



# VCR & DVD RECORDER

## OWNER'S MANUAL

MODEL: LRY-517

Before connecting, operating or adjusting this product, please read this owner's manual carefully and completely.





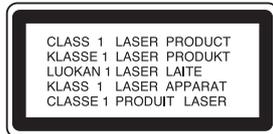
**CAUTION**  
RISK OF ELECTRIC SHOCK  
DO NOT OPEN



**CAUTION: THESE SERVICING INSTRUCTIONS ARE FOR USE BY QUALIFIED SERVICE PERSONNEL ONLY. TO REDUCE THE RISK OF ELECTRIC SHOCK DO NOT PERFORM ANY SERVICING OTHER THAN THAT CONTAINED IN THE OPERATING INSTRUCTIONS UNLESS YOU ARE QUALIFIED TO DO SO.**



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



**CAUTION: This product 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 center.**

**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.**



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

**FCC WARNING:** This equipment may generate or use radio frequency energy. Changes or modifications to this equipment may cause harmful interference unless the modifications are expressly approved in the instruction manual. The user could lose the authority to operate this equipment if an unauthorized change or modification is made.

**REGULATORY INFORMATION: FCC Part 15**

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

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

**CAUTION concerning the Power Cord**

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

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

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

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

**SERIAL NUMBER:**

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

Model No. \_\_\_\_\_

Serial No. \_\_\_\_\_

# IMPORTANT SAFETY INSTRUCTIONS

**CAUTION: PLEASE READ AND OBSERVE ALL WARNINGS AND INSTRUCTIONS IN THIS OWNER'S MANUAL. AND THOSE MARKED ON THE PRODUCT. RETAIN THIS BOOKLET FOR FUTURE REFERENCE.**

This product has been designed and manufactured to assure personal safety. Improper use can result in electric shock or fire hazard. The safeguards incorporated in this product will protect you if you observe the following procedures for installation, use, and servicing.

This product does not contain any parts that can be repaired by the user.

**DO NOT REMOVE THE CABINET COVER, OR YOU MAY BE EXPOSED TO DANGEROUS VOLTAGE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL ONLY.**

1. **Read these instructions.** - All these safety and operating instructions should be read before the product is operated.
2. **Keep these instructions.** - The safety, operating and use instructions should be retained for future reference.
3. **Heed all warnings.** - All warnings on the product and in the operating instructions should be adhered to.
4. **Follow all instructions.** - All operating and use instructions should be followed.
5. **Do not use this product near water.** - For example: near a bath tub, wash bowl, kitchen sink, laundry tub, in a wet basement; or near a swimming pool; and other areas located near water.
6. **Clean only with dry cloth.** - Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners.
7. **Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.** - Slots and openings in the cabinet are provided for ventilation and to ensure reliable operation of the product and to protect it from over-heating. The openings should never be blocked by placing the product on a bed, sofa, rug or other similar surface. This product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to.
8. **Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.**
9. **Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.**
10. **Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the product.**
11. **Only use attachments/accessories specified by the manufacturer.**
12. **Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with apparatus. When a cart is used, use caution when moving the cart/product combination to avoid injury from tip-over.**
13. **Unplug this product during lightning storms or when unused for long periods of time.**
14. **Refer all servicing to qualified service personnel. Servicing is required when the product has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the product, the product has been exposed to rain or moisture, does not operate normally, or has been dropped.**



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## About the symbols for instructions



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

Note Indicates special operating features of this unit.

Tip Indicates tips and hints for making the task easier.

# Introduction

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

## 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 are applicable only to those discs represented by the symbol.

**-RW<sub>VR</sub>** DVD-RW with Video recording mode

**-RW<sub>Video</sub>** DVD-RW with VR recording mode

**RAM** DVD-RAM disc

**+RW** DVD+RW disc

**-R** DVD-R disc

**+R** DVD+R disc

**DVD** DVD-Video disc

**VCD** Video CDs

**ACD** Audio CDs

**DivX** DivX files

**MP3** MP3 files

**WMA** WMA files

**JPEG** JPEG files

## About the Symbol Display

“” may appear on your TV display during operation and indicates that the function is not permitted by this unit or the disc.

## Notes on Discs

### Handling Discs

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

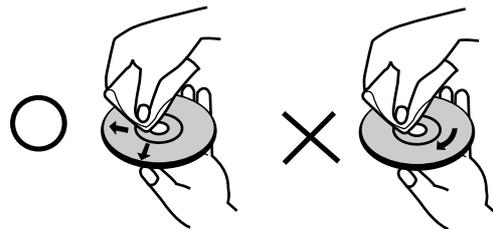


### Storing Discs

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

### Cleaning Discs

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



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

## Moisture Condensation

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

## Recordable and Playable Discs



### DVD-RW (Digital Video Disc - ReWritable):

- DVD-RW discs can be formatted for VR mode recording or Video mode recording.
  - These Discs can be recorded on repeatedly. Recordings can be erased, then you can record again on the same Disc.
- [VR mode]
- Recordings can be extensively edited
  - Playable only on VR mode compatible players (after finalization)
- [Video mode]
- Playable on regular DVD players (after finalization)
  - Limited editing features



### DVD-R (Digital Video Disc - Recordable)

- These Discs can be recorded only once. After you finalize a DVD-R, you cannot record on it or edit it.
- DVD-R discs can be only formatted to Video mode.
- Playable on regular DVD players (after finalization)
- Limited editing features



### DVD-RAM (Digital Video Disc + Recordable)

- DVD-RAM discs can be formatted for VR mode recording.
- These Discs can be recorded on repeatedly. Recordings can be erased, then you can record again on the same Disc.
- Playable on regular DVD players
- Limited editing features



### DVD+RW (Digital Video Disc + ReWritable)

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



### DVD+R (Digital Video Disc + Recordable)

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

### Notes:

- This Recorder cannot record CD-R or CD-RW discs.
- DVD-R/RW, DVD+R/RW and CD-R/RW discs recorded using a personal computer or a DVD or CD Recorder may not play if the disc is damaged or dirty, or if there is dirt or condensation on the Recorder's lens.
- If you record a disc using a personal computer, even if it is recorded in a compatible format, there are cases in which it may not play because of the settings of the application software used to create the disc. (Check with the software publisher for more detailed information.)

### The recommendable recordable DVD discs

DVD-R	DVD+R	DVD+R(DL)	DVD-RW	DVD+RW
SONY	SONY	Mitsubishi	Victor	SONY
TDK	TDK	Maxell	Maxell	TDK
Imation	Imation	-	Imation	Philips
Verbatim	Mitsubishi	-	TDK	Ricoh
Panasonic	Ricoh	-	Mitsubishi	HP

## Playable Discs



### DVD (8 cm / 12 cm disc)

- Discs such as movies that can be purchased or rented



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

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



### Audio CD (8 cm / 12 cm disc)

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



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

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

### Notes:

- Depending on the conditions of the recording equipment or the CD-R/RW (or DVD±R/±RW) disc itself, some CD-R/RW (or DVD±R/±RW) discs cannot be played on the unit.
- Do not attach any seal or label to either side (the labeled side or the recorded side) of a disc.
- Do not use irregularly shaped CDs (e.g., heart-shaped or octagonal). Doing so may result in malfunctions.
- Depending on the recording software & the finalization, some recorded discs (CD-R/RW or DVD±R/RW) may not be playable.

### Regional code of the recorder and DVDs



This recorder is designed and manufactured for playback of Region 1 encoded DVD software. The region code on the labels of some DVD discs indicates which type of the recorder can play those discs. This unit can play only DVD discs labeled 1 or ALL. If you try to play any other discs, the message "Incorrect region code. Can't play back" will appear on the TV screen. Some DVD discs may not have a region code label even though their playback is prohibited by area limits.

### Notes on DVDs and Video CDs

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

### About the Remote Control

#### Operation Range

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

**Distance:** About 23 ft (7 m) from the front of the remote sensor.

**Angle:** About 30° in each direction of the front of the remote sensor.

### Battery installation



Detach the battery cover on the rear of the remote control, and insert two (R03/AAA) size batteries with ⊕ and ⊖ aligned correctly.



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

## 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.

### DVD-RAM

????

### DVD +R (Double Layer)

Double layer recording technology offers two recordable layers on a single DVD disc, providing nearly double the capacity of 4.7GB single layer DVDs. The greatest, most valuable benefit of double layer recording technology is increased capacity. Storage space is nearly doubled with double layer DVD+R media, allowing consumers to burn up to 8.5GB of video on a single DVD+R disc.

### 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.

### WMA

Windows media audio file. A type of coding / decoding developed by Microsoft Corp.

### 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 recorder.

### 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.

## Notes on MP3/WMA Recordings

### About MP3

- An MP3 file is audio data compressed by using the MPEG1 audio layer-3 file-coding scheme. We call files that have the “.mp3” file extension “MP3 files”.
- The VCR/DVD Recorder can not read an MP3 file that has a file extension other than “.mp3”.

### About WMA (Window Media Audio)

- A WMA file is made using Microsoft audio compression technology.
- WMA (Windows Media Audio) offers double the audio compression of the MP3 format.

### MP3 / WMA disc compatibility with this player is limited as follows:

- The player cannot read an MP3/WMA file that has a file extension other than “.mp3” / “.wma”.
- CD-R physical format should be ISO 9660
- If you record MP3 / WMA files using software that cannot create a file system (eg. Direct-CD) it is impossible to playback MP3 / WMA files. We recommend that you use Easy-CD Creator, which creates an ISO 9660 file system.
- The total number of files and folders on the disc are free but the total number of files and folders on the folder should be less than 999.

This VCR/DVD Recorder requires discs and recordings to meet certain technical standards in order to achieve optimal playback quality. Pre-recorded DVDs are automatically set to these standards. There are many different types of recordable disc formats (including CD-R containing MP3 or WMA 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 / WMA files and music from the Internet. Our company has no right to grant such permission. Permission should always be sought from the copyright owner.**

## Notes on MP3/WMA Recordings

- Depending upon the size and number of JPEG files, it could take a long time for the DVD+VCR 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 5760 x 3840 pixels and burn another disc.
- The total number of files and folders on the disc should be less than 1500.
- 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.

### 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 limited to 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 frames per 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.

## Card useable on this unit

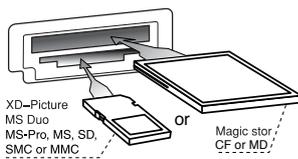
### Memory card capacity

- Compact Flash Card (CF)
  - Micro Drive (MD)
  - Secure Digital Card (SD)
  - Multi Media Card (MMC)
  - SmartMedia Card (SMC)
  - xD-Picture Card (xD)
  - Memory Stick (MS)
  - Magicstor
  - Memory Stick Pro (MS-Pro)
  - Memory Stick Duo (MS-Duo)
- Compatible with: FAT 12, FAT 16, or FAT 32
  - Only use the memory cards recommended above.

### Regarding Write Protect

For cards that have a write protect switch, if the switch is on it will not be possible to write or erase the contents of the card.

### Inserting/Removing the Memory Card



**Inserting the card.**  
Insert straight-in until it fits into place.

**Removing the card**  
Extract the card from the card slot.

### Notes:

- This unit can not format a memory card.
- Keep the memory card out of reach of children. If swallowed, seek medical advice immediately.
- The reading time depends on file size or resolution.
- If a folder in your memory cards have more than 645 files, the whole files are not available to read.
- Do not extract the memory card in operating (play, copy, move, etc.).

### ⚠ Caution

- Before you extract your memory cards, you should press the MEMORY in VCR TUNER mode. Otherwise you will lose your data in your memory card or the memory card can be damaged.

## 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.

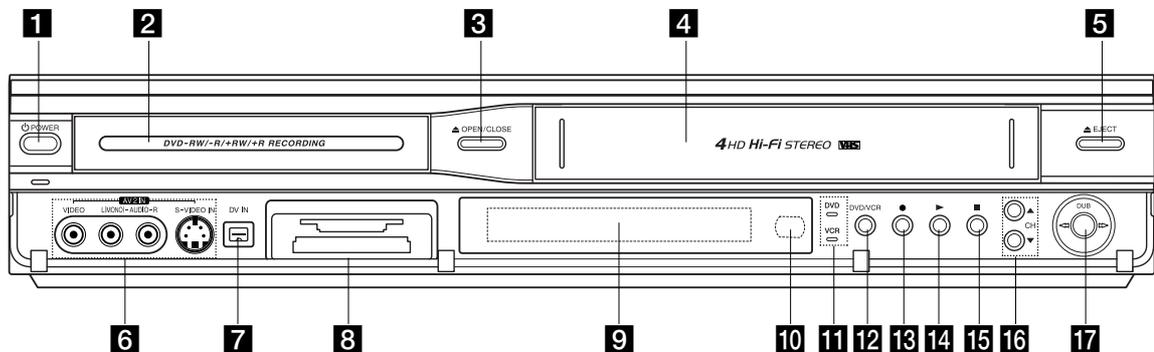
#### Maintaining the Unit

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.

