.
- REC (●)**
Records normally or activates One touch Timer Recording with repeated presses.

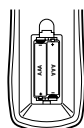
Remote Control Operation

Point the remote control at the remote sensor and press the buttons.



Do not mix old and new batteries and never mix different types of batteries such as standard, alkaline, etc.

Remote control battery installation



Detach the battery cover on the rear of the remote control, and insert two batteries (size AAA) with + and - aligned correctly.

Rear Panel

AERIAL

Connect the aerial using this jack.

DVD/VCR OUT (VIDEO/AUDIO (Left/Right))

Connect to a TV with video and audio inputs.

AUDIO OUT (Left/Right) (DVD EXCLUSIVE OUT)

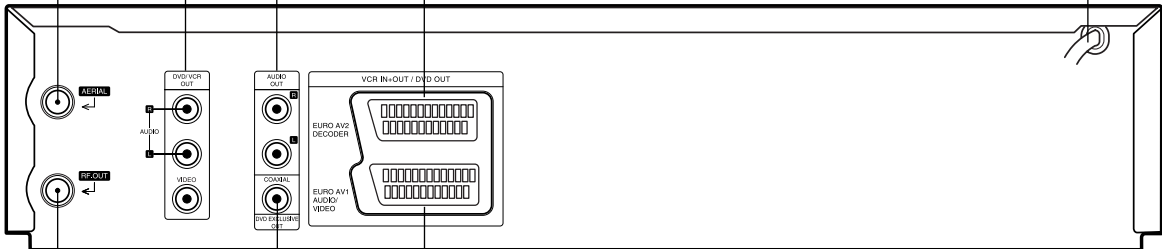
Connect to an amplifier, receiver or stereo system.

EURO AV2 DECODER (VCR IN+OUT/DVD OUT)

Connect to pay-TV decoder, Set Top Box or another video recorder.

AC Power Cord

Connect to a power source.



EURO AV1 AUDIO/VIDEO (VCR IN+OUT/DVD OUT)

Connect to your TV set or another video recorder.

COAXIAL (DVD EXCLUSIVE OUT)

(Digital audio out jack)

Connect to digital (coaxial) audio equipment.

RF.OUT

Connect to your TV using this jack.



Do not touch the inner pins of the jacks on the rear panel. Electrostatic discharge may cause permanent damage to the unit.

Installation and Setup

Tips:

- Depending on your TV and other equipment there are various ways you can connect the player.
- Please refer to the manuals of your TV, VCR, stereo system or other devices as necessary for additional connection information.

Notes:

- The picture and sound of a nearby TV, VCR, or radio may be distorted during playback. Position the units away from each other or turn off the unit after removing the disc.
- Make sure the DVD+VCR is connected directly to the TV and tune the TV to the correct video input channel.
- Do not connect the DVD+VCR's AUDIO OUT jack to the phono in jack (record deck) of your audio system. Do not connect the DVD+VCR via another VCR. The DVD image could be distorted by the copy protection system.

Connecting to a TV & Decoder (or Satellite)

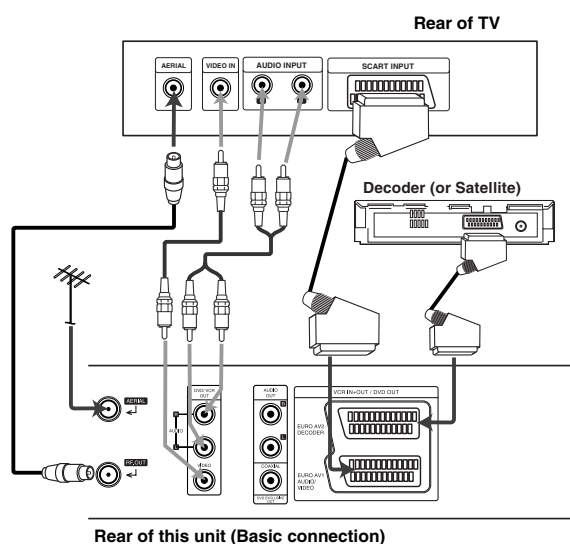
Make one of the following connections, depending on the capabilities of your existing equipment.

Basic connection (AV)

1. Connect the **EURO AV1 AUDIO/VIDEO** on the rear panel of this unit to the SCART input socket on the TV using a SCART lead (not supplied). For TV without SCART, connect the yellow VIDEO OUT jack and DVD/VCR AUDIO OUT jacks of this unit to the TV.
2. Some TV broadcasters transmit encoded television signals which you can only see with a purchased or rented decoder. You can connect such a decoder (descrambler) to this unit.

Basic connection (RF)

1. Connect the RF antenna cable from your indoor/outdoor antenna to **AERIAL** jack on the rear panel of this unit.
2. Connect the supplied RF antenna cable from the **RF.OUT** jack on the rear panel of this unit to your television's Antenna Input.



Connecting to Optional Equipment

Connecting to an amplifier equipped with two channel analog stereo or Dolby Pro Logic II/Pro Logic

Connect the Left and Right AUDIO OUT jacks on this unit to the audio left and right in jacks on your amplifier, receiver or stereo system, using the audio cables.

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 this unit's DIGITAL AUDIO OUT jack (COAXIAL) to the corresponding in jack on your amplifier. Use an optional digital (coaxial) audio cable.
2. You will need to activate this unit's digital output. (See "AUDIO" on page 19).

Digital Multi-channel sound

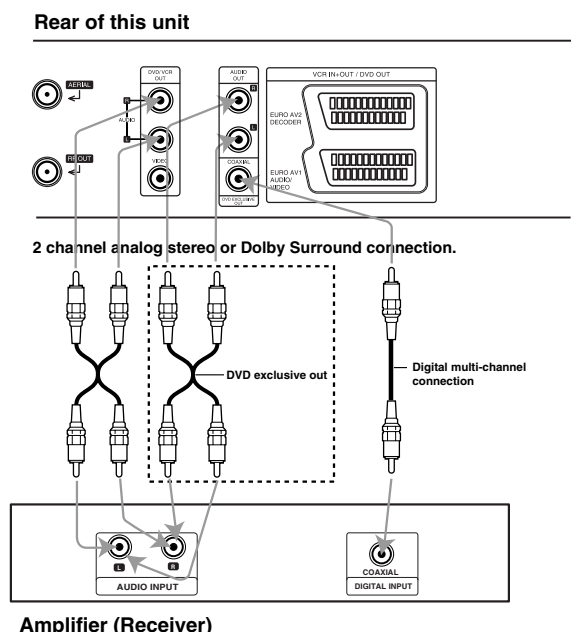
A digital multi-channel connection provides the best sound quality. For this you need a multi-channel Audio/Video receiver that supports one or more of the audio formats supported by your unit (MPEG 2, Dolby Digital and DTS). Check the receiver manual and the logos on the front of the receiver.

Warning:

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.
- To see the audio format of the current DVD in the On-Screen Display, press **A.MONITOR**.



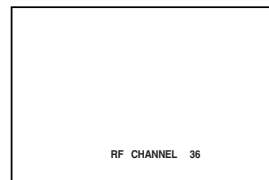
Before Operation-VCR part

Tuning in a video channel on your TV

Notes:

- The output frequency of this DVD+VCR is set at UHF channel 36. If channel 36 is already used by another TV station, or if the picture is distorted, you can change the transmitter channel of your DVD+VCR. Stages 5 ~ 8 will show you how to change the output frequency of your DVD+VCR.
- Your TV receives signals from the DVD+VCR like another TV station. You have to select a channel number on your TV and tune it in so that you may watch video tapes. If you have used a SCART then your TV should already have a dedicated video channel built into it, usually called AV.

1. Make sure that you have correctly installed your DVD+VCR as described earlier in this book. Press **ON/OFF** to turn on your DVD+VCR. Turn on your TV.
2. Insert a pre-recorded video tape into your DVD+VCR and press **▶** on the remote control. Select a TV channel which you wish to watch video.
Don't worry if you don't have a video-tape to play at this stage! If you switch your DVD+VCR on and continue stages **3 ~ 4**, instead of seeing video playback tune your TV until you see a bright blue screen.
3. Tune this channel until the video picture is sharp and the sound is clear.
If you have used a SCART or AUDIO and VIDEO cables you will not have to tune your TV, simply select the AV channel. The AV channel is already pre-tuned for optimum video playback on your TV.
4. Store this channel on your TV.
You will need to look at the TV instruction book if you do not know how to do this.
5. **Only carry out stages 5 ~ 8 if you cannot obtain clear video playback as described in stages 1 ~ 4.**
Select a TV channel which you wish to watch video.
Make sure that your DVD+VCR is in standby pressing **ON/OFF** on the remote control (only the clock will be displayed).
6. Press **PROG. (-/+)** on the front of your DVD+VCR for more than 4 seconds.
RF36 will appear in the display window.
The following picture will be displayed on the TV screen.



7. Use **PROG. (-/+)** to select another video channel. You may select any channel number between 22 and 68.

8. Select a TV channel which you wish to watch video.

Press **ON/OFF** on the front of your DVD+VCR when you have finished.

Tune this channel so that a bright blue screen appears.

Store this channel on your TV.

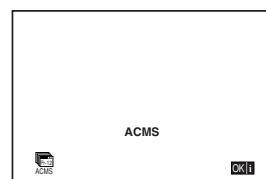
Notes:

Make sure that you have correctly installed your DVD+VCR and successfully tuned in a dedicated video channel on your TV. If you do not tune in a dedicated video channel on your TV you will be unable to view and record video tapes!

Using your VCR for the very first time

Following picture will display on the TV screen when you have just connected your video recorder for the very first time.

To make tuning TV stations, please follow stages 3 to 4 as shown "ACMS" (see p.14).

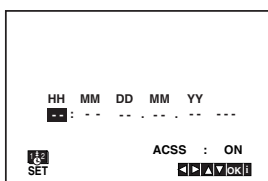


Setting the clock Manually

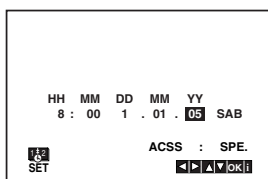
The clock in your VCR controls time and date settings for your VCR.

The clock is set automatically during **ACMS** (Automatic Channel Memory System) when your VCR detects a channel that broadcasts a Teletext signal. If the broadcast signal is weak the clock will not be set and will require setting manually.

1. Press **i**.
Press **◀** or **▶** to select **SET**.
Press **OK**.
The ACSS mode can be set to "OFF" by pressing **OK** if you want to set the time manually.



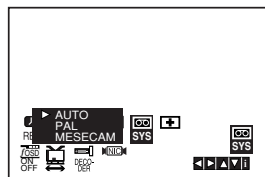
2. Use the **▲** or **▼** on the remote control to alter the **HOURS, MINUTES, DAY, MONTH** and **YEAR**. Please note your VCR uses a 24 hour clock. e.g. 1pm will be displayed as 13:00. The day of the week will appear automatically when you enter the year.
3. If you make a mistake press **◀** or **▶** and enter the correct details.



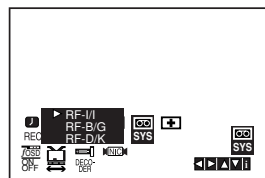
4. Press **i** to return to a TV picture.