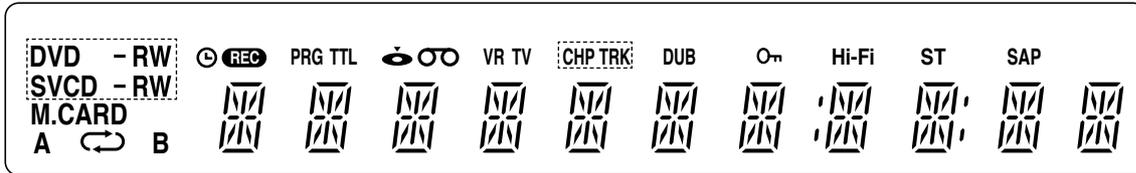
For details, please contact your nearest authorized service center.

## Front Panel



- 1 POWER button and indicator**  
Switches the VCR/DVD Recorder ON and OFF. Lights green when the VCR/DVD Recorder is turned on.
- 2 Disc Tray (DVD deck)**  
Insert a disc here.
- 3 ▲ OPEN/CLOSE**  
Opens or closes the disc tray.
- 4 Cassette Compartment (VCR deck)**  
Insert a video cassette here.
- 5 ▲ EJECT**  
Ejects the tape in the VCR deck.
- 6 AV 2 IN**  
- VIDEO /AUDIO (Left/Right)  
Connect the audio/video output of an external source (Audio system, TV/ Monitor, VCR, Camcorder, etc.).  
- S-VIDEO IN  
Connect the S-Video output of an external source (TV/ Monitor, VCR, Camcorder, etc.).
- 7 DV INPUT**  
Connect the DV output of a digital camcorder.
- 8 MEMORY CARD Slot**  
Insert a memory card (CF, MD, SMC, MMC, SD, MS, MS-Pro, XD-Picture, Magic stor, MS Duo).
- 9 Display window**  
Shows the current status of the VCR/DVD Recorder.
- 10 Remote Sensor**  
Point the VCR/DVD Recorder Remote Control here.
- 11 DVD/VCR indicator**  
Indicates the active DVD or VCR deck.
- 12 DVD/VCR**  
Toggles control between the DVD deck and the VCR deck.
- 13 ● (REC) button**  
Starts recording. Press repeatedly to set the recording time.
- 14 ► (PLAY)**  
To play back a disc or tape.
- 15 ■ (STOP)**  
Stops playback.
- 16 CH (▲ / ▼)**  
Scans up or down through memorized channels.
- 17 DUB (DUBBING)**  
Press to copy DVD to VCR (or VCR to DVD).

## Function Display Window



**DVD - RW** Indicates the type of disc loaded.  
**SVCD - RW**

**M.CARD** Indicates when Memory Card is activated.

**A B** Indicates repeat mode.

**⌚** Indicates when the recorder is in timer recording or a timer recording is programmed.

**REC** The recorder is recording.

**PRG** Programmed playback active.

**TTL** Indicates current title.

**📀** A disc is inserted in the DVD deck.

**📼** A VHS tape is inserted in the VCR deck.

**VR** Indicates a DVD-RW disc (VR mode only) is inserted in the DVD deck.

**TV** Indicates that TV mode is active.

**CHP TRK** Indicates current chapter or track number

**DUB** Indicates that a DVD to VCR (or VCR to DVD) dubbing is in progress.

**🔒** Indicates when the VCR/DVD Recorder is Locked.

**Hi-Fi** Indicates when the VCR/DVD Recorder is playing a tape in Hi-Fi.

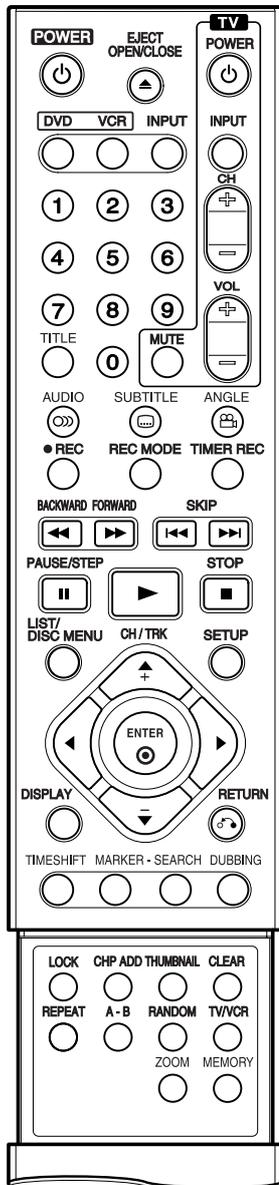
**ST** Indicates a stereo broadcast is being received.

**SAP** Indicates when a SAP BILINGUAL broadcast is being received.



Indicates clock, total playing time, elapsed time, remaining time, title number, chapter/track number, channel, etc.

## Remote Control



### A-B

Repeats sequence between two points (A and B)

### ANGLE

Selects a DVD camera angle, if available.

### AUDIO

Selects an audio language (DVD).

### BACKWARD / FORWARD

(◀▶)

- DVD: Search backward or forward.

- VCR: Rewinds/Advances the tape during the STOP mode, for fast reverse/ forward picture search.

### CHP ADD

Inserts a chapter marker when playing/recording.

**CH/TRK(▲/▼):** Selects a program. Adjusts manually the tape's picture onscreen.

### CLEAR

Removes a mark on the Marker Search menu.

### DISPLAY

Accesses On-Screen Display. Displays information while viewing a TV program.

### DUBBING

Press to copy DVD to VCR (or VCR to DVD).

### DVD

Select the VCR/DVD Recorder's function mode to DVD.

### EJECT, OPEN/CLOSE

- Opens and closes the disc tray.  
- Ejects the tape in the VCR deck.

### ENTER (⊙)

Confirms menu selections.

### INPUT

Changes the input to use for recording (Tuner, AV1, AV2, or DV IN).

### LIST / DISC MENU

Accesses menu on a DVD disc, Title List or Playlist menu.

### MARKER

Marks any point during playback.

### MEMORY

Accesses the Photo (or Music) menu for memory card.

### POWER

Turns VCR/DVD Recorder ON and OFF.

### PAUSE/STEP (⏸)

Pause playback or recording temporarily. Press repeatedly for frame-by-frame playback.

### RETURN (↶)

Removes the menu.

### REPEAT

Repeat chapter, track, title or all.

### RANDOM

Plays tracks in random order.

### REC MODE

Selects the recording mode:  
- DVD : SP, LP, EP or XP.  
- VCR : SP or SLP.

### ● REC

Starts recording. Press repeatedly to set the recording time.

### STOP (■)

Stops playback or recording.

### SEARCH

Displays Marker Search menu.

### SETUP

Accesses or removes the Setup menu.

### SKIP (◀◀ / ▶▶)

Go to next chapter or track. Returns to beginning of current chapter or track or go to previous chapter or track.

### SUBTITLE

Selects a subtitle language.

### TITLE

Displays the disc's Title menu, if available.

### THUMBNAIL

Selects a thumbnail picture for the current title for use in the Title List or Chapter List menu.

### TIMER REC

Displays Timer Record menu.

### TIME SHIFT

To play the title being recorded and also currently being recorded appears as PIP.

### TV Control Buttons

(See page 57)

### TV/VCR

To view channels selected by the VCR tuner or by the TV tuner.

### VCR

Select the VCR/DVD Recorder's function mode to VCR.

### ZOOM

Enlarges DVD video image.

### 0-9 numerical buttons

Selects numbered options in a menu.

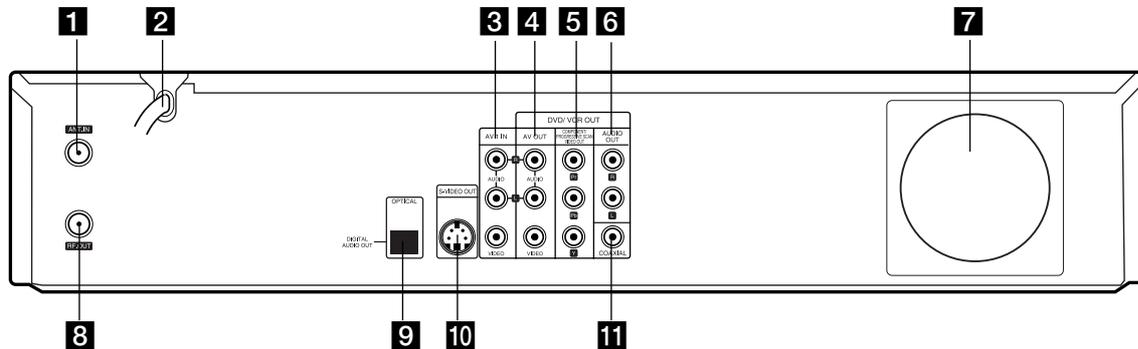
### ▶ (PLAY)

Starts playback.

### ◀▶▲▼ (left/right/up/down)

Selects menu options.

## Rear Panel



- |   |  |
|---|--|
| <p><b>1 ANT.IN</b><br/>Connect the VHF/UHF/CATV antenna to this terminal.</p> <p><b>2 AC Power Cord</b><br/>Plug into the power source.</p> <p><b>3 AV 1 IN (VIDEO IN /AUDIO IN (Left/Right))</b><br/>Connect the audio/video output of an external source (Audio system, TV/Monitor, VCR, Camcorder).</p> <p><b>4 AV OUT (VIDEO OUT/AUDIO OUT (Left/Right))</b><br/>Connect to a TV with video and audio inputs.</p> <p><b>5 COMPONENT/PROGRESSIVE SCAN VIDEO OUT (Y Pb Pr)</b><br/>Connect to a TV with Y Pb Pr inputs.</p> | <p><b>6 AUDIO OUT (Left/Right)</b><br/>Connect to a TV or other equipment with audio inputs.</p> <p><b>7 RF. OUT</b><br/>Connect to a TV with RF coaxial inputs.</p> <p><b>8 OPTICAL (DIGITAL AUDIO OUT jack)</b><br/>Connect to digital (optical) audio equipment.</p> <p><b>9 S-VIDEO OUT</b><br/>Connect to a S-Video Input on TV.</p> <p><b>10 COAXIAL (DIGITAL AUDIO OUT jack)</b><br/>Connect to digital (coaxial) audio equipment.</p> <p><b>11 Cooling fan</b></p> |
|---|--|



### Caution

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

## Preparation

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:

- Make sure the VCR/DVD Recorder is connected directly to the TV and tune the TV to the correct video input channel.
- Do not connect the VCR/DVD Recorder's AUDIO OUT jack to the phono in jack (record deck) of your audio system. Do not connect the VCR/DVD Recorder via another VCR. The DVD image could be distorted by the copy protection system.
- 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.

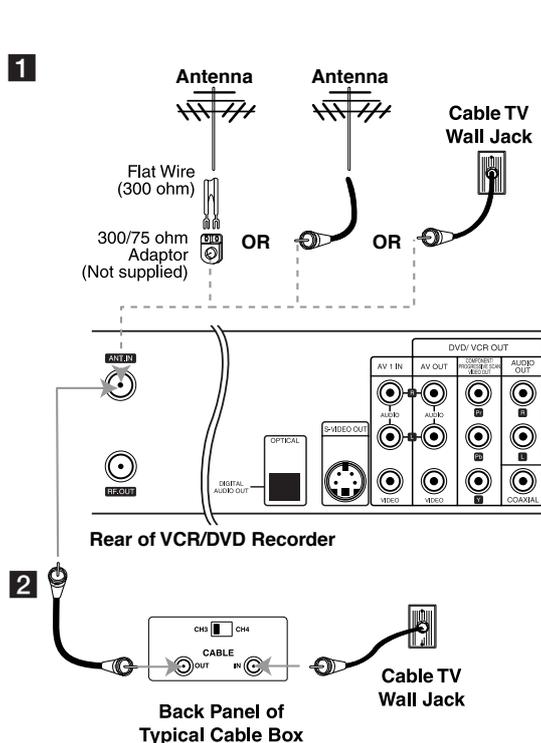
## Connecting an Antenna or Cable TV

### 1 Antenna:

Disconnect the antenna from the rear of the TV and identify the antenna cable. If it is a round 75 ohm coaxial cable connect it directly to the jack marked ANT.IN on your VCR/DVD Recorder. If your antenna cable is flat connect it to a 300-ohm to 75-ohm antenna adaptor (not supplied) and slip the adaptor over the ANT.IN jack. Don't attempt to screw it into the VCR/DVD Recorder.

### 2 Cable TV:

If your cable connection has no converter or descrambler, unscrew the cable from your TV and attach it to the ANT.IN jack on the VCR/DVD Recorder. If a converter is required connect a coaxial cable from the wall jack to the IN connector on the converter, and a coaxial cable from the OUT connector on the converter to the ANT IN on your VCR/DVD Recorder. This cable hookup permits both TV and VCR/DVD Recorder operation.