To set the colour system

1. Press **i**.
2. The main menu will appear on the TV screen.
3. Press **◀** or **▶** to select the **SYS** and press **OK**.
4. Press **▲** or **▼** to select according to the **COLOUR** system used.



5. Press **◀** or **▶** to select the **RF AUDIO**. Press **▲** or **▼** to select according to the **RF AUDIO** used.

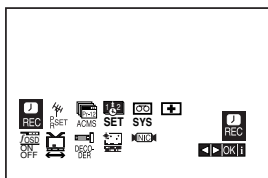


6. Press **i** to remove the menus from the TV screen.

How to using the main menu

This DVD+VCR can easily be programmed by using the menus displayed on screen. The menus are controlled from the Remote Control Handset.

1. Switch on your TV set and video recorder by pressing the **⏻/I** button.
2. Press **i** button.
The main menu will appear on the TV screen.



- **REC** - Timer recording setting (see p. 25).
- **PR SET** - Manual tuning setting (see p. 15).
- **ACMS** - ACMS (Automatic Channel Memory System) (see p. 14).
- **SET** - Date & clock setting (see p. 13).
- **SYS** - To set the Colour TV System (see p. 13).
- **⊠ (Dr.)** - To check a problem with your VCR (see p. 36).
- **F.OSD ON/OFF** - To display the operational mode of your VCR (see p. 36).
- **16:9/4:3** - To select the aspect ratio of your TV (see p. 37).
- **DECODER** - To use a pay-TV decoder (or Satellite) with your VCR (see p. 37).
- **OPR** - To improve the playback picture (see p. 22).
- **NIC** - To activate or deactivate the NICAM digital sound (see p. 37).

Tip:

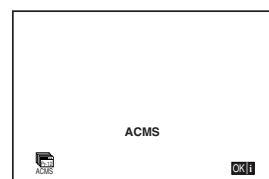
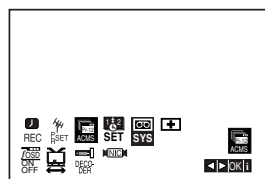
You can change the menu language on the DVD setup menu. (See the Menu Language on page 18.)

3. Press **◀** and **▶** to select the desired menu. Press **OK** and press **▲** or **▼** to select.
4. Press **i** to remove the menus from the TV screen.

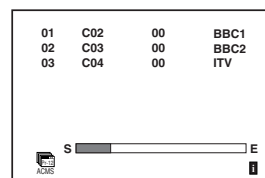
Tuning in TV Stations Automatically

If the TV broadcast signal is weak your VCR may not detect the necessary information and will not be able to store them correctly. To overcome this problem please turn to the **MANUAL TUNING** section on page 15.

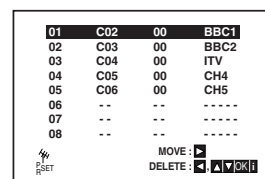
1. Press **⏻/I** to turn on your DVD+VCR.
2. Press **i** button.
The main menu will appear on the TV screen. Press **◀** or **▶** to select the **ACMS**. Press **OK**.



4. Press **OK** to again to start the automatic tuning process.



5. The **TV STATION TABLE** will appear when tuning is completed. Press **i** to save your settings.



Notes:

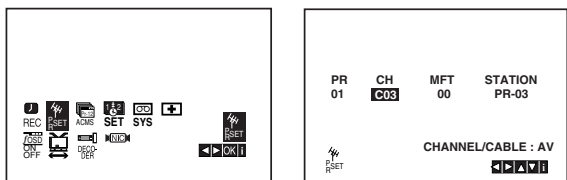
Please note currently only a limited number of TV companies transmit the **Programme Delivery Control (PDC)** signal which enables your DVD+VCR to successfully identify and store them. If your DVD+VCR has difficulty in identifying a TV station please turn the page to find out how to manually tune in and name a TV station. While automatic tuning is taking place the time and date will set automatically. If **- - -** appears in the DVD+VCR display it means that the broadcast signal is weak and the clock was not set. Please turn to **CLOCK SET** section of this book on page 13.

Tuning in TV Stations Manually

In certain areas of the country broadcast signals may be too weak for your DVD+VCR's automatic tuning process to find or assign TV stations correctly.

You must tune in these weaker broadcast stations manually in order for your DVD+VCR to store them.

- Press **i**.
The main menu will appear on the TV screen. Press **◀** or **▶** to select the **PR SET**. Press **OK**.

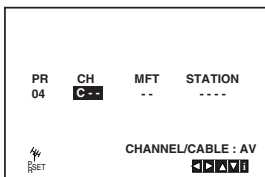


- Press **i**.
The station table will appear.
- Press **▲** or **▼** to select the programme number that you want to tune (for example, PR 04).

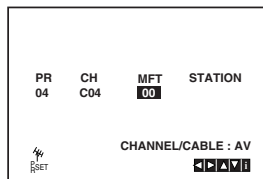
01	C01	00	PR-01
02	C02	00	PR-02
03	C03	00	PR-03
04	--	--	----
05	--	--	----
06	--	--	----
07	--	--	----
08	--	--	----

MOVE: **▶**
DELETE: **◀** **OK**

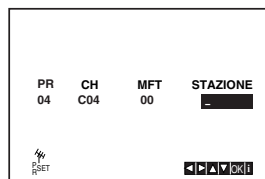
- Press **OK**.
Press **AUX** to select **C** (Standard stations) or **S** (Cable stations):
C02 - C69, S01 - S41.
Enter the channel number of station that you want to tune, use **▲** or **▼** to find the required station.



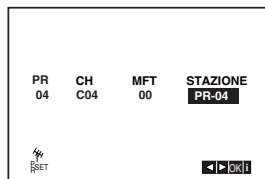
- Searching will stop when it locates a stations.
Press **▶** to select **MFT**.
Control the fine tuning of the station by using **▲** or **▼**.



- Press **▶** to select **STATION** so that you may name your TV station.
Press **OK**.
- Use **▲** or **▼** to select **letters** and **numbers** for the station name.
Use **◀** or **▶** to move back and forth between characters.
Press **OK**.



- Press **i**, confirm the station placement.



If you wish to manually tune other stations repeat stages **3 - 8**.

01	C01	00	PR-01
02	C02	00	PR-02
03	C03	00	PR-03
04	C04	00	PR-04
05	--	--	----
06	--	--	----
07	--	--	----
08	--	--	----

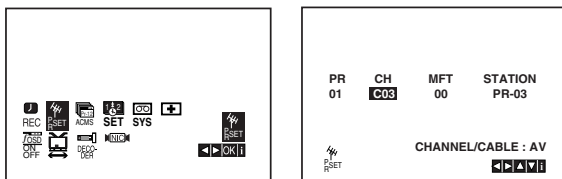
SPOSTA: **▶**
CANCELLA: **◀** **OK**

- Press **i** again.
Your new TV station has now been tuned into your DVD+VCR.

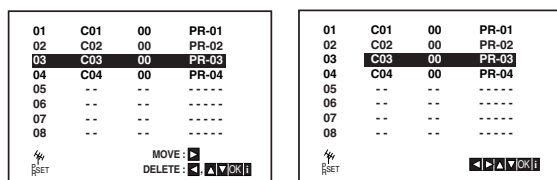
Changing the order of TV Stations

After tuning TV stations into your VCR you may wish to change the order in which they are stored without having to retune them against! The instructions given on this page will show you how you can simply move them into your desired order.

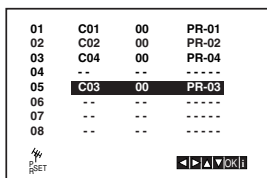
1. Press **i**.
The main menu will appear on the TV screen.
Press **◀** or **▶** to select the **PR SET**.
Press **OK**.



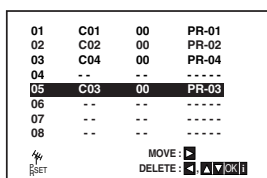
2. Press **i**.
Press **▲** or **▼** to select the **programme number** you want to move (for example, PR 03).
Press **▶**.



3. Press **▲** or **▼** to select the **programme number** you want to move to (for example, PR 05).



4. Press **OK**.
The selected **programme** will be moved to the **new programme number**.
If you wish to move other TV stations repeat stages 1 - 4.

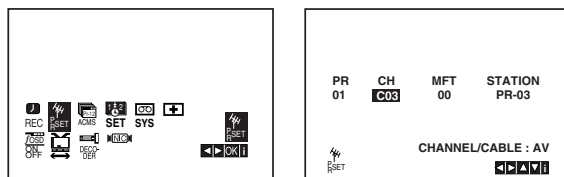


5. Press **i** to remove the menus from the TV screen.

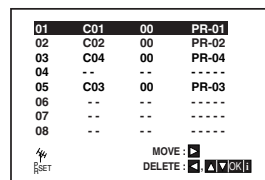
Deleting TV Stations

After tuning TV stations into your VCR you may wish to delete a station. how you can easily delete any unwanted TV stations.

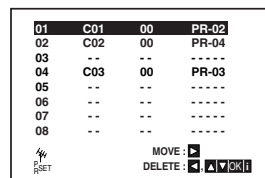
1. Press **i**.
The main menu will appear on the TV screen.
Press **◀** or **▶** to select the **PR SET**.
Press **OK**.



2. Press **i**.
3. Press **▲** or **▼** to select the **programme number** you want to delete. (for example, PR 01)



4. Press **◀**.
After a short while, the selected station will be deleted.
If you wish to delete other TV stations repeat stages 3 - 4.



5. Press **i** to remove the menus from the TV screen.

Before Operation-DVD part

On-Screen Display







You can display the general playback status on the TV screen. Some items can be changed using the menu. To use the on-screen display:

1. Press DISPLAY during playback.
2. Press ▲ / ▼ to select an item. The selected item is highlighted.
3. Press ◀ / ▶ to change the setting. You can also use the number buttons if appropriate (e.g. inputting the title number). For some functions, press ENTER to execute the setting.








Notes:

- Some discs may not provide all of the features shown below.
- If no button is pressed for 10 seconds, the on-screen display disappears.





Playback Status/Restrictions

-  Title Repeat title
-  A - B Repeat sequence
-  1 / 9 Enter a Marker
-  MARKER SEARCH 1 2 3 4 5 6 7 8 9 Marker Search menu
-  Resume play from this point
-  Action prohibited or not available






Example: On-Screen Display during playing DVD Video

Items	Selection Method
Title Number  1 / 3	◀ / ▶, Numbers ENTER
Chapter Number  1 / 12	◀ / ▶, Numbers ENTER
Time search  0:20:09	Numbers, ENTER
Audio language and Digital Audio Output mode  1 ENG 3/2.1CH	◀ / ▶ or A.MONITOR
Subtitle language  1 ENG	◀ / ▶ or SUBTITLE
Angle  1 / 3	◀ / ▶ or ANGLE
Sound  3D SUR	◀ / ▶

Example: On-Screen Display during playing VCD

Items	Selection Method
Track Number (or PBC mode)  1 / 3	◀ / ▶, Numbers ENTER
Time search  0:20:09	Numbers ENTER
Audio Channel  STEREO	◀ / ▶ or A.MONITOR
Sound  3D SUR	◀ / ▶

Example: On-Screen Display during playing divx movie disc

Items	Selection Method
Track Number  1 / 3	◀ / ▶, Numbers ENTER
Time search  0:20:09	Numbers, ENTER
Audio language and Digital Audio Output mode  1 MP3 2/0 CH	◀ / ▶ or A.MONITOR
Subtitle language  1 ENG	◀ / ▶ or SUBTITLE
Sound  3D SUR	◀ / ▶

Initial Settings

By using the Setup menu, you can make various adjustments to items such as picture and sound. You can also set a language for the subtitles and the Setup menu, among other things. For details on each Setup menu item, see pages 18 to 21.