### To view or record a CATV channel

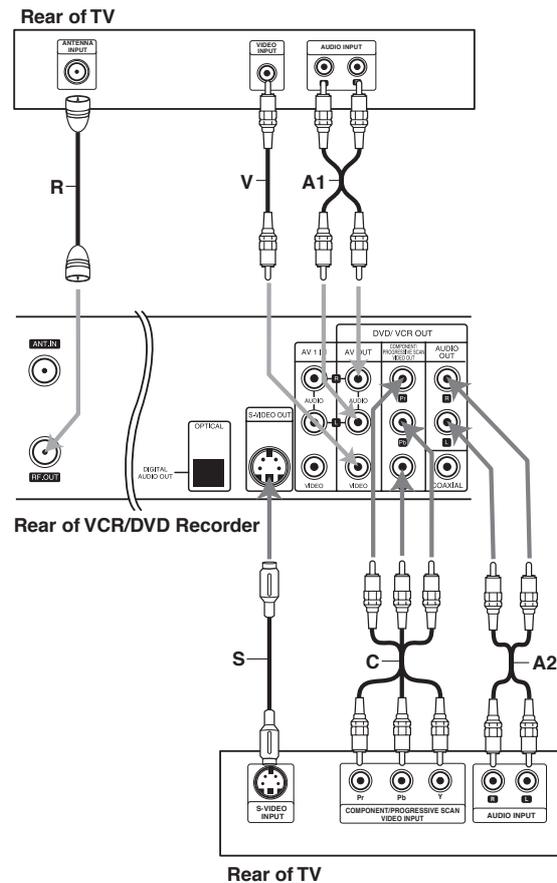
- 1 Tune the TV to the VCR/DVD Recorder output channel (CH 3 or 4).
- 2 Set the VCR/DVD Recorder channel selector to the cable output channel. (Example: CH3)
- 3 Select a channel using the cable converter.

### Notes:

- With this connection, you cannot record one program while viewing another.
- If you are using a cable box to tune channels, it is not necessary to do Auto Channel Set.

## Basic TV Connections

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



### RF coaxial connection

Connect the RF.OUT jack on the VCR/DVD Recorder to the antenna in jack on the TV using the supplied 75-ohm Coaxial Cable (**R**).

### How to set the VCR/DVD Recorder's RF output channel

1. When the VCR/DVD Recorder is turned off, press and hold CH (▼/▲) on the front panel for more than five seconds. "RF-03" or "RF-04" appears in the display window.
2. Press CH (▼/▲) to change the RF output channel (CH 03 or CH 04). Tune the TV to this channel.
3. Turn off the VCR/DVD Recorder.

### Audio/Video connection

1. Connect the DVD/VCR VIDEO OUT jack on the VCR/DVD Recorder to the video in jack on the TV using the video cable supplied (**V**).
2. Connect the Left and Right DVD/VCR AUDIO OUT jacks on the VCR/DVD Recorder to the audio left/right in jacks on the TV (**A1**) using the supplied audio cables.

#### Note:

If you use this connection, set the TV's source selector to VIDEO.

## Optional TV Connections

These connections support only DVD playback. The tuner and VCR still output through the RF.OUT (**R**) or DVD/VCR OUT (**A**, **V**) jacks.

### S-Video connection

1. Connect the S-VIDEO OUT jack on the VCR/DVD Recorder to the S-Video in jack on the TV using the optional S-Video cable (**S**).
2. Connect the Left and Right AUDIO OUT jacks of the VCR/DVD Recorder to the audio left/right in jacks on the TV using the supplied audio cables (**A2**).

### Component Video / Progressive Scan connection

If your television is a high-definition or "digital ready" television, you may take advantage of the VCR/DVD Recorder's progressive scan output for the highest video resolution possible.

1. Connect the COMPONENT/PROGRESSIVE SCAN VIDEO OUT jacks on the VCR/DVD Recorder to the corresponding in jacks on the TV using an optional Y Pb Pr cable (**C**).
2. Connect the Left and Right AUDIO OUT jacks of the VCR/DVD Recorder to the audio left/right in jacks on the TV (**A2**) using the supplied audio cables.

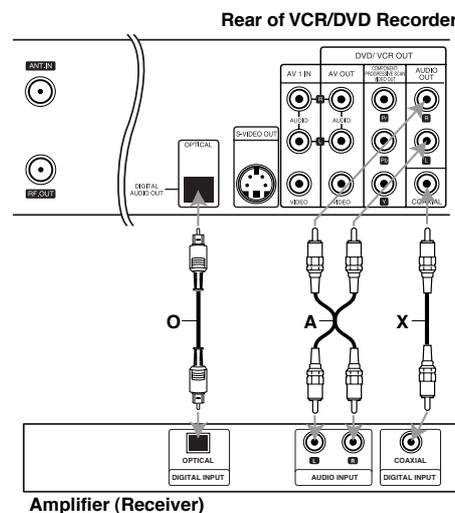
#### Notes:

- Set Progressive Scan option to "ON" in the General menu, see page 21.
- Progressive Scan does not work with the RF, Audio/Video or S-Video connections.
- If your TV does not accept the Progressive Scan format, the picture will appear scrambled.
- When you use Component Video signal, set the Progressive Scan to "Off" on the General menu.

## Audio Connection

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

Connect the Left and Right AUDIO OUT (or DVD/VCR AUDIO OUT) jacks on the VCR/DVD Recorder to the audio left and right in jacks on your amplifier, receiver, or stereo system using the audio cables (**A**) supplied.



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

1. Connect one of the VCR/DVD Recorder's DIGITAL AUDIO OUT jacks ( OPTICAL **O**, COAXIAL **X**) to the corresponding in jack on your amplifier. Use an optional digital (OPTICAL **O**, COAXIAL **X**) audio cable.
2. You will need to activate the VCR/DVD Recorder's digital output. (See "AUDIO" on page 18).

### 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 VCR/DVD Recorder (MPEG 2, Dolby Digital and DTS). Check the receiver manual and the logos on the front of the receiver.

### Caution:

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

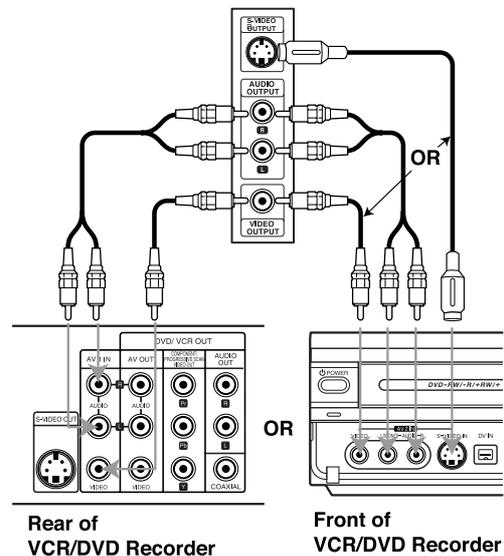
### Notes:

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

### Accessory Audio/Video (A/V) Connections to VCR/DVD Recorder

Connect the AV 1 IN or AV 2 IN jacks on the VCR/DVD Recorder to the audio/video out jacks on your accessory component, using the optional audio/video cables. (Refer to page 24 for "Dubbing and Editing".)

Jack panel of Accessory Component (VCR, Camcorder, etc.)



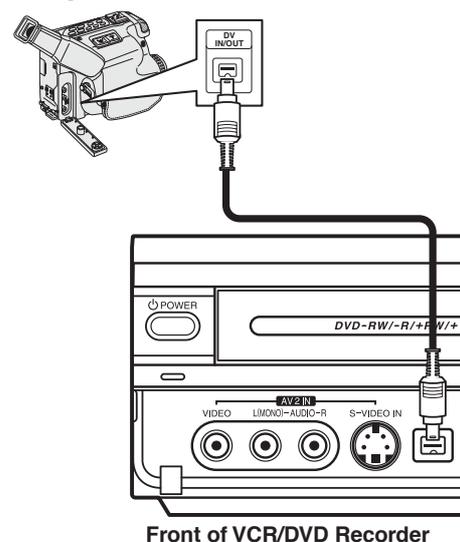
### Connecting a Digital Camcorder

Use a DV cable (not supplied) to connect the DV in/out jack of your DV Digital Camcorder to the front panel DV IN jack of this VCR/DVD Recorder.

### Note:

This jack is for connection to DV equipment only. It is not compatible with digital satellite tuners or D-VHS video decks.

DV Digital Camcorder



## Initial Settings

In this menu system, there are several ways to customize the settings provided. Most menus consist of three levels to set up the options, but some require greater depth for the variety of settings.

### General Operation

1. Press SETUP and the Setup menu appears.
2. Use ▲ / ▼ to select the desired option.
3. While the desired item is selected, press B to move to the second level.
4. Use ▲ / ▼ to select the second desired option.
5. Press B to move to the third level.
6. Use ▲ / ▼ to select the desired setting then press ENTER to confirm your selection. Some items require additional steps.
7. Press SETUP to exit the Setup menu.

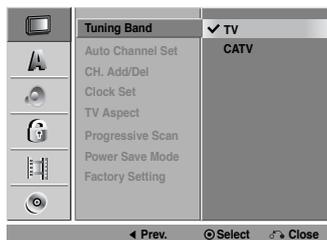
#### Note:

Press ◀ to go back to the previous level.

## GENERAL

### Tuning Band Select

1. Select the "Tuning Band" on the GENERAL menu then press ►.
2. Use ▲ / ▼ to select the tuning band (TV or CATV) option then press ENTER.  
**TV:** If you are using a standard antenna to receive channels.  
**CATV:** If you are using basic cable to receive channels.



### Auto Channel Set

Connect the VCR/DVD Recorder to the desired type of antenna or cable TV system as shown on page 16. This VCR/DVD Recorder is equipped with a frequency synthesized tuner capable of receiving up to 181 channels. These include VHF channels 2-13, UHF channels 14-69 and CATV channels 1-125.

1. Select the "Auto Channel Set" option.
2. Press ► to move to the third level. "Start" icon is highlighted.
3. Press ENTER to begin the channel search. The tuner will automatically cycle through all available channels in the area and place them in the tuner's memory.

#### Note:

After the Auto Channel Set proceeding is complete, make sure the Tuning Band is set appropriately (TV or CATV) on tuning band, follow steps 1~3 as shown previous (Tuning Band Select) to choose the correct Tuning Band (TV or CATV).



### To Add or Erase Channels from Memory

This feature allows you to add to or erase channels from memory manually.

1. Select the CH. Add/Del option.
2. Press ► to move to the third level. "Edit" icon is highlighted.
3. Press ENTER and the Channel Edit menu appears.



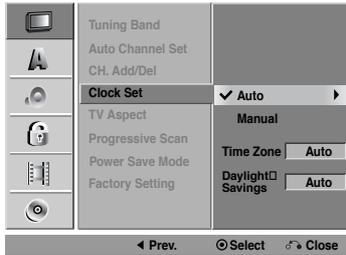
4. Use ▲ / ▼ or number buttons to select a channel to add or delete then press ►. "Add" or "Delete" icon is highlighted.
5. Press ENTER to confirm your setting.
6. Repeat steps 4-5 to add or erase additional channels.
7. Press SETUP or RETURN to exit the menu.

## Clock Set

- 1 Select the "Clock Set" option.
- 2 Press ► to move to the third level.

### Auto

The Auto option is set at the factory. In the Auto option, the VCR/DVD Recorder looks for a channel carrying XDS (Extended Data Services) information. XDS updates the clock using the Coordinated Universal Time.



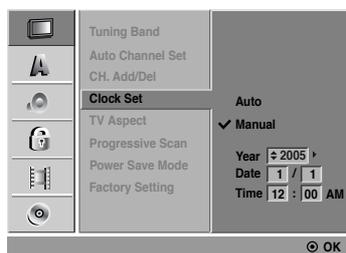
1. Use ▲ / ▼ to choose your Time Zone manually. When Timezone is set to Auto, the VCR/DVD Recorder will use XDS information to determine the proper setting.
2. Use ► to choose the "Daylight Savings" option. Use ▲ / ▼ to choose Auto, On, or Off. When it is set to Auto, the VCR/DVD Recorder will use XDS information to determine the proper setting.
3. Press ENTER to confirm your setting.

### Note :

The Auto Clock Feature enables the VCR/DVD Recorder to set up the clock when the VCR/DVD Recorder is turned off.

### Manual

If your local TV station does not send date and time information, or sends incorrect information, you can set the clock manually.



1. Enter the necessary information for date and time.
  - ◀ / ▶ (left/right): Moves the cursor to the previous or next column.
  - ▲ / ▼ (up/down): Changes the setting at the current cursor position.
2. Press ENTER to confirm your setting.
- 3 Press SETUP to exit the Setup menu.

## TV Aspect

### 4:3 Letter Box:

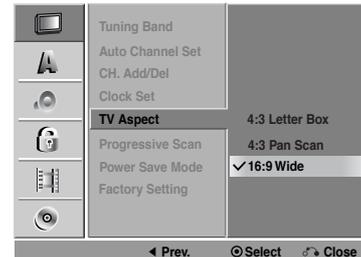
Select when a standard 4:3 TV is connected. Displays theatrical images with masking bars above and below the picture.

### 4:3 Pan Scan:

Select when a standard 4:3 TV is connected. Displays pictures cropped to fill your TV screen. Both sides of the picture are cut off.

### 16:9 Wide:

Select when a 16:9 wide TV is connected.

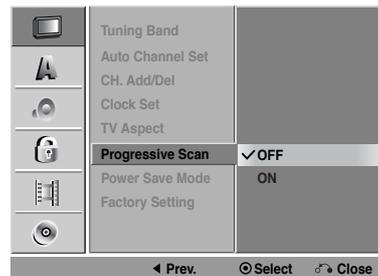


## Progressive Scan

Progressive Scan Video provides the highest quality pictures with less flickering.

**ON :** Using the COMPONENT/PROGRESSIVE SCAN VIDEO OUT jacks for connection to a TV or monitor that is compatible with a progressive scan signal.