To display and exit the Menu:

Press SETUP MENU to display the menu. A second press of SETUP MENU will take you back to initial screen.

To go to the next level:

Press ► on the remote control.

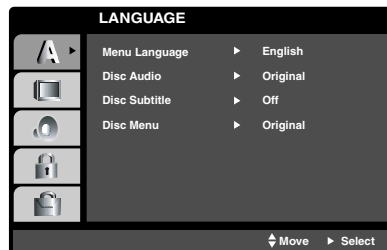
To go back to the previous level:

Press ◀ on the remote control.

General Operation

1. Press SETUP MENU. The Setup menu appears.
2. Use ▲ / ▼ to select the desired option then press ► to move to the second level. The screen shows the current setting for the selected item, as well as alternate setting(s).
3. Use ▲ / ▼ to select the second desired option then press ► to move to the third level.
4. Use ▲ / ▼ to select the desired setting then press ENTER to confirm your selection. Some items require additional steps.
5. Press SETUP MENU or ► to exit the Setup menu.

LANGUAGE



Menu Language

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

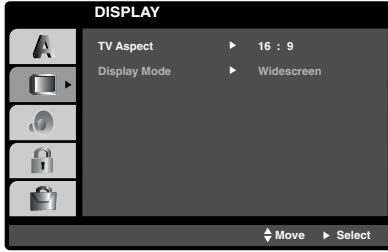
Disc Audio / Subtitle / Menu **DVD**

Select the language you prefer for the audio track (disc audio), subtitles, and the disc menu.

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

Other: 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. If you enter the wrong language code, press CLEAR (0000).

DISPLAY



TV Aspect **DVD**

4:3 : Select when a standard 4:3 TV is connected.

16:9 : Select when a 16:9 wide TV is connected.

Display Mode **DVD**

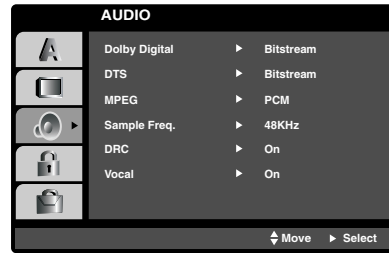
Display Mode setting works only when the TV Aspect mode is set to "4:3".

LetterBox: Displays a wide picture with bands on the upper and lower portions of the screen.

Panscan: Automatically displays the wide picture on the entire screen and cuts off the portions that do not fit.

AUDIO

Each DVD disc has a variety of audio output options. Set this unit AUDIO options according to the type of audio system you use.



Dolby Digital / DTS / MPEG **DVD** **DivX**

Bitstream: Select "Bitstream" if you connect the DVD Player's DIGITAL OUT jack to an amplifier or other equipment with a Dolby Digital, DTS or MPEG decoder.

PCM (for Dolby Digital / MPEG): Select when connected to a two-channel digital stereo amplifier. DVDs encoded in Dolby Digital or MPEG will be automatically downmixed to two-channel PCM audio.

Off (for DTS): If you select "Off", the DTS signal is not output through the DIGITAL OUT jack.

Sample Freq. (Frequency) **DVD**

If your receiver or amplifier is NOT capable of handling 96 kHz signals, select 48 kHz. When this choice is made, this unit automatically converts any 96 kHz signals to 48 kHz so your system can decode them.

If your receiver or amplifier is capable of handling 96 kHz signals, select 96 kHz. When this choice is made, this unit passes each type of signal through without any further processing.

Check the documentation for your amplifier to verify its capabilities.

Dynamic Range Control (DRC) **DVD** **DivX**

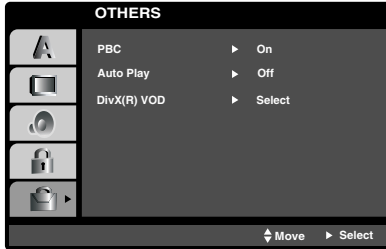
With the DVD format, you can hear a program's soundtrack in the most accurate and realistic presentation possible, thanks to digital audio technology. However, you may wish to compress the dynamic range of the audio output (the difference between the loudest sounds and the quietest ones). This allows you to listen to a movie at a lower volume without losing clarity of sound. Set DRC to On for this effect.

Vocal **DVD**

Set to On only when a multi-channel karaoke DVD is playing. The karaoke channels on the disc mix into normal stereo sound.

OTHERS

The PBC, Auto Play and DivX(R) VOD settings can be changed.



PBC **VCD**

Set Playback Control (PBC) to On or Off.

On: Video CDs with PBC are played according to the PBC.

Off: Video CDs with PBC are played the same way as Audio CDs.

Auto Play **DVD**

You can set up the DVD Player so a DVD disc automatically starts playing whenever the DVD is inserted. If Auto Play mode is set to On, this DVD player will search for title that has the longest playback time and then play back the title automatically.

On: Auto Play function is active.

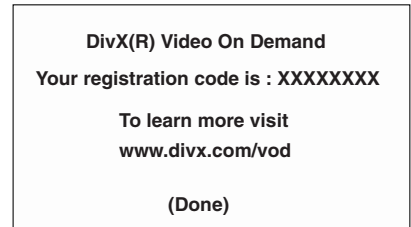
Off: Auto Play function is not active.

Notes:

The Auto Play function may not work for some DVDs.

DivX(R) VOD **DivX**

You can display the DivX DRM (Digital Rights Management) Registration code for your unit only.

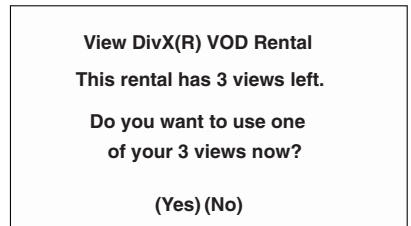


The Registration code is used for VOD (Video-On-Demand) service agent. You can purchase or rent an encrypt move file.

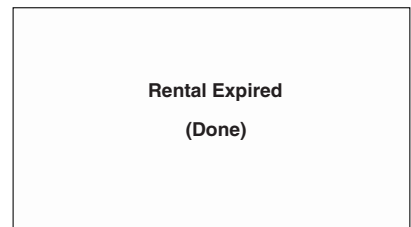
Notes:

If you rent the DivX VOD file, it has several options of viewing limits as shown below.

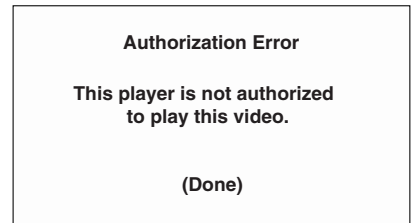
- Display the number which you can watch the file.



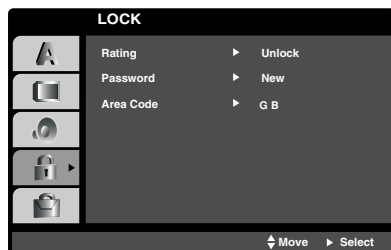
- The rental has been expired.



- Display the authorization error.



LOCK (Parental Control)



Rating **DVD**

Some movies contain scenes that may not be suitable for children to view. Many of these discs contain parental control information that applies to the complete disc or to certain scenes on the disc. Movies and scenes are rated from 1 to 8, depending on the country. Some discs offer more suitable scenes as an alternative.

The parental control feature allows you to block access to scenes below the rating you input, thereby preventing your children from being able to view material you believe is unsuitable.

1. Select "Rating" on the LOCK menu then press ►.
2. To access the Rating, Password and Country Code features, you must input the 4-digit security code you created. If you have not yet entered a security code you are prompted to do so.

Input a 4-digit code and press ENTER. Enter it again and press ENTER to verify. If you make a mistake before pressing ENTER, press CLEAR (0000).

3. Select a rating from 1 to 8 using the ▲ / ▼ buttons.

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

Unlock

If you select unlock, parental control is not active and the disc plays in full.

Notes:

If you set a rating for the player, all disc scenes with the same rating or lower are played. Higher rated scenes are not played unless an alternate scene is available on the disc. The alternative must have the same rating or a lower one. If no suitable alternative is found, playback stops. You must enter the 4-digit password or change the rating level in order to play the disc.

4. Press ENTER to confirm your rating selection, then press SETUP MENU to exit the menu.

Password (Security Code)

You can enter or change password.

1. Select Password on the LOCK menu then press ►.
2. Follow step 2 as shown left (Rating). "Change" or "New" is highlighted.
3. Enter the new 4-digit code, then press ENTER. Input it again to verify.
4. Press SETUP MENU to exit the menu.

If you forget your Security Code

If you forget your security code you can clear it using the following steps:

1. Press SETUP MENU to display the Setup menu.
2. Input the 6-digit number "210499" and the security code is cleared.
3. Enter a new code as described above.

Area Code **DVD**

Enter the code of the country/area whose standards were used to rate the DVD video disc, based on the list in the reference chapter.

1. Select "Area Code" on the LOCK menu then press ►.
2. Follow step 2 as shown left (Rating).
3. Select the first character using ▲ / ▼ buttons.
4. Press ENTER and select the second character using ▲ / ▼ buttons.
5. Press ENTER to confirm your country code selection.



Operation

Playing a tape

You will only be able to load and eject video cassettes when your DVD+VCR is plugged into the mains. Your DVD+VCR may also playback recordings from NTSC tapes (on PAL TV).





Getting a better picture

When a cassette is inserted and playback started, the automatic tracking function works to get the best possible picture automatically. If the quality of the recording is poor, repeatedly press ▲ or ▼ on the remote control to manually adjust the tracking until any distortions have been removed.



1. Make sure that you have correctly connected your DVD+VCR as described earlier in this book. Turn on your TV. Press  to turn on your DVD+VCR. Insert the video cassette into your DVD+VCR. The video cassette should have the window side facing up and the arrow facing away from you.
2. Press  to start playing your tape. If you load a video cassette which has had its record protection tab removed, playback of the cassette will start automatically.

AUTO TRACKING



Your DVD+VCR will automatically adjust the tracking to give the best picture quality. If noise bars appear during playback, adjust the tracking manually by pressing **PR/TRK** (-/+).

3. Press  to still a picture. Press  repeatedly to advance the tape frame by frame. If you press , the picture will be slowed down at about 1/19 times the normal playback. Tapes can be paused for up to 5 minutes. After 5 minutes your DVD+VCR will stop the tape to prevent damaging the tape or your DVD+VCR. Still picture quality can be improved slightly by using ▲ or ▼.
4. Press  to continue playing your tape.

Double speed playback

Press the " (X2)" button during normal playback. The tape will play back at double speed and without sound. Press the " (X2)" button to return to playback at normal speed



Picture search:

During playing back press either  or  to this will enable you to rapidly wind the tape (7 times normal playback) see where you are on the tape.



Notes:

- When playing back tapes that have been overrecorded with new content, the original audio may be audible during auto tracking.
- The image may be distorted during special playback in LP mode.

Logic search:

During fast forwarding or rewinding press and hold  or  the picture will be played back at 7 times normal playback speed.

5. Slow motion playback, Shuttle :

During playing back or still picture press  or . You can reach the following playback speeds. (-7xplay, -3xplay, -play, still, 1/19 slow, play, 2xplay, 7xplay)

To switch off the slow motion and shuttle, press the desired function.

During slow motion and shuttle, the noise bars may appear on the picture according to the status of tape.

If distortions can be seen in the picture, reduce them with ▲ or ▼.



6. Press to end playback.

Press **EJECT** ().

If the end of the tape is reached, your DVD+VCR will stop playback automatically, rewind, stop, eject the tape.


CM (Commercial Message) Skip:




This feature enables you during playback of a tape to skip a commercial break in a few seconds, then resume normal playback.

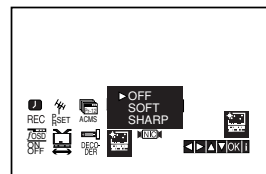
While tape is playing press  on the remote control to skip commercial (or another programme material). Repeatedly press  to skip:

- 1 Press 30 seconds
- 2 Press 60 seconds
- 3 Press 90 seconds
- 4 Press 120 seconds
- 5 Press 150 seconds
- 6 Press 180 seconds

OPR (Optimum Picture Response)

This feature automatically improves playback picture quality by adjusting your DVD+VCR to the condition of the tape. Please note that the OPR icon () will only appear in play that mode when playing a tape.

1. Press **i**.
2. Press  or  to select () OPR.
3. Press **OK**.
4. Press ▲ or ▼ repeatedly to select: **OFF**, **SOFT** or **SHARP**.
Please note you may only set OPR when playing a tape.
5. Press **i** return to screen.



Instant Timer Recording

Your DVD+VCR allows you to make recordings using a variety of simple methods:

Instant Timer Recording start recording immediately for a set period of time or until the video cassette runs out.

Your DVD+VCR incorporates Long Play (LP) which enables you to record up to twice the amount of time on a video cassette. For example an E-180 will record up to 180 minutes using Standard Play (SP); using LP you will be able to record up to 360 minutes. Please note there will be a slight loss in picture and sound quality when using LP.

1. Make sure that you have correctly connected your DVD+VCR as described earlier in this book. Press **ON/OFF** to turn on your DVD+VCR.
2. Insert a video cassette with protection tab into your DVD+VCR.
The video cassette should have the window side facing up and the arrow facing away from you.
3. Press **▲** or **▼** to select the **programme number** you wish to record.
You may also directly select programme number using the **numbered buttons** on the remote control.
4. If you wish to record directly from the SCART or RCA jacks, repeatedly press AUX until the socket you wish to record from is displayed.

AV 1 for recording from EURO AV1 SCART jacks on the rear of your unit.

AV 2 for recording from EURO AV2 SCART jacks on the rear of your unit.

AV 3 for recording from VIDEO IN and AUDIO IN (Left & Right) jacks on the front of your unit.

5. Press **///** if you wish to record in Long Play or Standard Play.
SP will produce improved picture and sound quality, however LP will provide twice as much recording time as SP.
6. Press **REC (●)** on the remote to start recording.

Press **●** on your unit or press **REC (●)** on the remote several times. Each successive press will increase the record time by 30 minutes until you reach a maximum of 9 hours.

7. Press **||** to avoid recording unwanted scenes.
Press **||** to continue recording.

Tapes can be paused for up to 5 minutes; RECP will be displayed when a tape is paused. After 5 minutes your DVD+VCR will stop recording to prevent damaging the tape or your DVD+VCR.

8. Press **■** to end recording.
Press **EJECT (▲)**.

Notes:

- If you do not wish to record on a tape (this can happen quite easily by accident!) remove the protection tab on the back edge of the video cassette.
- It is possible to record on a video cassette with the record protection tab removed by covering the hole with self adhesive tape.
- Remember you can record one programme while watching another by starting your instant recording, press **TV/VCR** to select TV mode and then selecting a different channel on your TV.

VIDEO Plus+ Programming

VIDEO Plus+ greatly simplifies entering the date, channel, start and end times of a Timer Recording by simply entering VIDEO Plus+ Code. VIDEO Plus+ Codes are published in most TV guide magazines; they can vary one to nine numbers in length.

1. Make sure that TV channels have been tuned and stored in correct VIDEO Plus+ order.
Insert a video cassette with protection tab into your DVD+VCR.

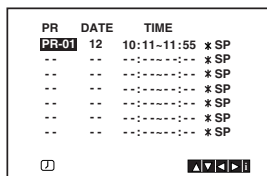


2. Press **VIDEO Plus+**.
3. Press the **numbered buttons** to enter the PlusCode of the TV programme that you wish to record.

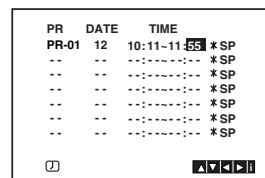
If you make a mistake press **◀** then enter the revised number.



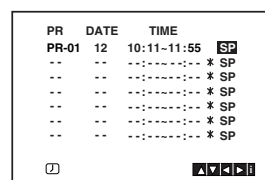
4. Press **OK**.
If **PLEASE CHECK** is displayed it means that you have entered the wrong VIDEO Plus+ numbers, entered the VIDEO Plus+ numbers incorrectly. If “- -” is displayed, you have to enter the programme number of the station, you want to record from.



5. Press **◀** or **▶** to select the settings that you wish to revise. (PR, DATE, TIME VPS/PDC and SP).
Press **▲** or **▼** to enter the correct information.



6. Press **▶** to select the recording speed.
Press **▲** or **▼** to select the desired tape speed (SP, IP, or LP).
IP mode determines how much tape is left and switches speed from SP to LP, if necessary, to complete recording the program.
IP mode is not selected when VPS/PDC is ON.
Check that the timer event details are correct.
If you wish to record from AUDIO IN and VIDEO IN on the front or from either of the EURO SCART sockets on the back of VCR, press AUX to select for correct display (AV1, AV2 or AV3).



7. If you want to make another VIDEO Plus+ recording repeat stages 2 - 7.

Press **i** twice.

If **PLEASE CHECK** is displayed, you have entered incorrect information and will need to re-enter the data.

Press **⏻/I** to switch your DVD+VCR power off mode.

⌚ will appear in the video recorder's display while your VCR waits to make the recording.

To watch a DVD during timer recording standby mode, press **⏻/I** and DVD to switch to DVD mode.

8. Press **⏻/I** to end recording.

Notes:

Programme Delivery Control (PDC)

The Programme Delivery Control (PDC) system adjusts the start and end times of a timer record event. This can be particularly useful with sports events which may run over into extra time. The PDC signal is transmitted by the broadcaster and this controls your video recorder's timer. Currently only a limited number of TV companies transmit PDC signals. Please make sure that when recording from channels that do not broadcast PDC that you turn PDC OFF.

Timer recording using On Screen Display


You may set up to seven timer record events within one month of the current date.

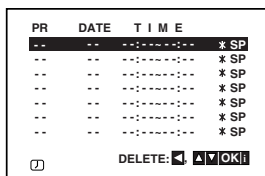
Note:

Before setting the timer make sure that you have set the DVD+VCR clock correctly and you know which stations you have tuned TV stations on your DVD+VCR.

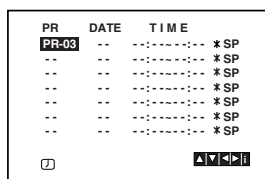
1. Insert a video cassette with protection tab into your DVD+VCR.
The video cassette should have the window side facing up and the arrow facing away from you.

2. Press **i**.

Press **◀** or **▶** to select **REC** ().
Press **OK**.



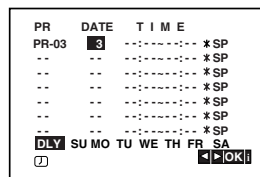
3. Press **OK** to start setting the timer record event.
4. Use the **▲/▼** to enter the station that you wish to record then press **▶**.



Note:

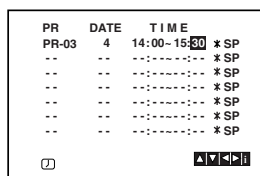
If all timer record events are full press **▲** or **▼** to select the event that you wish to remove and replace.
Press **◀** to delete the event.

5. Use the **▲/▼** to enter the date of the programme.
If you press **OK** before entering the date you may select one of the following automated recording features.
Press **◀** or **▶** to select, then press **OK** to confirm.
DLY To record every day (except Saturday and Sunday) at the same time.
SU~SA To record at the same time every week.

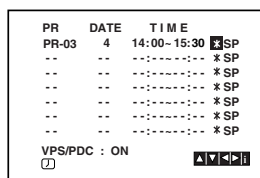


6. Use **▲/▼/◀▶** buttons to enter the recording start and end times of the programme that you wish to record.

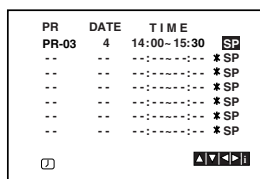
Please note your DVD+VCR uses a 24 hour clock.
e.g. 1pm will be displayed as 13:00.



7. Press **▶** and press **▲** or **▼** to switch VPS/PDC on or off.



8. Press **▶** to select the recording speed.
Press **▲** or **▼** to select the desired tape speed (SP, IP, or LP).
IP mode determines how much tape is left and switches speed from SP to LP, if necessary, to complete recording the program. IP mode is not selected when VPS/PDC is ON.



Timer recording using On Screen Display (Continued)

9. Press **i** to set another timer record event and follow steps 3 to 8.
Check that the timer event details are correct.
Press **i** return to screen.
If **PLEASE CHECK** is displayed, you have entered incorrectly and will need to re-enter the data.
10. Press **⏻** to switch your DVD+VCR to Timer Standby mode.

The timer symbol (⌚) will appear in the display window while your DVD+VCR waits to make the recording.
11. Press **⏻** to end timer recording.

Notes:

- If you want to stop recording while recording is in progress, press **⏻** to stop recording.
- The DVD+VCR will automatically power off when Timer Recording ends.
- During timer recording standby mode, the DVD and VCR mode cannot be operated. To use the DVD+VCR, press **⏻**. After you use the DVD or VCR, press **⏻** again to put the VCR into timer recording standby mode.
- If at a later date you wish to **delete** or **change** any of the settings in timer event memory you may do so without having to enter all the timer event information again. Simply display the timer event screen. Use **▲** or **▼** to select the event that you wish to **delete** or **change**.

Press **◀** to delete the event...or

Press **OK** to change; then press **◀** or **▶** to select; Station, Date, Start and End times and recording speed. Press **▲** or **▼** to enter the correct information.

● If Timer record events Overlap...

Make sure that the preset times of the timer recording events do not overlap. If they do, the earlier programme will always be given priority.

Example:

Programme 1 is programmed to start at 16:00 and end at 17:00.

Programme 2 is programmed to start at 16:30 and end at 17:30.

(In this case, Programme 1 will be recorded in its entirety, but only the last 30 minutes of Programme 2 will be recorded.)