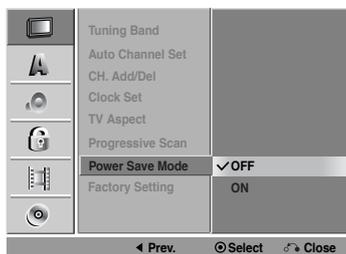
**OFF :** Using the COMPONENT/PROGRESSIVE SCAN VIDEO OUT jacks, but are connecting the VCR/DVD Recorder to a standard (analog) television.



Once the setting for Progressive Scan output is entered, an image will only be visible on a Progressive Scan compatible TV or monitor. If you set Progressive Scan to ON in error, you must reset the VCR/DVD Recorder. First, remove the disc in the VCR/DVD Recorder. Next, press STOP (■) and hold it for five seconds before releasing it. The video output will be restored to the standard setting, and a picture will once again be visible on a conventional analog TV or monitor.

## Power Save Mode

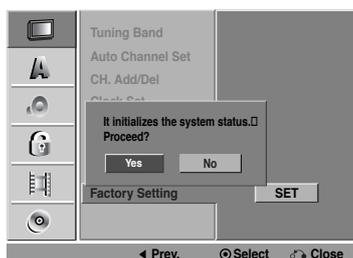
Set Power Save Mode to On to place your DVD/VCR Recorder into an economic power save mode.



## Factory Setting

You can reset the VCR/DVD Recorder to its original factory settings.

- 1 Select the "Factory Setting" option.
- 2 Press ► to select "SET" then press ENTER. The Initialize menu will appear.
- 3 Select "Yes" and press ENTER. Movie Rating, Password and Country Code options cannot be reset.



## LANGUAGE

### Display Menu

Select a language for the Setup menu and information display.



## Disc Menu/Audio/Subtitle

**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 (see p. 36). If you enter the wrong language code, press CLEAR.

**Off (for Disc Subtitle) :** Turn off Subtitle.



## AUDIO

Each DVD disc has a variety of audio output options. Set the VCR/DVD Recorder's Audio Output according to the type of audio system you use.

### Dolby Digital / DTS / MPEG

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

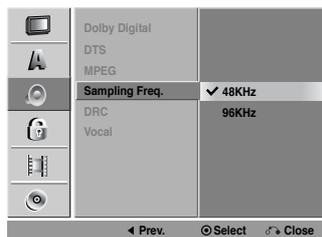
**PCM (for Dolby Digital / MPEG):** Select when connected to a two-channel digital stereo amplifier. DVDs encoded in Dolby Digital or MPEG will be automatically downmixed to two-channel PCM audio.

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



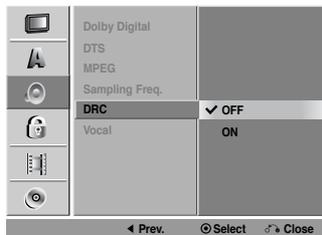
## Sample Freq. (Frequency)

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.



## DRC (Dynamic Range Control)

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

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



## LOCK (Parental Control)

### Movie Rating

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 area. DVD video discs may or may not respond to the parental control setting if the Area code of the disc is set wrongly. Some discs offer more suitable scenes as an alternative. Ratings are area dependent. 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.

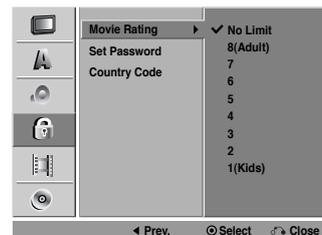
1. Select "Movie Rating" on the LOCK menu then press ►.
2. To access the Rating, Password and Area Code features, you must input the 4-digit security code you created.

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.

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

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

**No Limit :** If you select unlock, parental control is not active and the disc plays in full.



4. Press ENTER to confirm your rating selection, then press SETUP to exit the menu.
5. Press OPEN/CLOSE (▲) to activate parental control.

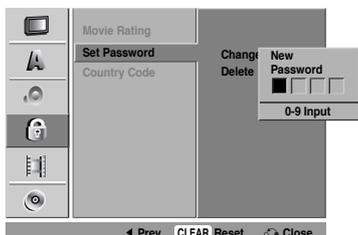
### Note:

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.

## Set Password

You can enter or change password.

1. Select "Set Password" on the LOCK menu then press ►.



2. Follow step 2 as shown "Movie Rating". To change the password, select the "Change", press ENTER and input the new 4-digit code then press ENTER. Input it again to verify.
3. Press SETUP to exit the menu.

### *If you forget your password*

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

1. Press SETUP to display the Setup menu.
2. Input the 5-digit number "21019". The message appears, select "Yes" then press ENTER. The security code is cleared.
3. Enter a new code as described above.

## Area Code

Enter the Area Code whose standards were used to rate the DVD video disc, based on the list in the reference chapter (see p. ??).



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

## RECORD

### Disc Record Mode

You can set the picture quality for DVD recording; XP (High quality), SP (Standard quality), LP (Low quality), EP (Extend quality).



1. Select the "Disc Record Mode" on the RECORD menu then press ►.
2. Use ▲ / ▼ to select a desired Disc Record Mode (XP, SP, LP or EP).
3. Press ENTER to confirm your selection, then press SETUP to exit the menu.

### VCR Record Mode

You can set the picture quality for VCR recording; SP (Standard Play), SLP (Super Long Play).



### DV Record Audio

You need to set this if you have a camcorder using 32kHz/12-bit sound connected to the front panel DV IN jack. Some digital camcorders have two stereo tracks for audio. One is recorded at the time of shooting; the other is for overdubbing after shooting.

On the Audio 1 setting, the sound that was recorded while shooting is used.

On the Audio 2 setting, the overdubbed sound is used.



## Auto Chapter

During recording, chapter markers are added automatically at fixed intervals. You can set this interval to 5 minutes or 10 minutes. To turn off automatic chapter marking, select "None".



## DISC

### Disc Initialize

If you load a completely blank disc, the recorder will initialize the disc.

- DVD-R/DVD+R/DVD+RW: The recorder formats in Video mode.
- DVD-RW: The recorder initialize the disc to VR Mode or Video Mode.
- DVD-RAM: The recorder initialize the disc to VR Mode.

Also, you can format the disc from the Setup menu as below.



- 1 Select the "Disc Initialize" on the DISC menu then press ►.  
"Start" icon is highlighted.
- 2 Press ENTER.
  - In case of DVD-RW, use ◀ / ▶ to select a desired Disc Initialize Mode (VR Mode or Video Mode) then press ENTER.
  - In case of DVD+RW/DVD-RAM, use ◀ / ▶ to select "OK", and press ENTER.  
It takes a few moments to format the disc.

### Caution

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

## Disc Finalize

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

### Caution

Once you have finalized a DVD-R and DVD+R disc, you cannot edit or record anything else on that disc except DVD+RW. However, you can record and edit a DVD-RW disc by choosing Unfinalize.



- 1 Select the "Disc Finalize" on the DISC menu then press ►.  
Finalize is highlighted.
- 2 Press ENTER.
- 3 Use ◀ / ▶ to select OK then press ENTER.  
The VCR/DVD Recorder starts finalizing the disc.

### Note:

Finalization can take up to 3-4 minutes or more depending on the type of disc, how much is recorded on the disc, and the number of titles on the disc.

### Tips

- If you load a DVD-RW that has already been finalized, you can 'Unfinalize' it by choosing Unfinalize from the Finalize menu. After doing this, you can edit and re-record onto the disc.
- You cannot unfinalize a DVD-R and DVD+R disc.
- If you need to unlock the disc to make edits, select OFF.

## Disc Label

Use the Disc Label feature to enter a name for the disc. This name appears when you load the disc and when you display disc information on-screen.

- The Disc label can be up to 32 characters long.
- For discs formatted on a different DVD Recorder, you will see only a limited character set.



- 1 Select the "Disc Label" on the DISC menu then press ►.  
"Edit" icon is highlighted.
- 2 Press ENTER.  
Keyboard menu appears.



- 3 Use ▲ ▼ ◀ ▶ to select a character then press ENTER to confirm your selection.
  - **English/Latin Capital:** Selects a keyboard with uppercase characters.
  - **English/Latin Lowercase:** Selects a keyboard with lowercase characters .
  - **Symbols:** Selects a keyboard with all symbols.
  - **Space:** Inserts a space at the cursor position.
  - **Delete:** Deletes the character to the left of the cursor position.
  - ◀ / ▶: Moves the cursor left or right.
  - **OK:** Confirms the name you have entered.
  - **Cancel:** Deletes all characters and exits the Keyboard menu.

### Remote control buttons for entering a name

- **PLAY (▶):** Inserts a space at the cursor position.

- **PAUSE/STEP (II):** Deletes the character to the right of the cursor position.
  - **SKIP (I◀◀ / ▶▶I):** Moves the cursor left or right.
  - **STOP (■), CLEAR:** Deletes the character to the left of the cursor position.
  - **0-9:** Enters the character corresponding to the selected column.
  - **DISC MENU/LIST, DISPLAY:** Switches the keyboard type (English/Latin Capital, English/Latin Lowercase, Symbols)
- 4 Choose OK then press ENTER to set the name and return to the DISC menu.
  - 5 Press SETUP to exit the menu.

type of disc you are using, Disc Protect allows you to preserve your DVD recordings in a variety of ways:

- **DVD+RW :** Prevents editing, erasing, or overwriting of existing recordings. Allows regular recording.
- **DVD+R :** Prevents editing or erasing of existing recordings. Allows regular recording.
- **DVD-RW (VR mode) :** Prevents editing, erasing, and regular recording.

### Notes:

- Disc Protect is not compatible with DVD-RW discs in Video mode or DVD-R discs.
- If you need to unlock a disc to make edits, select OFF.

## PBC

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

- **ON:** Video CDs are played according to the PBC, if available.
- **OFF:** Video CDs are played the same way as Audio CDs.





## On-Screen Display

You can display various information about the disc or tape loaded on-screen. Some items can be changed using the menu.

### On-screen display operation

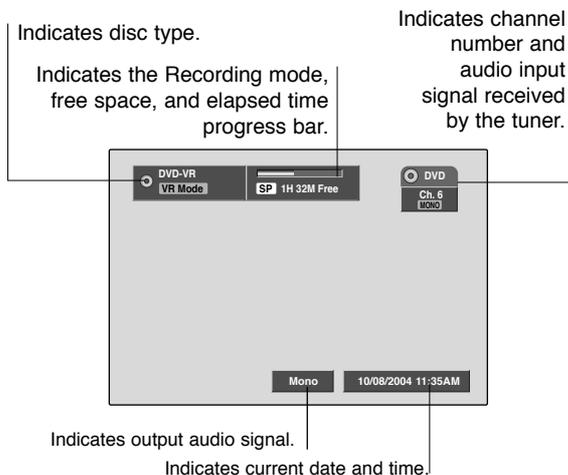
1. Press DISPLAY repeatedly to display/change the information displayed on-screen.
2. Use ▲ / ▼ to select an item.
3. Use ◀ / ▶ to change the setting. You can also use the number buttons if appropriate (e.g. inputting the title number). For some functions, press ENTER to execute the setting.

### 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.
- If  is displayed, action prohibited or not available.

## Displaying OSD While Watching TV

While watching TV, press DISPLAY to display/remove the on-screen display.



## Changing TV Audio Channel

Some TV programs are broadcast with both a main and a Secondary Audio Program (SAP). You can change the TV audio using the AUDIO button. Press AUDIO repeatedly to change the TV audio, according to Broadcast audio signal as shown below.

- STEREO+SAP Audio Signal  
Stereo → SAP → Mono → Stereo
- STEREO Audio Signal  
Stereo → L → R → Mono → Stereo
- SAP Audio Signal  
Mono → SAP → Mono
- MONO Audio Signal  
Mono

### The current audio channel is displayed on-screen.

- If SAP is selected, but there is no SAP channel being broadcast, you will still hear the main audio (Mono or Stereo) channel.
- If the sound is poor quality when set to Stereo, you can often improve it by changing to Mono.
- When an external input is selected, the audio channel can be switched only to Stereo.

# Playback

## VCR Tape Playback

Press **VCR** button to select the device to be operated.

### Basic Instructions

1. Insert a pre-recorded video cassette.  
The  indicator lights and the VCR/DVD Recorder powers on automatically.
2. If the  (TIMER) indicator in the display window is lit press **POWER** once.
3. If a tape without a safety tab is inserted the unit starts playback automatically.  
If not, press **PLAY** ().
4. Press **STOP** () to stop playback. **STOP** appears on the TV screen. If the tape reaches the end before you press **STOP** () the VCR/DVD Recorder automatically stops, rewinds and ejects the tape.

### Note:

It is not necessary to select the tape speed for playback because it is automatically selected by the VCR/DVD Recorder. Also, during playback the TV/VCR selector switches to VCR mode automatically.

### Auto Tracking

Automatic tracking adjusts the picture to remove snow or streaks and beings when:

- A tape is played for the first time.
- The tape speed (SP, LP, SLP) changes.
- Streaks or snow appear due to scratches on the tape.

### Manual Tracking

To manually adjust the tracking use the **CH/TRK** () buttons on the remote control or **CH** () on the front panel during playback.

### Notes:

- Vertical jitter requires a very fine adjustment.
- Tracking is automatically reset to normal when the tape is ejected or the power cord is unplugged for more than 3 seconds.