- To watch a DVD while performing a timer recording, press DVD to select DVD mode.

Playing a DVD or Video CD

Playback Setup

1. Turn on the TV and select the video input source connected to the DVD player.
2. Turn on the audio system (if applicable) and select the input source connected to the DVD player.
3. Press OPEN/CLOSE (▲) to open the disc tray and load your chosen disc in the tray, with the playback side down.
4. Press OPEN/CLOSE (▲) to close the tray. Playback starts automatically. If playback does not start, press ►.

In some cases, the disc menu might appear instead:

DVD

Use the ◀ ▶ ▲ ▼ buttons to select the title/chapter you want to view, then press ENTER to start. Press TITLE or DISC MENU to return to the menu screen.

VCD

Use the number buttons to select the track you want to view and press RETURN to return to the menu screen. Menu settings and operating procedures may differ. Follow the instructions on the each menu screen. You also may set PBC to Off (See "PBC" on page 20).

Notes:

- If parental control is set and the disc is not within the rating settings you must input the password. (See "Lock Menu" on page 21.)
- DVDs may have a region code. Your player does not play discs that have a region code different from your player. The region code for this player is 2 (two).

General Features

Note:

Unless stated otherwise, all operations described use the remote control. Some features may also be available on the Setup menu.

Moving to another TITLE DVD

When a disc has more than one title, you can move to another title. Press DISPLAY while playback is stopped then the appropriate number (0-9) or use ◀ / ▶ to move to another title.

You can play any title by inputting its number while playback is stopped.

Moving to another CHAPTER/TRACK

DVD VCD DivX

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

Search DVD VCD DivX

1. Press ◀◀ or ▶▶ during playback.
2. Press ◀◀ or ▶▶ repeatedly to select the required speed.
DVD, DivX disc; X2, X4, X16 or X100
Video CD; X2, X4 or X8
3. To exit SEARCH mode, press ►.

Changing the Audio Channel VCD

Press A.MONITOR repeatedly during playback to hear a different audio channel (Stereo, Left, or Right).

Still Picture and Frame-by-Frame Playback

DVD **VCD** **DivX**

1. Press **II** on the remote control during playback. Advance the picture frame-by-frame by pressing **II** repeatedly.
2. To exit still motion mode, press **▶**.

Slow Motion **DVD** **VCD** **DivX**

1. Press **II** during playback.
The DVD player will now go into PAUSE mode.
2. Use **◀◀** or **▶▶** to select the required speed: **◀◀** 1/16, **◀◀** 1/8, **◀◀** 1/4, or **◀◀** 1/2 (backward), or **▶▶** 1/16, **▶▶** 1/8, **▶▶** 1/4, or **▶▶** 1/2 (forward).
With a Video CD, the Slow speed changes: **▶▶** 1/16, **▶▶** 1/8, **▶▶** 1/4 or **▶▶** 1/2 (forward).
3. To exit Slow Motion mode, press **▶**.

Note:

Slow motion playback in reverse is not possible with Video CDs and DivX Discs.

Random **VCD** **Karaoke DVD**

1. Press **RANDOM** during playback or in stop mode. The unit automatically begins random playback and **RANDOM** appears on the TV screen.
2. Press **RANDOM** again to normal.

Tip:

By pressing **▶▶▶** during random playback, the unit selects another title (track) and resumes random playback.

Note:

On a Video CD with PBC, You must set PBC to Off on the setup menu to use the random function (See "PBC" on page 20).

Repeat A-B **DVD** **VCD** **DivX**

To repeat a sequence.

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

Repeat **DVD** **VCD** **DivX**

You can play a title/chapter/all/track on a disc. Press **REPEAT** during playback to select a desired repeat mode.

DVD Video Discs - Repeat Chapter/Title/Off

- Chapter: repeats the current chapter.
- Title: repeats the current title.
- Off : does not play repeatedly.

Video CDs, Divx discs - Repeat Track/All/Off

- Track : repeats the current track
- All : repeats all the tracks on a disc.
- Off : does not play repeatedly.

Notes:

- On a Video CD with PBC, you must set PBC to Off on the setup menu to use the repeat function (See "PBC" on page 20).
- If you press **▶▶▶** once during Repeat Chapter (Track) playback, the repeat playback cancels.

3D Surround **DVD** **VCD** **DivX**

To produce a 3D surround effect that simulates multi-channel audio from two stereo speakers (instead of the five+ speakers normally required for multi-channel audio from a home theater system).

1. Press **DISPLAY** during playback.
2. Use **▲** or **▼** to select the sound option. The sound option will be highlighted.
3. Use **◀** or **▶** to select "3D SUR".
To turn off the 3D Surround effect, select "Normal".

Time Search **DVD** **VCD** **DivX**

To start playing at any chosen time on the disc:

1. Press **DISPLAY** during playback. The time search box shows the elapsed playing time.
2. Press **▲** / **▼** to select the time clock icon and "-:--:" appears.
3. Input the required start time in hours, minutes, and seconds from left to right. If you enter the wrong numbers, press **CLEAR** (0000) to remove the numbers you entered. Then input the correct numbers.
4. Press **ENTER** to confirm. Playback starts from the selected time.

Zoom **DVD** **VCD** **DivX**

Use zoom to enlarge the video image.

1. Press ZOOM during playback or still playback to activate the Zoom function. The square frame appears briefly in the right bottom of the picture.
2. Each press of the ZOOM button changes the TV screen in the sequence: 100% size → 400% size → 1600% size → screen fit mode → 100% size
Screen fit mode:
You can change the way the image appears on the screen when you're playing a DVD movie. Press ▲/▼ to select between Normal, Enhanced, and Maximum.
3. Use the ◀▶▲▼ buttons to move through the zoomed picture.
4. To resume normal playback, press ZOOM repeatedly or press CLEAR (0000) button.

Notes:

- Zoom may not work on some DVDs.
- Screen fit mode is available for playing the DVD disc, VR disc and movie file.

Marker Search **DVD** **VCD** **DivX****To enter a Marker**

You can start playback from up to nine 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 nine markers.

To Recall or Clear a Marked Scene

1. During disc playback, press SEARCH. The marker search menu appears on the screen.
2. Within 10 seconds, press ◀ / ▶ to select a marker number that you want to recall or clear.
3. Press ENTER and playback starts from the marked scene. Or, press CLEAR (0000) and the marker number is erased from the list.
4. You can play any marker by inputting its number on the marker search menu.

Special DVD Features**Checking the contents of DVD discs: Menus**

DVDs may offer menus that allow you to access special features. To use the disc menu, press DISC MENU. Input the corresponding number 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 appears on the screen. Otherwise, the disc menu may appear.
2. The menu offers features such as camera angles, spoken language and subtitle options, and chapters for the title.
3. Press TITLE to exit.

Disc Menu **DVD**

Press DISC MENU and the disc menu is displayed. Press DISC MENU again to exit.

Camera Angle **DVD**

If the disc contains scenes recorded at different camera angles, you can change to a different camera angle during playback. Press ANGLE repeatedly during playback to select a desired angle. Note that the number of the current angle appears on the display.

Changing the Audio Language **DVD** **DivX**

Press A.MONITOR repeatedly during playback to hear a different audio language or audio track. With DVD-RW discs recorded in VR mode that have both a main and a Bilingual audio channel, you can switch between Main (L), Bilingual (R), or a mix of both (Main + Bilingual) by pressing AUDIO.

Subtitles **DVD** **DivX**

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

Note:

- The subtitle file of the DivX file is displayed only smi, srt and sub.
- If there is no information or there is a code that can not read in the DivX file, " 1 " or etc. are displayed.

Playing an Audio CD or MP3 Disc

The DVD player can play MP3 formatted recordings on CD-ROM, CD-R, or CD-RW discs.

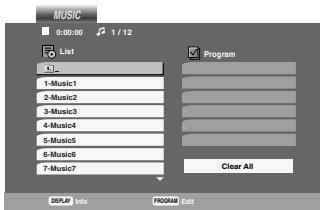
Audio CD

Once you insert an audio CD a menu appears on the TV screen. Press ▲ / ▼ to select a track then press ► or ENTER and playback starts.



MP3


1. Press ▲ / ▼ to select a folder, and press ENTER to see the folder contents.
2. Press ▲ / ▼ to select a track then press ► or ENTER. Playback starts.



ID3 TAG

- When playing a file containing information such as track titles, you can see the information by pressing DISPLAY. [Song, Artist, Album, Comment, Genre]
- If there is no information, “No ID3 TAG” appear on the menu screen.

Tip:

- If you are in a file list on the MUSIC menu and want to return to the Folder list, use the ▲ / ▼ to highlight  and press ENTER.
- Press DISC MENU to move to the next page.
- On a CD with MP3 and JPEG you can switch MP3 and JPEG. Press TITLE and MUSIC or PHOTO word on top of the menu is highlighted.
- When playing a file containing information such as track titles, you can see the information by pressing DISPLAY.

MP3 disc compatibility with this player is limited as follows:

- Sampling frequency: within 8 - 48 kHz (MP3)
- Bit rate: within 8 - 320kbps (MP3)
- The player cannot read an MP3 file that has a file extension other than “.mp3”.
- CD-R physical format should be ISO 9660
- 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 files on the disc should be less than 650.

This DVD player 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.

Audio CD and MP3 Disc Features

Pause **CD** **MP3**

1. Press **II** during playback.
2. To return to playback, press **▶**, **ENTER** or press **II** again.

Moving to another Track **CD** **MP3**

1. Press **◀◀** or **▶▶** briefly during playback to go to the next track or to return to the beginning of the current track.
2. Press **◀◀** twice briefly to go back to the previous track.
3. In case of audio CD, to go directly to any track, enter the track number using the numbered buttons (0-9).

Repeat Track/All/Off **CD** **MP3**

You can play a track/all on a disc.

1. Press **REPEAT** when playing a disc. The repeat icon appears.
2. Press **REPEAT** to select a desired repeat mode.
 - Track: repeats the current track
 - All: repeats all the tracks on a disc.
 - Off(No display): does not play repeatedly.

Note:

If you press **▶▶** once during Repeat Track playback, the repeat playback cancels.

Search **CD** **MP3**

1. Press **◀◀** or **▶▶** during playback.
2. Press **◀◀** or **▶▶** repeatedly to select the required speed: X2, X4, X8 backward or forward.
3. To exit **SEARCH** mode, press **▶**.

Random **CD** **MP3**

1. Press **RANDOM** during playback or when playback is stopped. Random Playback begins immediately and **RANDOM** appears on the menu screen.
2. To return to normal playback, press **RANDOM** repeatedly until **RANDOM** disappears from the menu screen.

Tip:

By pressing **▶▶** during random playback, the unit selects another track and resumes random playback.

Repeat A-B **CD**

1. To repeat a sequence during disc playback press **REPEAT A-B** at your chosen starting point. The Repeat icon and "A" appear on the menu screen.
2. Press **REPEAT A-B** again at your chosen end point. The Repeat icon and "A-B" appear on the menu screen, and the sequence begins to play repeatedly.
3. To exit the sequence and return to normal play, press **REPEAT A-B** again. The Repeat icon disappears from the menu screen.

3D Surround **CD**

To produce a 3D surround effect that simulates multi-channel audio from two stereo speakers (instead of the five+ speakers normally required for multi-channel audio from a home theater system).

1. Press **A.MONITOR** during playback. "3D SUR." appears on the menu screen.
2. To return to normal playback, press **A.MONITOR** repeatedly until "3D SUR." disappears from the menu screen.

Programmed Playback

The program function enables you to store your favorite tracks from any disc in the player memory. A program can contain 30 tracks.

1. Insert a disc.

Audio CD or MP3 Discs:

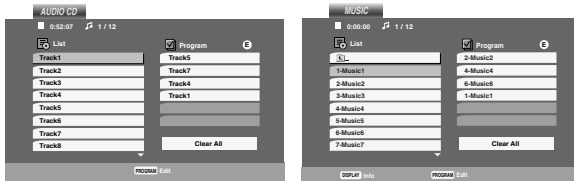
AUDIO CD or MUSIC menu appears.

2. Press MNL.PROG..

The **E** mark will appear to the right of the word "Program" on the right side of the menu screen.

Note:

Press MNL.PROG. again, then the **E** mark will disappear to exit the Program Edit mode.



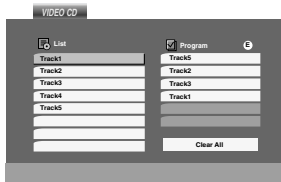
Audio CD Menu

MP3 Menu

Video CD: Press MNL.PROG. while playback is stopped. The program menu appears. Press MNL.PROG. to exit the menu.

Note:

On a Video CD with PBC, you must set PBC to Off on the setup menu to use the programmed playback (See "PBC" on page 20).



Video CD Menu

3. Select a track on the "List", then press ENTER to place the selected track on the "Program" list. Repeat to place additional tracks on the list.
4. Press **▶**.
Select the track you want to start playing on the "Program" list.
5. Press **▶** or ENTER to start. Playback begins in the order in which you programmed the tracks. Playback stops after all of the tracks on the "Program" list have played once.
6. To resume normal playback from programmed playback, select a track of CD (or MP3) list and then press **▶**.

Repeat Programmed Tracks

1. Press REPEAT when playing a disc. The repeat icon appears.
2. Press REPEAT to select a desired repeat mode.
 - Track: repeats the current track
 - All: repeats all the tracks on programmed list.
 - Off(No display): does not play repeatedly.

Note:

If you press **▶▶** once during Repeat Track playback, the repeat playback cancels.

Erasing a Track from Program List

1. Video CD : Press MNL.PROG. in the stop mode to enter Program Edit mode.
2. Press **▶** to move to the "Program" list.
3. Use **▲/▼** to select the track that you wish to erase from the "Program" list.
4. Press CLEAR (0000). Repeat to erase additional tracks on the list.

Erasing the Complete Program List

1. Follow steps 1-2 of "Erasing a Track from Program List" as above.
2. Use **▲/▼** to select "Clear All", then press ENTER. The complete Program for the disc will be erased.

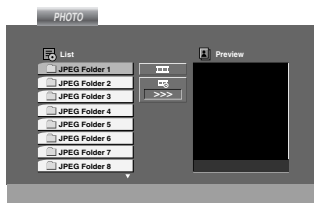
Note:

The programs are also cleared when the disc is removed.

Viewing a JPEG Disc

Using this DVD Player you can view discs with JPEG files.

1. Insert a disc and close the tray. The PHOTO menu appears on the TV screen.



2. Press ▲ / ▼ to select a folder, and press ENTER. A list of files in the folder appears. If you are in a file list and want to return to the previous Folder list, use the ▲ / ▼ buttons on the remote to highlight and press ENTER.
3. If you want to view a particular file, press ▲ / ▼ to highlight a file and press ENTER or ►. Viewing the file proceeding starts. The on-screen messages displayed with the file can be turned off by pressing the **RETURN** (Hide) button on the remote control. While viewing a file, you can press ■ to move to the previous menu (PHOTO menu).

Slide Show **JPEG**

Use ▲ ▼ ◀ ▶ to highlight the (Slide Show) then press ENTER.

Tip:

- There are three Slide Speed options : >>> (Fast), >> (Normal) and > (Slow).
- On a disc with MP3 and JPEG you can switch MP3 and JPEG. Press TITLE and MUSIC or PHOTO word on top of the menu is highlighted.
- Press RETURN, information of file is hidden.

Still Picture **JPEG**

1. Press **||** during slide show. The player will now go into PAUSE mode.
2. To return to the slide show, press ► or press **||** again.

Moving to another File **JPEG**

Press **◀◀** or **▶▶** or cursor **◀** or **▶** once while viewing a picture to advance to the next or previous file.

Zoom **JPEG**

Use zoom to enlarge the photo image. (see 29 page)

To rotate picture

Press ▲ / ▼ during showing a picture to rotate the picture clockwise or counter clockwise.

To listen to MP3 music watching picture **JPEG**

You can display files while listening to MP3 music files recorded on the same disc.

1. Insert the disc containing the two types of file in the player.
2. Press TITLE to display PHOTO menu.
3. Press ▲ / ▼ to select a photo file.
4. Use ► / ▼ to select icon then press ENTER. Playback starts. The playback will continue until STOP is pressed.

Tip:

To listen to only the desired music watching picture, programmed the desired tracks from the "MUSIC" menu and then proceed as above.

JPEG disc compatibility with this player is limited as follows:

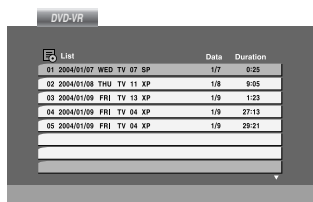
- Depending upon the size and number of JPEG files, it could take a long time for the DVD player to read the disc's contents. If you don't see an on-screen display after several minutes, some of the files may be too large — reduce the resolution of the JPEG files to less than 2M pixels as 2760 x 2048 pixels and burn another disc.
- The total number of files and folders on the disc should be less than 650.
- Some discs may be incompatible due to a different recording format or the condition of disc.
- Ensure that all the selected files have the ".jpg" extensions when copying into the CD layout.
- If the files have ".jpe" or ".jpeg" extensions, please rename them as ".jpg" file.
- File names without ".jpg" extension will not be able to be read by this DVD+VCR. Even though the files are shown as JPEG image files in Windows Explorer.

Playing a DVD VR format Disc

This unit will play DVD-R/RW discs recorded using the DVD-Video format that have been finalized using a DVD-recorder.

- This unit will play DVD-RW discs recorded using the Video Recording (VR) format.

1. Insert a disc and close the tray. The DVD-VR menu appears on the TV screen.



2. Press ▲ / ▼ to select a track then press ► or ENTER and playback starts.
3. Press TITLE to move to the list menu.

Note:

- Unfinalized DVD-R/RW discs cannot be played in this player.
- Some DVD-VR disc are made with CPRM data by DVD RECORDER. Player does not support these kinds of discs.

What is 'CPRM'?

CPRM is a copy protection system (with scramble system) only allowing the recording of 'copy once' broadcast programs. CPRM stands for Content Protection for Recordable Media.

This player is CPRM compatible, which means that you can record copy-once broadcast programs, but you cannot then make a copy of those recordings. CPRM recordings can only be made on DVD-RW discs formatted in VR mode, and CPRM recordings can only be played on players that are specifically compatible with CPRM.

Maintenance and Service

Refer to the information in this chapter before contacting a service technician.

Handling the Unit

When shipping the unit

Please save the original shipping carton and packing materials. If you need to ship the unit, for maximum protection, re-pack the unit as it was originally packed at the factory.

Keeping the exterior surfaces clean

- Do not use volatile liquids such as insecticide spray near the unit.
- Do not leave rubber or plastic products in contact with the unit for a long period of time. since they leave marks on the surface.

Cleaning the unit

To clean the player, use a soft, dry cloth. If the surfaces are extremely dirty, use a soft cloth lightly moistened with a mild detergent solution.

Do not use strong solvents such as alcohol, benzene, or thinner, as these might damage the surface of the unit.

Maintaining the Unit

The DVD player is a high-tech, precision device. If the optical pick-up lens and disc drive parts are dirty or worn, the picture quality could be diminished.

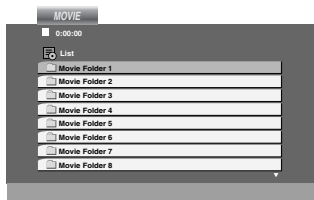
Depending on the operating environment, regular inspection and maintenance are recommended after every 1,000 hours of use.


For details, please contact your nearest authorized service center.

Playing a DivX Movie Disc

Using this DVD Player you can play DivX disc.

1. Insert a disc and close the tray. The MOVIE menu appears on the TV screen.



2. Press ▲ / ▼ to select a folder, and press ENTER. A list of files in the folder appears. If you are in a file list and want to return to the Folder list, use the ▲ / ▼ buttons on the remote to highlight  and press ENTER.
3. If you want to view a particular file, press ▲ / ▼ to highlight a file and press ENTER or ►.
4. Press ■ to exit.

Tip:

- Press DISC MENU to move to the next page.
- On a CD with MP3, JPEG and MOVIE file, you can switch MUSIC, PHOTO and MOVIE menu. Press TITLE and MUSIC, PHOTO and MOVIE word on top of the menu is highlighted.
- The disc subtitle may not be displayed properly, if a DivX subtitle is downloaded through the internet.
- If the Disc Subtitle setup menu does not have the DivX Subtitle language you are going to play, the subtitle may not be displayed properly.

Note:

If DivX Subtitle file name is not same with DivX file name, Subtitle will not be displayed on the screen. A DivX Movie file and the subtitle file must be located in same directory.

DivX disc compatibility with this player is limited as follows:

- Available resolution size of the DivX file is under 720x576 (W x H) pixel.
- The file name of the DivX subtitle is available by 56 characters.
- If there is impossible code to express in the DivX file, it may be displayed as " _ " mark on the display.
- **If the number of the screen frame is over 30 per 1 second, this unit may not operate normally.**
- **If the video and audio structure of recorded file is not interleaved, either video or audio is outputted.**
- **If the file is recorded with GMC, the unit supports only 1-point of the record level.**

* GMC?

GMC is the acronym for Global Motion Compensation. It is an encoding tool specified in MPEG4 standard. Some MPEG4 encoders, like DivX or Xvid, have this option. There are different levels of GMC encoding, usually called 1-point, 2-point, or 3-point GMC.

Playable DivX file

- ".avi ", ".mpg ", ".mpeg "

Playable Subtitle format

- SubRip(*.srt/*.txt)
SAMI(*.smi)
SubStation Alpha(*.ssa/*.txt)
MicroDVD(*.sub/*.txt)
SubViewer 2.0(*.sub/*.txt)
TMPlayer(*.txt)
Dvd Subtitle System(*.txt)
VobSub (*.sub) ➔ Sub/idx, stream based format.

Playable Codec format

- "DIVX3.xx ", "DIVX4.xx ", "DIVX5.xx ", "XVID ", "MP43 ", "3IVX "

Playable Audio format

- "AC3 ", "DTS ", "PCM ", "MP3 ".
 - Sampling frequency: within 8 - 48 kHz (MP3)
 - Bit rate: within 8 - 320kbps (MP3)

Additional Features-VCR part

On Screen Display

You may easily display the current time or tape counter, amount of tape left, day, month, year, day of week, programme channel, tape speed and operational mode of your VCR will appear on the TV screen. If a recording is taking place these On Screen Displays will not be recorded onto the tape.