### Search

This function lets you visually search for a tape section in either direction: forward and reverse. During the high-speed picture search modes, the audio is muted and horizontal lines (noise bars) appear. Also, a short time is needed to stabilize the tape speed when re-entering the **PLAY** mode so slight interference may be observed during this time.

To search:

1. Press **BACKWARD** () or **FORWARD** () during playback.
2. To return to playback, press **PLAY** ().

### Note:

After 3 minutes in **SEARCH** mode the VCR/DVD Recorder returns to **PLAY** mode to protect the tape and video heads.

### Still Picture and Frame-by-Frame Playback

1. Press **PAUSE/STEP** () during playback.  
A still picture appears on the TV screen and the audio is muted.
2. If the still picture vibrates vertically, stabilize it by using **CH/TRK** () on the Remote Control.
3. Press **PAUSE/STEP** () repeatedly to advance the video picture one frame at a time.
4. To return to playback, press **PLAY** ().

### Note:

After 5 minutes in **STILL** mode the VCR/DVD Recorder stops to protect the tape and video heads.

### Slow Motion

During slow motion, audio is muted and horizontal lines (noise bars) may appear on the TV screen. This is normal.

1. While in still mode, press **FORWARD** (). The tape is played at a speed 1/19 times slower than the normal speed.
2. Use **CH/TRK** () on the Remote Control if necessary to adjust the tracking.
3. To return to the normal speed, press **PLAY** ().

### Note:

After 3 minutes in **SLOW MOTION** mode the VCR/DVD Recorder goes back to **PLAY** mode to protect the tape and video heads.

## Counter Memory Function

This feature is useful if there is a section of tape you want to view immediately after recording or if you want to return to the same point several times.

1. Begin recording or playing a tape.
2. Press DISPLAY until the real-time counter is displayed on the TV screen.
3. At the point that you want to locate later, reset the real-time counter to "0:00:00" by pressing CLEAR.
4. Continue to play or record.
5. Press STOP (■) when recording or playback finishes.
6. Press RETURN (↶). The tape automatically stops when the tape counter returns to about "0:00:00".

## Playing a DVD or Video CD

### Playback Setup

1. Press OPEN/CLOSE (▲) to open the disc tray and load your chosen disc in the tray, with the playback side down.
2. Press OPEN/CLOSE (▲) to close the tray. Playback starts automatically. If playback does not start, press ► (PLAY).  
In some cases, the disc menu might appear instead.
3. To stop the playback, press STOP ■.  
The unit records the stopped point, depending on the disc. "||■" appears on the screen briefly. Press ► (PLAY) to resume playback (from the scene point). If you press STOP ■ again or unload the disc ("■" appears on the screen.), the unit will clear the stopped point.  
Press OPEN/CLOSE (▲) to remove the disc.  
Press OPEN/CLOSE (▲) to close disc tray or press POWER (⏻), the disc tray closes automatically and unit turns off.

### If a menu screen is displayed

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

#### DVD

Use the ◀ ▶ ▲ ▼ buttons to select the title/ chapter you want to view, then press ENTER to start. Press TITLE or LIST/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 each menu screen. You may also set PBC to Off (See page 27).

#### Notes:

- If parental control is set and the disc is not within the rating settings you must input the password. (See "Movie Rating" on page 19).
- DVDs may have a region code. Your VCR/DVD Recorder will not play discs that have a region code different from your VCR/DVD Recorder. The region code for this player is 1 (one).

## General Features

#### Notes:

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 Video VR +RW +R

When a disc has more than one title, you can move to another title. Press DISPLAY and select desired title by using number (0-9) or ◀ / ▶ then press ENTER to move to another title.

### Moving to another CHAPTER/TRACK

DVD Video VR +RW +R VCD

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

- Press SKIP ►► or ◀◀ briefly during playback to select the next chapter/track or to return to the beginning of the current chapter/track.
- Press SKIP ◀◀ twice in quick successions to step back to the previous chapter/track.
- To go directly to any chapter during DVD playback, press DISPLAY twice and use ▲ / ▼ to select the chapter or track (for Video CD) icon. Input the chapter/track number or use ◀ / ▶, then press ENTER.

#### Note:

On a Video CD with PBC, you must set PBC to Off in the DISC menu to use this function (See page 18).

## Slow Motion

**DVD** **Video** **VR** **+RW** **+R** **VCD**

1. Press BACKWARD (◀◀) or FORWARD (▶▶) during pause mode.
2. Use the BACKWARD (◀◀) or FORWARD (▶▶) to select the required speed: 1/16, 1/8, 1/4 and 1/2 (forward and backward)  
With a DivX Disc or Video CD: 1/8, 1/4 or 1/2 (forward only).
3. To exit Slow Motion mode, press ▶ (PLAY).

### Note:

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

## Search

**DVD** **Video** **VR** **+RW** **+R** **VCD**

1. Press BACKWARD (◀◀) or FORWARD (▶▶) during playback.  
The recorder will now go into SEARCH mode.
2. Press BACKWARD (◀◀) or FORWARD (▶▶) to select the required speed: ◀, ◀◀, ◀◀◀, ◀◀◀◀, ◀◀◀◀◀, ◀◀◀◀◀◀ (backward) or ▶, ▶▶, ▶▶▶, ▶▶▶▶, ▶▶▶▶▶ (forward).  
With a Video CD, the Search speed changes to: ◀◀, ◀◀◀, ◀◀◀◀(backward) or ▶▶, ▶▶▶, ▶▶▶▶ (forward).
3. To exit SEARCH mode, press PLAY (▶).

### Note:

When you press BACKWARD or FORWARD during a fast forward search or a fast reverse search mode to go to normal speed, search mode is canceled.

## Time Search

**DVD** **Video** **VR** **+RW** **+R** (VCD:????)

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 to remove the numbers you entered. Then input the correct numbers.
4. Press ENTER to confirm. Playback starts from the selected time.

## Marker Search **DVD** **VCD**

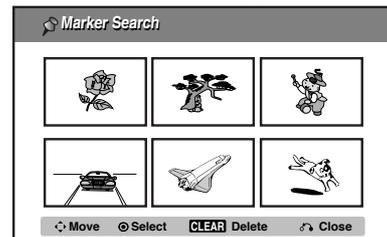
(VR/Video/RW???)

### 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, use ◀ / ▶ 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 and use ◀ / ▶ to select “Yes” then press ENTER to delete marked scene from the list.
4. You can play any marker by inputting its number on the marker search menu.
5. To remove the Marker Search menu, press RETURN (↵).

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

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 SKIP (▶▶) during Random playback, the VCR/DVD Recorder selects another title (track) and resumes Random playback.

### Notes

- This function only works with DVD Karaoke discs or video CDs without PBC.
- On a Video CD with PBC, you must set PBC to OFF in the DISC menu to use the this function. See page 27.

## Still Picture and Frame-by-Frame Playback

**DVD** **Video** **VR** **+RW** **+R** **VCD**

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

## Zoom

**DVD** **Video** **VR** **+RW** **+R**

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: X1 (normal size) → X2 size → X4 size → X1 (normal size)
3. Use the ◀ ▶ ▲ ▼ buttons to move through the zoomed picture.
4. To resume normal playback, press ZOOM repeatedly or CLEAR button.

### Note:

Zoom may not work on some DVDs.

## Repeat

**DVD** **Video** **VR** **+RW** **+R** **VCD**

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

### DVD Video Discs - Repeat Chapter/Title/All/Off

- CHAPTER: repeats the current chapter.
- TITLE: repeats the current title .
- All: repeats the all titles on the disc. (VR mode DVD-RW disc only)
- OFF: does not play repeatedly.

### Video CDs or DivX file - Repeat Track/All/Off

- TRACK: repeats the current track.
- ALL: repeats the all tracks on the 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 this function (See page 18).
- If you press SKIP (▶▶) once during Repeat Chapter (Track) playback, the repeat playback cancels.

## Repeat A-B

**DVD** **Video** **VR** **+RW** **+R** **VCD**

To repeat a sequence.

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

## 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.

### Tip:

The Camera Angle icon is displayed on the TV screen when alternate angles are available.

## Subtitles **DVD**

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 cannot read in the DivX file, " 1 " etc are displayed.

## Changing the Audio Language **DVD**

Press AUDIO repeatedly during playback to hear a different audio language or audio track.

### **Note:**

Some discs feature both Dolby Digital and DTS soundtracks. There is no analog audio output when DTS is selected. To listen to the DTS soundtrack, connect this recorder to a DTS decoder via one of the digital outputs. See page 23 for connection details.

## Changing the Audio Channel

**VR** **Video** **+RW** **+R** **VCD**

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

- VCD : STEREO, LEFT or RIGHT.
- Video, +R/RW : L+R, L+L or R+R.

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.

## 3D Surround

**DVD** **Video** **VR** **+RW** **+R** **VCD**

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

1. Press DISPLAY twice then use ▲ / ▼ to select the sound icon. Then, use ◀ / ▶ to select "3D SUR."
2. To turn off the 3D Surround effect, select "NORMAL".

## Last Scene Memory **DVD** **CD** **VCD**

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

### **Notes:**

- Settings are stored in memory for use any time.
- This VCR/DVD Recorder does not memorize settings of a disc if you switch off the VCR/DVD Recorder before commencing to play it.
- The Last Condition Memory function may not work on some DVDs.
- Last Condition Memory function for a previous DVD title is erased once a different DVD title is played.

## Finding Locations on a Disc

You can directly access any point on a video CD using this function within 95% of progress bar. Use this function only while a video CD is playing. Playback jumps to the point specified.

- 1 Press SEARCH during playback. The progress bar appears on the TV screen.



- 2 Use ◀ / ▶ to find the desired starting position for playback.
- 3 Press ENTER to confirm the selected position. Playback starts from the selected position.

### **Notes:**

This function will not work if any bookmarks have been set; see page 30.

## Playing a DivX Movie File

Using this DVD/VCR Recorder 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 ► (PLAY).

4. Press STOP (■) to exit.

### Tip:

- Press DISC MENU to move to the next page.
- On a CD with MP3/WMA, 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.

### Film menu options

1. Press ▲ / ▼ to select a folder/file on the Film menu then press ENTER. Film menu options appear.
2. Press ▲ / ▼ / ◀ / ▶ to select an option, and press ENTER.
  - **Play:** Start playback the selected title.
  - **Open:** Opens the folder and a list of files in the folder appears
  - **Delete:** Deletes the file(s) or folder(s) from the media. (HDD, Memory Card only)

- **Rename:** Edits the file name. (HDD, Memory Card only) (page 39)
- **Move:** Moves the file(s) to another folder or media. (HDD, Memory Card only) (page 39)
- **Copy:** Copies the file(s) to another folder or media. (page 39)

### DivX disc compatibility with this recorder 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 limited to 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 29.97 frames per 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”, “.divx”

#### Playable DivX subtitle

“.smi (Micro DVD format only)”, “.srt”, “.sub”

“.txt (Micro DVD format only)”

\* Divx subtitle except those listed above is not displayed on the TV screen.

#### Playable Codec format

“DIVX3.xx”, “DIVX4.xx”, “DIVX5.xx”, “XVID”, “MP43”, “3IVX”

#### Playable Audio format

“AC3”, “PCM”, “MP3”, “WMA”.

- Sampling frequency: within 8 - 48 kHz (MP3), within 32 - 48kHz (WMA)
- Bit rate: within 8 - 320kbps (MP3), 32 - 192kbps (WMA)

## Playing an Memory Card

You can play Photo and Music files in Memory Cards.

1. Insert a Memory Card until it fits into place.
2. Press MEMORY on the Remote Control in the Tuner mode. The Memory Card slot choice menu appears.
3. Press ENTER. If both slots are connected with Memory Card, use ◀ / ▶ to select the desired Memory Card slot.

MUSIC Menu

PHOTO Menu

4. Press MEMORY or RETURN to exit the menu.

**For details on each operation item,  
refer to relevant page.**

## Playing an Audio CD or MP3/WMA Disc

The VCR/DVD Recorder can play Audio CDs and MP3/WMA files on CD-ROM, CD-R, CD-RW, DVD+R/+RW, DVD-R/-RW discs or Memory Card. Before playing MP3 files, read "Notes on MP3 Recordings" on page 8.

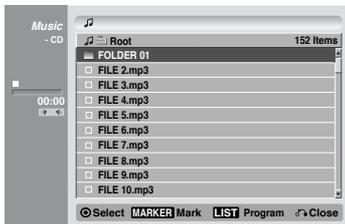
### Audio CD

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



### MP3 / WMA

1. Press ▲ / ▼ to select a folder, and press ENTER to see the folder contents.
2. Press ▲ / ▼ to select a track then press ► (PLAY) 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 ]
- If there is no information, "No ID3 TAG" appear on the menu screen.

### Tips:

- You can view TV channel or video input source by pressing RETURN. If you want to return to the Music-CD or Music-Audio CD menu, press LIST/DISC MENU.
- On the Music-CD menu, you can display the folders on the disc. Use ▲▼◀▶ to select the "Folder" icon on the Music-CD menu then press ENTER twice.
- On CDs with mixed content (audio tracks, MP3/WMA files and JPEG files), you can select among the Music-Audio CD menu, Music-CD menu, and Photo-CD menu by pressing TITLE repeatedly in Stop mode.
- If you select a folder and press DISPLAY, the number of subfolders and number of MP3/WMA files in the folder are displayed.

- If you are in a file list and want to return to the Folder list, use the ▲/▼ to highlight [ ] and press ENTER to return to the previous menu screen.