1. Press **DISPLAY** to display.
Press **DISPLAY** repeatedly to cycle through the display options. The tape counter and amount of tape left will appear if there is a tape loaded.
2. After 3 seconds the majority of the On Screen Displays will clear leaving only the clock or tape counter and the amount of tape left on the screen.
Press **DISPLAY** again to remove all displays from the TV screen.

Note:

It cannot display when f.OSD is OFF.

Tape Counter Memory Stop

The **Digital Tape Counter** can be displayed on the display window instead of the time by pressing **DISPLAY** on the remote control. The Digital Tape Counter indicates the relative positions of recordings on the tape.

1. Press **DISPLAY**.
Press **CLEAR** (0000) to set the counter to 0:00:00.
Press **▶** or start recording.
The tape counter will display the actual play time in hours, minutes and seconds.
2. Press **■** when playback or recording is complete.
Press **◀◀**.
The tape will rewind and automatically stop when the counter returns to 0:00:00.

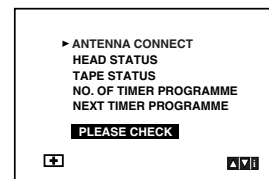
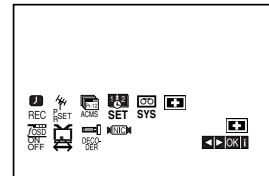
Note:

To rewind to the beginning of the tape, press **◀◀** again.

Video Doctor (Self-Diagnosis)

This feature informs you that there is a problem with your DVD+VCR. These error messages will appear on the TV screen.

1. Press **i**.
Press **◀** or **▶** to select **Ⓜ**.
Press **OK**.



2. Press **▲** or **▼** to check a problem.

ANTENNA CONNECT

● PLEASE CHECK:

Connect the aerial into the jack securely.

HEAD STATUS

● PLEASE CLEAN:

Clean your video heads.

TAPE STATUS

● NOT RECORDABLE:

Insert a tape with its protection tab in place

NO. OF TIMER PROGRAMME

● 2

Shows the number of timer recording.

NEXT TIMER PROGRAMME

● PR-01 26 10:00~11:00 SP

Shows the current status of timer recording.

3. Press **i** to remove the menus from the TV screen.

Hi-Fi Stereo Sound System

Your VCR will record and playback Hi-Fi stereo sound. In addition it has a stereo NICAM digital stereo sound decoder. This allows you to record and playback the sound in several different ways. Video cassettes recorded on your VCR will have a normal mono audio track and two VHS Hi-Fi stereo audio tracks. These stereo tracks allow you to make audio recordings in Hi-Fi stereo or bilingual mode from a TV broadcast, stereo audio system, video disc or another Hi-Fi VCR.

1. Your VCR's NICAM digital sound decoder allows you to enjoy broadcasts with NICAM sound, as well as standard stereo, bilingual and mono sound. The particular type of sound received or that recorded will be briefly displayed on the TV screen for a couple of seconds:

STEREO NICAM

Sound is automatically recorded on the Hi-Fi stereo and mono tracks of the video tape.

BIL NICAM

Both audio channels will be recorded on the Hi-Fi stereo tracks. The primary language channel (left) will be recorded on the mono track of the video tape.

MONO

The sound is recorded on the Hi-Fi tracks and the mono track of the video tape without any separation.


2. Press **AUDIO** repeatedly until the desired audio mode appears.
3. The choice is **STEREO**, **LEFT**, **RIGHT** and **MONO**. In **BIL NICAM** playback the primary language is output on the left channel and the secondary channel is output simultaneously from the right channel when audio output is set to **STEREO**.
The primary language will be output from both channels when the audio setting is **MONO**.
Please note that when adjusting the tracking control Hi-Fi stereo sound may revert to **MONO**.

Note:

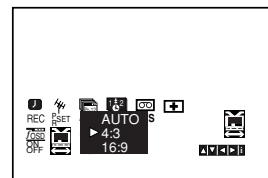
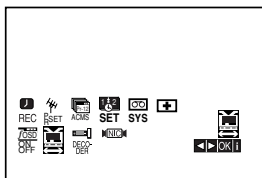
When OFF is selected in NIC, only mono sound will be output.

Wide Screen Compatibility 16:9

Your DVD+VCR can record and play back wide screen aspect ratio programmes (16:9). To record a wide screen format programme successfully the correct type of wide screen signal must be broadcast by the TV station.

1. Switch on your DVD+VCR.
Press **i**.
Press **◀** or **▶** to select .
Press **OK**.

2. Press **▲/▼** repeatedly to select: **AUTO**, **4:3** or **16:9**.



AUTO:

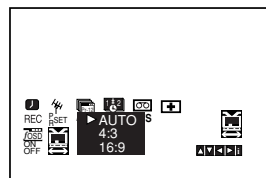
Automatically plays back Wide-Screen programmes as Wide-Screen and Normal programmes as normal.

4:3

Only for playing back and recording Normal format recordings (4:3).

16:9:

Only for playing back and recording Wide-Screen format recordings (16:9).



3. Press **i** to remove the menus from the TV screen.
To enjoy Wide-Screen playback you must connect your VCR to the TV using a SCART cable.

To set the decoder

We have already described, how to connect a decoder for pay-TV station as CANAL+ or PREMIERE on page 10. For the recording of an encoded station you do not have to control anything. You just select the station and wait shortly until the decoding will start.

1. Press **i**.
The main menu will appear on the TV screen.
Press **◀** or **▶** to select the **DECODER**.
Press **OK**.
2. Press **▲** or **▼** to select.
ON: When the decoder is connected to the AV2 socket.
OFF: When another VCR is connected to the AV2 socket.
3. Press **i** to return to a TV picture.

Additional Features

Last Scene Memory

DVD **CD** **VCD**

This player memorizes last scene from the last disc that is viewed. The last scene remains in memory even if you remove the disc from the player or switch off the player. If you load a disc that has the scene memorized, the scene is automatically recalled.

Note:

This player does not memorize the scene of a disc if you switch off the player before commencing to play the disc.

Screen Saver

The screen saver appears when you leave the DVD player in Stop mode for about five minutes.

Copying from DVD To VCR

This unit allows you to copy the contents of a DVD to a VHS tape with a press of the REC (●) button.

Notes:

If the DVD you are attempting to copy is copy protected, you may not be able to copy the disc.

- 1. Insert Disc**
Insert the disc you wish to copy in the DVD deck and close the disc tray.
- 2. Insert VHS Tape**
Insert a blank VHS videotape into the VCR deck.
- 3. Copy the DVD to VHS Tape**
Press the REC (●) button.
 - The DVD will go into Play mode and the VCR will go into Record mode.
 - If the DVD disc menu appears, you may need to press the Play button manually to begin copying.

Note:

If you press the REC (●) button, be sure this unit is in DVD mode.

- 4. Stop the Copy Process**
When the DVD is finished playing, press ■ to end the copy.
 - You must stop the Copy process manually when the DVD movie ends, or the unit may replay and record over and over again.

Recording from another video recorder

With this video recorder you can make recordings from an external source, such as copying from another video recorder or a camcorder.

Note:

In the following description, this video recorder will be one used for recording and will be referred to as VCR B. The other appliance will be used for playback and will be referred to as VCR A.

1. VCR A should be connected to the SCART socket on the rear panel of your unit or the AV sockets on the front panel of your unit.
2. Insert the recorded tape into VCR A and a blank tape into VCR B.
3. Press **AUX** until the socket you wish to record from is displayed. (VCR B)

AV 1 for recording from EURO AV1 SCART socket on the rear of your unit.

AV 2 for recording from EURO AV2 SCART socket on the rear of your unit.

AV 3 for recording from VIDEO IN and AUDIO IN (Left & Right) sockets on the front of your unit.

4. To start recording, press the REC (●) on VCR B and PLAY on VCR A.
5. When you want to finish copying, press the ■ on both video recorders.

Reference

Language Codes

Use this list to input your desired language for the following initial settings:
Disc Audio, Disc Subtitle, Disc Menu.

Language	Code	Language	Code	Language	Code	Language	Code
Abkhazian	6566	Fiji	7074	Lingala	7678	Singhalese	8373
Afar	6565	Finnish	7073	Lithuanian	7684	Slovak	8375
Afrikaans	6570	French	7082	Macedonian	7775	Slovenian	8376
Albanian	8381	Frisian	7089	Malagasy	7771	Somali	8379
Ameharic	6577	Galician	7176	Malay	7783	Spanish	6983
Arabic	6582	Georgian	7565	Malayalam	7776	Sudanese	8385
Armenian	7289	German	6869	Maltese	7784	Swahili	8387
Assamese	6583	Greek	6976	Maori	7773	Swedish	8386
Aymara	6588	Greenlandic	7576	Marathi	7782	Tagalog	8476
Azerbaijani	6590	Guarani	7178	Moldavian	7779	Tajik	8471
Bashkir	6665	Gujarati	7185	Mongolian	7778	Tamil	8465
Basque	6985	Hausa	7265	Nauru	7865	Tatar	8484
Bengali; Bangla	6678	Hebrew	7387	Nepali	7869	Telugu	8469
Bhutani	6890	Hindi	7273	Norwegian	7879	Thai	8472
Bihari	6672	Hungarian	7285	Oriya	7982	Tibetan	6679
Breton	6682	Icelandic	7383	Panjabi	8065	Tigrinya	8473
Bulgarian	6671	Indonesian	7378	Pashto, Pushto	8083	Tonga	8479
Burmese	7789	Interlingua	7365	Persian	7065	Turkish	8482
Byelorussian	6669	Irish	7165	Polish	8076	Turkmen	8475
Cambodian	7577	Italian	7384	Portuguese	8084	Twi	8487
Catalan	6765	Japanese	7465	Quechua	8185	Ukrainian	8575
Chinese	9072	Javanese	7487	Rhaeto-Romance	8277	Urdu	8582
Corsican	6779	Kannada	7578	Rumanian	8279	Uzbek	8590
Croatian	7282	Kashmiri	7583	Russian	8285	Vietnamese	8673
Czech	6783	Kazakh	7575	Samoan	8377	Volapük	8679
Danish	6865	Kirghiz	7589	Sanskrit	8365	Welsh	6789
Dutch	7876	Korean	7579	Scots Gaelic	7168	Wolof	8779
English	6978	Kurdish	7585	Serbian	8382	Xhosa	8872
Esperanto	6979	Laothian	7679	Serbo-Croatian	8372	Yiddish	7473
Estonian	6984	Latin	7665	Shona	8378	Yoruba	8979
Faroese	7079	Latvian, Lettish	7686	Sindhi	8368	Zulu	9085

Area Codes

Choose a area code from this list.