## Music menu options

1. To display menu options, select a track (or folder) on the menu then press ENTER.
2. Use ▲ / ▼ to select an option then press ENTER to confirm your selection.

### Music-Audio CD menu options **CD**

<b>Play</b>	<b>Play:</b> Starts playback the selected track.
<b>Program Add</b>	<b>Program Add:</b> Adds the track(s) to Program List. (page 39)

### Music-CD menu options **MP3** **WMA**

- Track options.
- Folder options

<b>Play</b>	<b>Open</b>
<b>Program Add</b>	<b>Program Add</b>
<b>Copy</b>	<b>Copy</b>

**Play:** Starts playback the selected track.

**Program Add:** Adds the track(s) to Program List. (page 39)

**Copy:** Copies the track(s) to the memory card. (page 38)

**Open:** Displays sub-folders and MP3/WMA files only in the folder.

### Music-MP3/WMA Memory menu options **M/C**

- Track options.
- Folder options

<b>Play</b>	<b>Open</b>
<b>Program Add</b>	<b>Program Add</b>
<b>Delete</b>	<b>Delete</b>

**Play:** Starts playback the selected track.

**Program Add:** Adds the track(s) to Program List. (page 39)

**Delete:** Deletes the track(s) from the memory card. (page 38)

**Open:** Displays sub-folders and MP3/WMA files only in the folder.

## Audio CD and MP3 / WMA Disc Features

### Pause

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

### Moving to another Track

1. Press SKIP (▶▶ or ◀◀) briefly during playback to go to the next track or to return to the beginning of the current track.
2. Press SKIP ◀◀ twice in quick successions to go back to the previous track.
3. You can play any track by inputting its number.

### Repeat

Press REPEAT to select a desired repeat mode.

- TRACK: Repeats the current track.
- ALL (CD): Repeats all the tracks on a disc.
- FOLDER (MP3/WMA): Repeats all the tracks on a folder of a disc.
- OFF (No display): Does not play repeatedly.

### Note:

If you press SKIP (▶▶) once during Repeat Track playback, the repeat playback will be cancelled.

### Repeat A-B **CD**

1. To repeat a sequence during disc playback press A-B at your chosen starting point. The Repeat icon and "A -" appear on the menu screen.
2. Press 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 A-B again. The Repeat icon disappears from the menu screen.

### Search **CD** **MP3** **WMA** **M/C**

1. Press BACKWARD ◀◀ or FORWARD ▶▶ during playback.
2. Press BACKWARD ◀◀ or FORWARD ▶▶ repeatedly to select the required speed:  
◀◀, ◀◀◀, ◀◀◀◀ (backward) or  
▶▶, ▶▶▶, ▶▶▶▶ (forward).
3. To exit SEARCH mode, press PLAY (▶).

### Changing the Audio Channel

Press AUDIO repeatedly to hear a different audio channel (stereo, left or right).

### Random **CD** **MP3** **WMA** **M/C**

1. Press RANDOM during playback. 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 SKIP ◀◀ or ▶▶ during random playback, the unit selects another track and resumes random playback.

### Copying MP3/WMA file(s) on the disc to Memory Card

1. Use ▲ / ▼ to select an MP3/WMA file or folder on the Music-CD menu and press ENTER.
2. Use ▲ / ▼ to select the "Copy" option then press ENTER.
3. Use ▲ / ▼ to select a copied folder then press ▶.
4. When "Copy" option is highlighted on the Copy menu, press ENTER to begin copying.

### Notes:

- If you select a folder on the disc to copy, the sub-folders in the folder will not be copied.
- You must insert a memory card in the VCR/DVD recorder to use this function.

### Tips:

- You can create new album (folder). Select "New album" option on the Copy menu then press ENTER. "NON-AME##" folder is created.
- Use the MARKER button to select multiple files and/or folders.

### Erasing MP3/WMA file(s) or folder(s) from the Memory Card

1. Select an MP3/WMA file or folder you wish to erase on the Music-Memory Card menu.
2. Press ENTER.
3. Select "Delete" option then press ENTER.
4. Use ◀ / ▶ to select "Yes" then press ENTER. The selected file(s) or folder(s) is deleted from the Memory Card.

### Tip:

Use the MARKER button to select multiple files and/or folders.

## Audio CD and MP3 / WMA Disc Features

### Pause **CD** **MP3** **WMA** **M/C**

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

### Moving to another Track

#### **CD** **MP3** **WMA** **M/C**

1. Press SKIP (▶▶ or ◀◀) briefly during playback to go to the next track or to return to the beginning of the current track.
2. Press SKIP ◀◀ twice in quick successions to go back to the previous track.
3. You can play any track by inputting its number.

### Repeat **CD** **MP3** **WMA** **M/C**

Press REPEAT to select a desired repeat mode.

- TRACK: Repeats the current track.
- ALL (CD): Repeats all the tracks on a disc.
- FOLDER (MP3/WMA): Repeats all the tracks on a folder of a disc.
- OFF (No display): Does not play repeatedly.

### Note:

If you press SKIP (▶▶) once during Repeat Track playback, the repeat playback will be cancelled.

### Repeat A-B **CD**

1. To repeat a sequence during disc playback press A-B at your chosen starting point. The Repeat icon and "A -" appear on the menu screen.
2. Press 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 A-B again. The Repeat icon disappears from the menu screen.

### Changing the Audio Channel

#### **CD** **MP3** **WMA** **M/C**

Press AUDIO repeatedly to hear a different audio channel (stereo, left or right).

### Search **CD** **MP3** **WMA** **M/C**

1. Press BACKWARD ◀◀ or FORWARD ▶▶ during playback.
2. Press BACKWARD ◀◀ or FORWARD ▶▶ repeatedly to select the required speed: ◀◀, ◀◀◀, ◀◀◀◀ (backward) or ▶▶, ▶▶▶, ▶▶▶▶ (forward).
3. To exit SEARCH mode, press PLAY (▶).

### Random **CD** **MP3** **WMA** **M/C**

1. Press RANDOM during playback. 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 SKIP ◀◀ or ▶▶ during random playback, the unit selects another track and resumes random playback.

## Copying MP3/WMA file(s) on the disc to Memory Card

1. Use ▲ / ▼ to select an MP3/WMA file or folder on the Music-CD menu and press ENTER.
2. Use ▲ / ▼ to select the "Copy" option then press ENTER.



3. Use ▲ / ▼ to select a copied folder then press ▶.
4. When "Copy" option is highlighted on the Copy menu, press ENTER to begin copying.

### Notes:

- If you select a folder on the disc to copy, the sub-folders in the folder will not be copied.
- You must insert a memory card in the VCR/DVD recorder to use this function.

### Tips:

- You can create new album (folder). Select "New album" option on the Copy menu then press ENTER. "NONAME##" folder is created.
- Use the MARKER button to select multiple files and/or folders.

## Programmed Playback

The program function enables you to store your favourite tracks from any disc in the player memory. Program can contain 99 tracks (Audio CD) or 256 tracks (MP3/WMA).

- 1 Insert a disc.  
AUDIO CD or MUSIC menu appears.
- 2 Use ▲ / ▼ to select a track or fold on the List then press ENTER.
- 3 Select "Program Add" option then press ENTER. The selected track is added to the Program List.
- 4 Repeat steps 2-3 to place additional tracks on the Program list.
- 5 **Audio CD** : Use ► to move the tracks to the Program list.  
The programmed track you selected last is highlighted on the program list.  
**MP3/WMA** : Go to next step.
- 6 Use ▲ / ▼ to select the track you want to start playing.
- 7 Press PLAY (►) to start.  
Playback begins in the order in which you programmed the tracks and "PRG" indicator appears on the display window.  
Playback stops after playing the last programmed track on the program list.

### Notes:

- Press and hold ▼ for fast to move to the next track or folder.
- Press and hold ▲ for fast to move to the previous track or folder.

### Tips:

- Use the MARKER button to select multiple files and/or folders.
- Use the CLEAR button to select all tracks, or cancel all marked tracks.
- If you select folder for Programmed Playback, all tracks in the folder are added to the program list.
- You can switch between the Track List and Program List menus by pressing LIST/DISC MENU (Music-CD only).

### Program List menu options

CD MP3 WMA

1. To display menu options, select a track on the Program List menu then press ENTER. The menu options appear on the left side of the menu.
2. Use ▲ / ▼ to select an option then press ENTER to confirm your selection.

**Play**

**Move**

**Delete**

**Play:** Playback begins in the order in which you programmed the tracks from the selected track.

**Move:** Moves the track(s) to change the program order.

**Delete:** Deletes the track(s) from the Program List menu.

### Repeat Programmed Tracks

- 1 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.

### Erasing a Track(s) from "Program" List

1. Select the track that you wish to erase from the Program list then press ENTER.
2. Select "Delete" icon then press ENTER.
3. Repeat steps 1-2 to erase additional tracks on the list.

### Tip:

Use the MARKER button to select multiple tracks.

## Changing the order of Program List

- 1 Select the track you wish to move on the Program List then press ENTER.  
The options appear on the left side of the menu.
- 2 Select "Move" then press ENTER.  
A yellow bar appears in the Program List.
- 3 Use ▲/▼ to move the yellow bar to the desired location, then press ENTER.  
The selected track is moved.
- 4 If you wish to move other tracks repeat stages 1 - 3.

### Tip:

Use the MARKER button to select multiple tracks.

## Viewing a JPEG Disc

The VCR/DVD Recorder can play JPEG files on CD-ROM, CD-R, CD-RW, DVD+R/+RW, DVD-R/-RW discs or Memory Card. Before playing JPEG recordings, read "Notes on JPEG Recordings" on page 8.

1. Insert a disc and close the tray. To display the Photo-CD menu for JPEG files recorded on the memory card, see "Playing an Memory Card" on page ???. The Photo-CD menu appears.
- 2 Use ▲▼◀▶ to select a file or folder and press ENTER.



- 3 Use ▲ / ▼ to select option and press ENTER.
- 4 To stop viewing at any time, press STOP.

### Note:

If the  icon displays in the Photo-CD menu, it means you cannot see those JPEG files.

### Tips:

- You can view TV channel or video input source by pressing RETURN. If you want to return to the Photo-CD, press LIST/DISC MENU.
- On CDs with mixed content (Audio tracks, MP3/WMA files and JPEG files), you can select among the Music-Audio CD menu, Music-CD menu, and Photo-CD menu by pressing TITLE repeatedly in Stop mode.
- If you are in a file list and want to return to the Folder list, use the v/V to highlight folder  and press ENTER to return to the previous menu screen.

## Photo-CD menu options **JPEG**

- When you select a photo file.

<b>Full Screen</b>
<b>Slide Show</b>
<b>Copy</b>

**Full Screen:** Shows the selected file as full screen.

**Slide Show:** Displays Slide Show menu. (page 42)

**Copy:** Copies the file(s) to Memory card. (page 42)

- When you select a folder.

<b>Open</b>
<b>Copy</b>

**Open:** Displays sub-folders and JPEG files in the folder.

**Copy:** Copies the folder to memory card. (page 42)

## Photo-Memory menu options **M/C**

- When you select a photo file.

<b>Full Screen</b>
<b>Slide Show</b>
<b>Delete</b>

**Full Screen:** Shows the selected file as full screen.

**Slide Show:** Displays Slide Show menu. (page 42)

**Delete:** Deletes the selected file(s) from the Memory card. (page 42)

- When you select a folder.

<b>Open</b>
<b>Delete</b>

**Open:** Displays sub-folders and JPEG files in the folder.

**Delete:** Deletes the selected folder(s) from the memory card. (page 42)

## Still picture

Use PAUSE/STEP (III) while showing a picture to pause mode.

## Skip Images

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

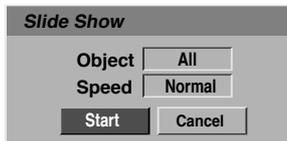
## Rotate Images

Use ▲ / ▼ while viewing a picture to flip the picture clockwise or counterclockwise.

## View Slide Shows

1. Select "Slide Show" option on the menu.
2. Press ENTER.

The Slide Show menu appears.



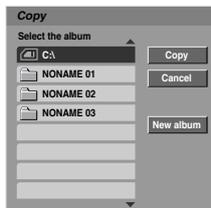
3. Use ▲ ▼ ◀ ▶ to set the options.  
Object: Selected file or All files.  
Speed: Sets the speed for Slide Show (Slow, Normal, or Fast)
4. Select the "Start" option then press ENTER to start the Slide Show.
5. Press STOP to stop the Slide Show and returns to the menu.

### Note:

Use the MARKER button to select multiple files.

## Copying JPEG file(s) or folder on the disc to Memory Card **JPEG** **M/C**

1. Use ▲ / ▼ to select an JPEG file or folder on the Photo-CD menu.
2. Press ENTER.  
The options appear on the left side of the menu.
3. Use ▲ / ▼ to select the "Copy" option then press ENTER. Copy menu will appear.



4. Use ▲ / ▼ to select a copied folder then press ▶.
5. When "Copy" option is highlighted on the Copy menu, press ENTER to begin copying.

## Notes

- If you select a folder on the disc to copy, the sub-folders in the folder will not be copied.
- You must insert a memory card in the VCR/DVD recorder to use this function.