Area	Code	Area	Code	Area	Code	Area	Code
Afghanistan	AF	Ethiopia	ET	Malaysia	MY	Saudi Arabia	SA
Argentina	AR	Fiji	FJ	Maldives	MV	Senegal	SN
Australia	AU	Finland	FI	Mexico	MX	Singapore	SG
Austria	AT	France	FR	Monaco	MC	Slovak Republic	SK
Belgium	BE	Germany	DE	Mongolia	MN	Slovenia	SI
Bhutan	BT	Great Britain	GB	Morocco	MA	South Africa	ZA
Bolivia	BO	Greece	GR	Nepal	NP	South Korea	KR
Brazil	BR	Greenland	GL	Netherlands	NL	Spain	ES
Cambodia	KH	Islands	HM	Netherlands Antilles	AN	Sri Lanka	LK
Canada	CA	Hong Kong	HK	New Zealand	NZ	Sweden	SE
Chile	CL	Hungary	HU	Nigeria	NG	Switzerland	CH
China	CN	India	IN	Norway	NO	Taiwan	TW
Colombia	CO	Indonesia	ID	Oman	OM	Thailand	TH
Congo	CG	Israel	IL	Pakistan	PK	Turkey	TR
Costa Rica	CR	Italy	IT	Panama	PA	Uganda	UG
Croatia	HR	Jamaica	JM	Paraguay	PY	Ukraine	UA
Czech Republic	CZ	Japan	JP	Philippines	PH	United States	US
Denmark	DK	Kenya	KE	Poland	PL	Uruguay	UY
Ecuador	EC	Kuwait	KW	Portugal	PT	Uzbekistan	UZ
Egypt	EG	Libya	LY	Romania	RO	Vietnam	VN
El Salvador	SV	Luxembourg	LU	Russian Federation	RU	Zimbabwe	ZW

Troubleshooting

Check the following guide for the possible cause of a problem before contacting service.

Symptom	Cause	Correction
DVD or VCR do not work properly.	<ul style="list-style-type: none"> • DVD or VCR button is not switched properly. 	<ul style="list-style-type: none"> • Refer to page 2.
No power.	<ul style="list-style-type: none"> • The power cord is disconnected. 	<ul style="list-style-type: none"> • Plug the power cord into the wall outlet securely.
The power is on, but the DVD player does not work.	<ul style="list-style-type: none"> • No disc is inserted. 	<ul style="list-style-type: none"> • Insert a disc. (Check that the DVD or audio CD indicator in the display window is lit.)
No picture.	<ul style="list-style-type: none"> • The TV is not set to receive DVD signal output. 	<ul style="list-style-type: none"> • Select the appropriate video input mode on the TV so the picture from the DVD player appears on the TV screen.
	<ul style="list-style-type: none"> • The video cable is not connected securely. 	<ul style="list-style-type: none"> • Connect the video cable into the jacks securely.
No sound.	<ul style="list-style-type: none"> • The equipment connected with the audio cable is not set to receive DVD signal output. 	<ul style="list-style-type: none"> • Select the correct input mode of the audio receiver so you can listen to the sound from the DVD player.
	<ul style="list-style-type: none"> • The audio cables are not connected securely. 	<ul style="list-style-type: none"> • Connect the audio cable into the jacks securely.
	<ul style="list-style-type: none"> • The power of the equipment connected with the audio cable is turned off. 	<ul style="list-style-type: none"> • Turn on the equipment connected with the audio cable.
	<ul style="list-style-type: none"> • The Digital Audio Output is set to the wrong position. 	<ul style="list-style-type: none"> • Set the Digital Audio Output to the correct position, then turn on the DVD player again by pressing PAUSE.
The picture is poor.	<ul style="list-style-type: none"> • The disc is dirty. • The TV channels are not tuned in properly. 	<ul style="list-style-type: none"> • Clean the disc. • Check tuning, carry out tuning again.
The DVD player does not start playback.	<ul style="list-style-type: none"> • An unplayable disc is inserted. 	<ul style="list-style-type: none"> • Insert a playable disc. (Check the disc type and Regional code.)
	<ul style="list-style-type: none"> • The disc is placed upside down. 	<ul style="list-style-type: none"> • Place the disc with the playback side down.
	<ul style="list-style-type: none"> • The disc is not placed within the guide. 	<ul style="list-style-type: none"> • Place the disc on the disc tray correctly inside the guide.
	<ul style="list-style-type: none"> • The disc is dirty. 	<ul style="list-style-type: none"> • Clean the disc.
	<ul style="list-style-type: none"> • The Rating level is set. 	<ul style="list-style-type: none"> • Cancel the Rating function or change the rating level.
The remote control does not work properly.	<ul style="list-style-type: none"> • There is an obstacle in the path of the remote control and this unit. 	<ul style="list-style-type: none"> • Remove the obstacle.
	<ul style="list-style-type: none"> • The batteries in the remote control are exhausted. 	<ul style="list-style-type: none"> • Replace the batteries with new ones.
Video tape cannot be inserted.	<ul style="list-style-type: none"> • Is the cassette compartment empty? 	<ul style="list-style-type: none"> • Eject the tape in.
No Hi-Fi sound	<ul style="list-style-type: none"> • Audio mode is not set properly. 	<ul style="list-style-type: none"> • Select "STEREO" by repeatedly pressing "AUDIO" on the remote control.
No NICAM sound recording	<ul style="list-style-type: none"> • NICAM mode is not set properly. 	<ul style="list-style-type: none"> • Make sure NICAM in the menu is set to AUTO for the station to be recorded.

Specification

General

Power requirements	AC 200-240V, 50 Hz
Power consumption	17W
Dimensions (approx.)	430 X 78.5 X 265 mm (w/h/d)
Mass (approx.)	4.2 kg
Operating temperature	5°C to 35°C (41°F to 95°F)
Operating humidity	5 % to 90 %
Timer	24 hours display tape
RF Modulator	UHF 22 - 68 (Adjustable)

System

Laser	Semiconductor laser, wavelength 650 nm
Video Head system	Double azimuth 6 heads, helical scanning.
Signal system	PAL
Frequency response	DVD (PCM 96 kHz): 8 Hz to 44 kHz DVD (PCM 48 kHz): 8 Hz to 22 kHz CD: 8 Hz to 20 kHz
Signal-to-noise ratio	More than 100dB (ANALOG OUT connectors only)
Harmonic distortion	Less than 0.008%
Dynamic range	More than 100 dB (DVD) More than 95 dB (CD)

Inputs (VCR)

Audio	-6.0dBm, more than 10 kohms (SCART) -6.0dBm, more than 47 kohms (RCA)
Video	1.0 Vp-p, 75 ohms, unbalanced (SCART/RCA)

Outputs (DVD)

VIDEO OUT	1 Vp-p 75 ohms, sync negative
Audio output (digital audio)	0.5 V (p-p), 75 Ω, RCA jack x 1
Audio output (analog audio)	2.0 Vrms (1 KHz, 0 dB), 600 Ω, RCA jack (L, R)x2/SCART (TO TV)

Outputs (VCR)

Audio	-6.0dBm, less than 1 kohms (SCART)
Video	1.0Vp-p, 75 ohms, unbalanced (SCART)

- Design and specifications are subject to change without notice.

Manufactured under license from Dolby Laboratories. "Dolby" and the double-D symbol are trademarks of Dolby Laboratories.

"DTS" and "DTS Digital Out" are trademarks of Digital Theater Systems, Inc.

Precautions

When the equipment is installed in a cabinet or a shelf, make sure that it has sufficient space on all sides to allow for ventilation (10 cm or more on both sides, on top and at the rear).

When discarding batteries, environmental problems must be considered and the local rules or laws governing the disposal of these batteries must be followed strictly.

Failure to heed the following precautions may result in damage to the unit, remote control or disc.

1. DO NOT place the unit —

- in an environment prone to extreme temperatures or humidity.
- in direct sunlight.
- in a dusty environment.
- in an environment where strong magnetic fields are generated.
- on a surface that is unstable or subject to vibration.

2. DO NOT block the unit's ventilation openings or holes.

(If the ventilation openings or holes are blocked by a newspaper or cloth, etc., the heat may not be able to get out.)

3. DO NOT place heavy objects on the unit or remote control.

4. DO NOT place anything which might spill on top of the unit or remote control.

(If water or liquid is allowed to enter this equipment, fire or electric shock may be caused.)

5. DO NOT expose the apparatus to dripping or splashing.

6. DO NOT use this equipment in a bathroom or places with water. Also DO NOT place any containers filled with water or liquids (such as cosmetics or medicines, flower vases, potted plants, cups, etc.) on top of this unit.

7. DO NOT place any naked flame sources, such as lighted candles, on the apparatus.

8. AVOID violent shocks to the unit during transport.

IMPORTANT

Connection to the mains supply in the United Kingdom.

DO NOT cut off the mains plug from this equipment.

If the plug fitted is not suitable for the power points in your home or the cable is too short to reach a power point, then obtain an appropriate safety approved extension lead or consult your dealer.

In the unlikely event of the plug fuse failing be sure to replace the fuse only with an identical approved type, as originally fitted, and to replace the fuse cover. If the fuse fails again consult your nearest JVC dealer.

If nonetheless the mains plug is cut off remove the fuse and dispose of the plug immediately, to avoid a possible shock hazard by inadvertent connection to the mains supply.

If this product is not supplied fitted with a mains plug then follow the instructions given below:

DO NOT make any connection to the Larger Terminal coded E or Green.



Blue to N (Neutral) or Black

Brown to L (Live) or Red

The wires in the mains lead are coloured in accordance with the following code:

If these colours do not correspond with the terminal identifications of your plug, connect as follows:

Blue wire to terminal coded N (Neutral) or coloured Black.

Brown wire to terminal coded L (Live) or coloured Red.

If in doubt — consult a competent electrician.

Some Do's And Don'ts On The Safe Use Of Equipment

This equipment has been designed and manufactured to meet international safety standards but, like any electrical equipment, care must be taken if you are to obtain the best results and safety is to be assured.

DO read the operating instructions before you attempt to use the equipment.

DO ensure that all electrical connections (including the mains plug, extension leads and interconnections between pieces of equipment) are properly made and in accordance with the manufacturer's instructions. Switch off and withdraw the mains plug when making or changing connections.

DO consult your dealer if you are ever in doubt about the installation, operation or safety of your equipment.

DO be careful with glass panels or doors on equipment.

DON'T continue to operate the equipment if you are in any doubt about it working normally, or if it is damaged in any way—switch off, withdraw the mains plug and consult your dealer.

DON'T remove any fixed cover as this may expose dangerous voltages.

DON'T leave equipment switched on when it is unattended unless it is specifically stated that it is designed for unattended operation or has a standby mode. Switch off using the switch on the equipment and make sure that your family knows how to do this. Special arrangements may need to be made for infirm or handicapped people.

DON'T use equipment such as personal stereos or radios so that you are distracted from the requirements of road safety. It is illegal to watch television whilst driving.

DON'T listen to headphones at high volume, as such use can permanently damage your hearing.

DON'T obstruct the ventilation of the equipment, for example with curtains or soft furnishings. Overheating will cause damage and shorten the life of the equipment.

DON'T use makeshift stands and NEVER fix legs with wood screws—to ensure complete safety always fit the manufacturer's approved stand or legs with the fixings provided according to the instructions.

DON'T allow electrical equipment to be exposed to rain or moisture.

ABOVE ALL...

— **NEVER** let anyone especially children push anything into holes, slots or any other opening in the case—this could result in a fatal electrical shock;

— **NEVER** guess or take chances with electrical equipment of any kind—it is better to be safe than sorry!

EN

HR-XV45SEK

JVC