## Tips:

- You can create new album (folder). Select "New album" option on the Copy menu then press ENTER. "NON-AME##" folder is created.
- Use the MARKER button to select multiple files and/or folders.

## Erasing JPEG file(s) or folder from the Memory Card

1. Select an JPEG file or folder you wish to erase on the Photo-Memory Card menu.
2. Press ENTER.
3. Select "Delete" option then press ENTER.  
The confirm message for deleting will appear.
4. Use ◀ / ▶ to select "Yes" then press ENTER.  
The selected file(s) or folder is deleted from the Memory Card.

### Tip:

Use the MARKER button to select multiple files and/or folders.

# Recording

## Basic Recording from a TV

Follow the instructions below to record a TV program. Recording starts immediately and continues until the disc or tape is full or you stop the recording.

- Switch on the VCR/DVD Recorder, select the device (VCR or DVD) for Recording and load a recordable disc or tape. Also make sure that the TV input is set to this recorder.  
If you load a completely blank DVD±RW disc, Disc initialize menu will appear, to select a desired Recording Mode to initialize the disc (See page 26).
- Set a recording mode as necessary by pressing REC MODE repeatedly.  
DVD: XP (High quality), SP (Standard quality), LP (Low quality), EP (Extend quality).  
VCR: SP (Standard Play), SLP (Super Long Play).
- Select the TV channel to record.
- Use AUDIO to select the audio channel to record. The table below shows what will be recorded on the different settings for different types of broadcast. The last column (Monitor Audio) shows what you'll hear as it is recording.  
If you set the audio channel to SAP, but there is no SAP channel being broadcast, the main audio (mono or stereo) will be recorded.

TV Broadcast	Selected Audio	Broadcast Audio		Monitor Audio
		L Ch	R Ch	
MONO	MONO	MONO	MONO	MONO
STEREO	STEREO	L	R	STEREO
	Left	L	L	Left
	Right	R	R	Right
MONO+SAP	MONO	MONO	MONO	MONO
	SAP	SAP	SAP	SAP
STEREO +SAP	STEREO	L	R	STEREO
	SAP	SAP	SAP	SAP
	MONO	MONO	MONO	MONO

- Press ● REC once to start recording. The REC indicator lights in the display window.
- Press STOP (x) to stop recording.

### Notes

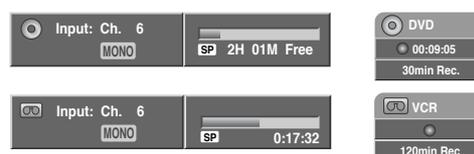
- The maximum number of DVD titles is 99 (DVD-R/RW) or 49 (DVD+R/RW).
- If the VCR/DVD Recorder is powered off during DVD recording, the recording will not be saved.

## Instant Timer Recording

Instant Timer Recording allows you to make a recording easily of a preset length without using the program timer.

- Follow steps 1-4 as shown left (Basic Recording from a TV).
- Press ● REC repeatedly to select the recording time length. Recording starts after the first press.  
DVD: Each subsequent press increases the recording time by 10 minutes (maximum 360 minutes).

VCR: Each subsequent press increases the recording time by 30 minutes (maximum 540 minutes). Please confirm the VHS tape has enough remaining time to be recorded before recording.



Instant Timer Record Menu

### Checking the Recording Time

Press ● REC or DISPLAY once to check the recording time. The recalled setting will automatically return to the TV screen for a moment. Also, remaining time of recording is shown in the display window.

### To Extend the Recording Time

The recording time can be extended anytime by pressing ● REC. Each subsequent press increases the recording time by 10 minutes (DVD) or 30 minutes (VCR).

### To Pause the Recording

- Press PAUSE/STEP (||) to pause the disc during recording.
- When you want to continue recording, press PAUSE/STEP (||) or ● REC.

### Notes

- If you press PAUSE/STEP (||) during the Instant Timer Recording, it will be canceled.
- The VCR/DVD Recorder will automatically power off when the Instant Timer Recording ends.

## To record one TV program while watching another

- 1 Press TV/VCR to select the TV mode during recording. The TV indicator appears.
- 2 Using the TV, select the channel to be viewed.

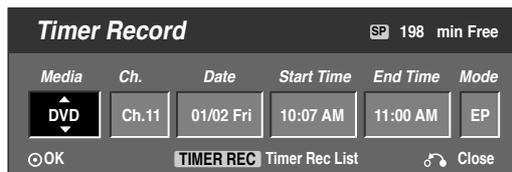
### Tip (VCR mode only)

Always use PAUSE/STEP (II) for best results when making changes during recording. For example: To change channels during recording, first press PAUSE/STEP (II) to put the unit in pause mode. Then select the desired channel on the VCR/DVD Recorder, and press PAUSE/STEP (II) again to resume recording.

## Timer Recording

The Timer Recording function allows you to record up to 8 programs within a period of one month.

- 1 Press TIMER REC. The Timer Record menu will appear.



- Media – Choose a media (DVD or VCR).
- Ch. – Choose a channel (2-69 or 1-125 for antenna or cable channels respectively, excluding skip channels), or one of the external inputs from which to record (AV1 or AV2).
- Date – Choose a date up to 1 month in advance, or select a daily or weekly program.
- Start Time – Set the recording start time.
- End Time – Set the recording end time.
- Mode – Choose a record mode.  
DVD: EP, LP, SP, XP, or AT (Auto)  
VCR: SP, SLP, or AT (Auto)  
AT(Auto) mode determines how much time is available on the disc or tape and switches record mode, if necessary, to complete recording the program.

- 2 Enter the necessary information for your timer recording(s).
  - ◀ / ▶ (left/right) – Move the cursor left/right
  - ▲ / ▼ (up/down) – Change the setting at the current cursor position
  - Press RETURN (↵) to exit the Timer Record menu.
  - Press TIMER REC to display Timer Record List.

- 3 Press ENTER to save the program. The Timer Record List will appear.
- 4 Press RETURN (↵) to exit the Timer Record List.
- 5 Be sure to load a recordable disc or tape.

### Notes:

- The Timer indicator lights on the front panel display.
- If the Disc and Tape indicator are blinking, either no disc or tape is loaded, or the loaded disc is not recordable.
- The VCR/DVD Recorder will record the audio according to the current TV tuner setting (Stereo, Mono or SAP). Use the AUDIO button to set the audio before switching the VCR/DVD Recorder to Standby mode.
- The VCR/DVD Recorder will automatically power off when the Timer Recording ends.
- There is a short delay when a timer recording finishes to confirm the recorded program. If two timer recordings are set to record sequentially (one right after the other), the very beginning of the later program may not be recorded.
- You must press STOP to stop the Timer Recording.

## Checking Timer Recording Details

Programming can be checked whenever the VCR/DVD Recorder is turned on. Press TIMER REC twice.

- Use ▲ / ▼ to select a timer recording.
- Press ENTER to edit the selected program. Timer Record menu appears.
- Press CLEAR to delete the selected program from the Timer Record List.



## Canceling a Timer Recording

You can clear a timer setting anytime before the recording actually starts.

- Use ▲ / ▼ to select a program you want to erase on the Timer Recorder List. If you want to erase the program, press CLEAR.

## Timer Recording Troubleshooting

**Even though the timer is set, the recorder will not record when:**

- There is no disc (or tape) loaded.
- A non-recordable disc (or tape) is loaded.
- Disc Protect is set to ON in the Disc menu (see page 27).
- There are already 99 titles (DVD-RW, DVD-R), 49 titles (DVD+RW, DVD+R) recorded on the disc.

**You cannot enter a timer program when:**

- A recording is already underway.
- The time you're trying to set has already passed.
- There are already 8 timer programs set.

**If two or more timer programs overlap:**

- The earlier program takes priority.
- When the earlier program finishes, the later program starts.
- If two programs are set to start at exactly the same time, the program entered first takes priority.

**Confirmation is not possible when:**

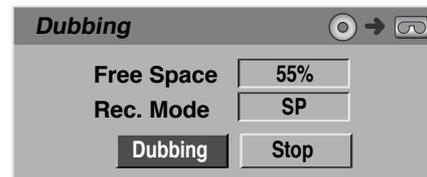
- Disc Protect setting is set to ON.
- There are already 99 titles (DVD-RW, DVD-R), 49 titles (DVD+RW, DVD+R) recorded on the disc.

If the disc is damaged, the recording may not complete successfully. In this case even though the Check field shows "Rec. OK", it may not be.

## Dubbing from DVD to VCR

You can copy the contents of a DVD to a VHS tape using the DUBBING (or DUB) button.

- 1 Insert a blank VHS videotape into the VCR deck.
- 2 Insert the disc you wish to copy in the DVD deck and close the disc tray.
- 3 Find the place on the DVD (or Disc) from which you want to start dubbing using the PLAY, FF, REW and PAUSE functions.  
For best results, pause playback at the point from which you want to record.
- 4 Press the DUBBING button on the Remote Control or DUB on the front panel.  
The Dubbing menu appears.



- 5 Use ▲ / ▼ / ◀ / ▶ to select the desired Record Mode: SP or SLP (3 times SP).
- 6 Select "Dubbing" then press ENTER or DUBBING to start copying.
- 7 To stop dubbing at any other time, press STOP (■).  
You must stop the dubbing process manually when the DVD movie ends, or the unit may replay and record over and over again.

### **Note:**

If the DVD (or Discs) you are attempting to copy is copy protected, you will not be able to copy the disc. It is not permitted to copy Macrovision encoded DVDs (or Discs). "Copy-protected. Cannot record." is displayed on the TV screen.

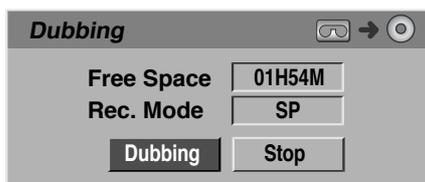
### **Tip:**

If you press PAUSE during Dubbing mode, both the DVD and VCR decks go into Pause mode and the "DUB" indicator blinks on the front panel display. While in Pause mode, you can adjust the DVD playback position using PLAY, REW, FF, PAUSE/STEP, etc. The VCR deck will remain in Pause mode. To resume Dubbing, press the DUBBING button twice.

## Dubbing from VCR to DVD

You can copy the contents of a VHS tape to a DVD±R or DVD±RW using the DUBBING (DUB) button. This allows you to archive your old VHS tapes to DVD.

- 1 Insert a blank DVD±R or DVD±RW disc in the DVD deck and close the disc tray. When using a DVD±RW disc, you must initialize before copying; see page 26.
- 2 Insert the VHS video tape you wish to copy into the VCR deck.
- 3 Find the place on the VHS tape from which you want to start dubbing using the PLAY, FF, REW and PAUSE functions. For best results, pause playback at the point from which you want to record.
- 4 Press the DUBBING button on the Remote Control or DUB on the front panel. The Dubbing menu appears.



- 6 Use ▲ / ▼ / ◀ / ▶ to select the desired Record Mode: EP, LP, SP or XP.
- 7 Select "Dubbing" then press ENTER or DUBBING to start copying.
- 8 To stop dubbing at any other time, press STOP (■). Dubbing will stop automatically when the VHS tape ends.

### Note:

If the VHS video tape you are attempting to copy is copy protected, you will not be able to copy the tape. It is not permitted to copy Macrovision encoded tapes.

### Tip:

If you press PAUSE during Dubbing mode, both the DVD and VCR decks go into Pause mode and the "DUB" indicator blinks on the front panel display. While in Pause mode, you can adjust the VCR playback position using PLAY, REW, FF, PAUSE/STEP, etc. The DVD deck will remain in Pause mode. To resume Dubbing, press the DUBBING button twice.

## Recording from External Components

You can record from an external component, such as a camcorder or VCR, connected to any of the VCR/DVD Recorder's external inputs.

- 1 Make sure that the component you want to record from is connected properly to the VCR/DVD Recorder. See page 19.
- 2 Press INPUT repeatedly to select the external input to record from.
  - AV1: Audio/Video Input mounted on back panel.
  - AV2: Audio/Video Input mounted on front panel.
  - DV: DV Input mounted on front panel.
- 3 Load a recordable disc or tape.
- 4 Set a recording mode as necessary by pressing REC MODE repeatedly.
  - DVD: XP, SP, LP or EP.
  - VCR: SP or SLP
- 5 Press ● REC once to start recording. The REC indicator lights in the display window.
- 6 Press STOP (■) to stop recording.

### Notes

- Check that the Audio In settings DV Record Audio are as you want them. See page 23.
- If your source is copy-protected using CopyGuard, you will not be able to record it using this recorder. See Copyright on page 10 for more details.
- Recording continues until you press STOP (■) or the disc is full.
- To record for a fixed length of time, see Instant Timer Recording on page 44.

## What is DV?

Using DV, also known as i.LINK, you can connect a DV-equipped camcorder to this recorder using a single DV cable for input and output of audio, video, data and control signals.

The i.LINK interface is also known as IEEE 1394-1995. "i.LINK" and the "i.LINK" logo are trademarks.

- This recorder is only compatible with DV-format (DVC-SD) camcorders. Digital satellite tuners and Digital VHS video recorders are not compatible.
- You cannot connect more than one DV camcorder at a time to this recorder.
- You cannot control this recorder from external equipment connected via the DV IN jack (including two DVD Recorders).
- It may not always be possible to control the connected camcorder via the DV IN jack.
- Digital camcorders can usually record audio as stereo 16-bit/48kHz, or twin stereo tracks of 12-bit/32kHz. The VCR/DVD Recorder can only record one stereo audio track. Set DV Record Audio to Audio 1 or Audio 2 as necessary (see page 26).
- Audio input to the DV IN jack should be 32 or 48kHz (not 44.1kHz).
- Picture disturbance on the recording may occur if the source component pauses playback or plays an unrecorded section of tape, or if the power fails in the source component, or the DV cable becomes disconnected.
- If DV Record Audio is set to Audio 2, but no Audio 2 signal is present, DV Record Audio will be reset to Audio 1 automatically.

## DV-Related Messages

You may see the following messages appear on your TV screen when using the DV IN jack.

### **Not connected to Camcorder.**

The camcorder is not connected properly, or the camcorder is switched off.

### **Too many devices connected.**

The DV jack on this recorder supports connection to just one camcorder.

### **Check the tape.**

There is no cassette loaded into the connected equipment.

### **Uncontrollable device.**

The VCR/DVD Recorder cannot control the camcorder.

### **Updating the Information.**

Camcorder is updating information for DV.

### **Camera mode.**

Camcorder is set to camera mode.

## Troubleshooting

If you cannot get a picture and/or audio through the DV IN jack, check the following:

- Make sure the DV cable is properly connected.
- Try switching off the connected equipment, then switch it back on.
- Try switching the audio input.

### **Notes:**

- Depending on the connected camcorder, you may not be able to control it using the Remote Control supplied with this VCR/DVD Recorder.
- Before you set the mode of your Camcorder to camera mode, turn down the volume of connected Sound device. There can be a howling sound.

# Editing

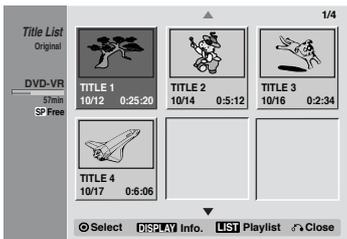
## Title List and Chapter List Menu

### Using the Title List-Original menu

**VR**

The Title List-Original is where you build and edit your Playlist, and where you can delete titles and make other changes to the Original content of the disc. You can also play individual titles directly from the Title List-Original menu.

- 1 Press LIST/DISC MENU repeatedly to display the Title List-Original menu.
  - Use the ▲/▼ buttons to display the previous/next page if there are more than 6 titles or chapters.
  - To exit the menu, press RETURN (↵).



- 2 To view Title List-Original options, select the title you want then press ENTER. Title List-Original options appears on the left side of the menu.
- 3 Use ▲ / ▼ to select an option then press ENTER to confirm.

<b>Play</b>	<b>Play:</b> Start playback of the selected title.
<b>Chapter</b>	<b>Chapter:</b> Shows the Chapter List-Original menu of the title (Refer to right on this page).
<b>Delete</b>	<b>Delete:</b> Deletes the title from the Title List-Original menu. (see page 56)
<b>Protect</b>	<b>Protect:</b> Protects accidental recording, editing or deleting of the title. (page 58)
<b>Edit</b> >	<b>Edit:</b> Selects Edit options. <ul style="list-style-type: none"> <li>• <b>Title Name:</b> Edits the title name. (page 57)</li> <li>• <b>Delete Part:</b> Deletes a part of the Title. (see page 56)</li> </ul>
<b>Playlist Add</b> >	<b>Playlist Add:</b> Adds the title to the Playlist. (see page 55)
<b>Dubbing</b>	<b>Dubbing:</b> Copys the title to a VHS tape.

- 4 Press RETURN (↵) repeatedly to exit the Title List-Original menu.

### Note:

To switch between the Title List-Original and Title List-Playlist menu, press LIST/DISC MENU repeatedly. The Original and Playlist heading at the top of the screen indicate which mode you are in.

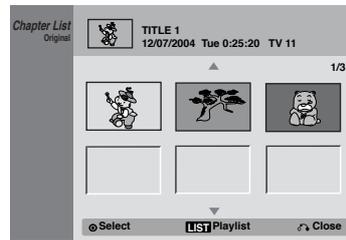
### Tip:

Press DISPLAY to display more detailed title information for selected title.

### Using the Chapter List-Original menu

**VR**

- 1 Press LIST/DISC MENU repeatedly to display Title List-Original menu.
- 2 Use ▲▼◀▶ to choose the title you want to view Chapter List-Original menu then press ENTER. Title List-Original options appears on the left side of the menu.
- 3 Use ▲ / ▼ to select "Chapter" from Title List-Original options then press ENTER. Chapter List-Original menu appears on the TV screen.



- 4 To view Chapter List-Original options, select the chapter you want then press ENTER. Chapter List-Original options appears on the left side of the Chapter List-Original display.
- 5 Use ▲ / ▼ to select an option then press ENTER to confirm.

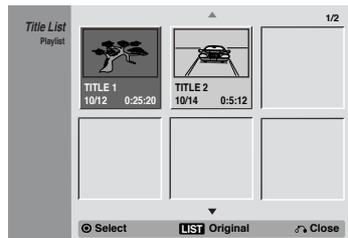
<b>Play</b>	<b>Play:</b> Starts playback of the selected chapter.
<b>Title</b>	<b>Title:</b> Shows the Title List-Original menu (refer to left on this page)
<b>Delete</b>	<b>Delete:</b> Deletes the chapter from the Chapter List-Original menu. (page 56)
<b>Combine</b>	<b>Combine:</b> Merges two chapters into one. (page 57)
<b>Playlist Add</b> >	<b>Playlist Add:</b> Adds the chapter to the Playlist. (page 55)

- 6 Press RETURN (↵) repeatedly to exit Chapter List-Original menu.

## Using the Title List-Playlist Menu

VR

- 1 Press LIST/DISC MENU repeatedly to display the Title List-Playlist menu.
  - Use the v/V buttons to display the previous/next page if there are more than 6 titles or chapters.
  - To exit the Title List-Playlist, press RETURN (O).



- 2 To view Title List-Playlist options, select the title you want then press ENTER. Title List-Playlist options appears on the left side of the menu.
- 3 Use v / V to select an option then press ENTER to confirm.

<b>Play</b>	<b>Play:</b> Start playback the selected title.
<b>Chapter</b>	<b>Chapter:</b> Shows the Chapter List-Playlist menu of the title (Refer to right on this page).
<b>Title Name</b>	<b>Title Name:</b> Edits the title name. (page 57)
<b>Delete</b>	<b>Delete:</b> Deletes the title from the Title List-Playlist menu. (page 56)
<b>Delete Part</b>	<b>Delete Part:</b> Deletes a part of the Title. (page 56)
<b>Dubbing</b>	<b>Dubbing:</b> Copys the title to a VHS tape.

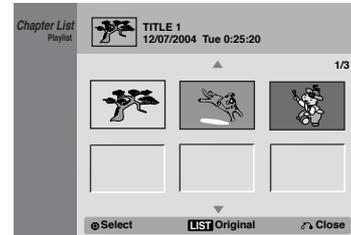
- 4 Press RETURN (O) repeatedly to exit Title List-Playlist menu.

## Using the Chapter List-Playlist Menu

VR

- 1 Press DISC MENU/LIST repeatedly to display the Title List-Playlist menu.
- 2 Use v V b B to choose the title you want to view Title List-Playlist menu then press ENTER. Title List-Playlist options appears on the left side of the menu.

- 3 Use v / V to select "Chapter" from Title List-Playlist options then press ENTER. Chapter List-Playlist menu appears on the TV screen.



- 4 To view Chapter List-Playlist options, select the chapter you want then press ENTER. Chapter List-Playlist options appears on the left side of the menu.
- 5 Use v / V to select an option then press ENTER to confirm.

<b>Play</b>	<b>Play:</b> Starts playback of the selected chapter.
<b>Title</b>	<b>Title:</b> Shows the Title List-Playlist menu (Refer to left on this page).
<b>Delete</b>	<b>Delete:</b> Deletes the chapter from the Chapter List-Playlist menu (page 56).
<b>Move</b>	<b>Move:</b> Moves a chapter of Chapter List-Playlist to a position on the Chapter List-Playlist menu (page 58)
<b>Combine</b>	<b>Combine:</b> Merges two chapters into one (page 57).

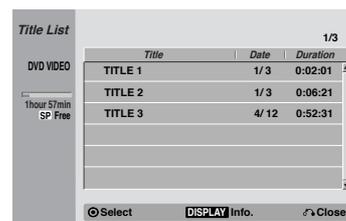
- 6 Press RETURN (O) repeatedly to exit Chapter List-Playlist menu.

## Using the Title List menu Video

From the Title List display you can play, name and erase titles.

Once a Video mode disc is finalized, the Title List screen changes its appearance and all you can do is select titles to play.

- 1 Press LIST/DISC MENU to display the Title List.



- Use v / V to choose a title then press ENTER. Title List options appears on the left side of the Title List display.
- Use v / V to select an option then press ENTER to confirm.

<b>Play</b>	<b>Play:</b> Start playback the selected title.
<b>Title Name</b>	<b>Title Name:</b> Edits the title name (page 57).
<b>Delete</b>	<b>Delete:</b> Deletes the title from the Title List.
<b>Dubbing</b>	<b>Dubbing:</b> Copys the title to a VHS tape.

- Press RETURN (O) repeatedly to exit Title List.

### Tip:

Press DISPLAY to display more detailed title information for selected title.

## Deleting a Title Video

Before a disc is finalized, you can erase titles recorded on the disc.

### Caution

- If you erase a title from a DVD-R disc, the title will disappear from the Title List, but the available recording time will not increase.
- When erasing a title from a DVD-RW disc, the remaining time available for recording will only increase if it is the last title on the disc.

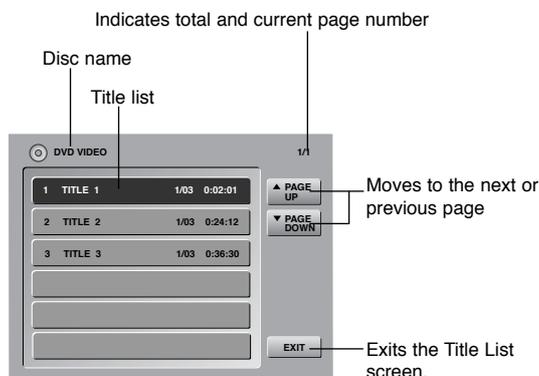
- Press LIST/DISC MENU to display Title List
- Use v V b B to choose a title you want to erase then press ENTER. Title List options appears on the left side of the Title List screen.



- Use v / V to select 'Delete' then press ENTER to confirm. The confirm message for deleting will appear.
- Use b / B to select 'Yes' then press ENTER. The selected title is deleted. After pressing ENTER, the new, updated menu is displayed.
- Repeat steps 2 - 4 to continue to delete from the menu.
- Press RETURN (O) to exit the menu.

## If the disc has already been finalized

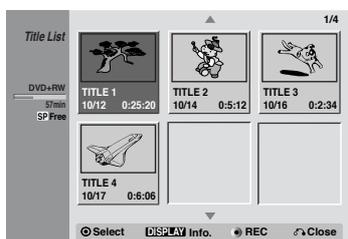
You will see a screen as shown below:



## Using the Title List menu **+RW**

The Title List is where you can see all recorded titles, and where you can delete titles and make other changes to the Original content of the disc. You can also play titles directly from the Title List menu. The recorder must be stopped in order to edit using the Title List menu.

- 1 Press LIST/DISC MENU to display the Title List menu.
  - Use the  $\nabla$  /  $\blacktriangledup$  buttons to display the previous/next page if there are more than 6 titles.
  - To exit the Title List menu, press RETURN (O).



- 2 To view Title List options, select the title you want then press ENTER. Title List options appears on the left side of the menu.
- 3 Use  $\nabla$  /  $\blacktriangledup$  to select an option then press ENTER to confirm.

<b>Play</b>	<b>Play:</b> Starts playback the selected title except the hidden chapters or titles.
<b>Full Play</b>	<b>Full Play:</b> Starts playback the selected title including the hidden chapters.
<b>Chapter</b>	<b>Chapter:</b> Moves Chapter List menu of the title. (refer to right on this page)
<b>Delete</b>	<b>Delete:</b> Deletes the title. (page 56)
<b>Protect</b>	<b>Protect:</b> Protects accidental recording, editing or deleting of the title. (page 58)
<b>Edit</b> >	<b>Edit:</b> Selects Edit options. <ul style="list-style-type: none"> <li>• <b>Title Name:</b> Edits the title name. (page 57)</li> <li>• <b>Divide:</b> Divides one title into two titles. (page 59)</li> <li>• <b>Hide (Show):</b> Hides (or Shows) the title or all chapters within the title. (page 59)</li> </ul>
<b>Dubbing</b>	<b>Dubbing:</b> Copys the title to a VHS tape.

- 4 Press RETURN (O) repeatedly to exit Title List menu.

### Tip

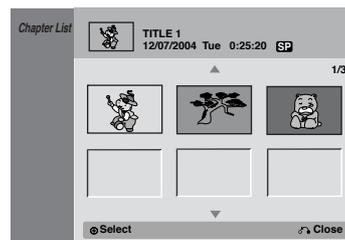
Press DISPLAY to display more detailed title information for selected title.

### Caution

If you press z REC when the Title List menu appears, the selected title is erased then overwrite recording starts. (See page 60 for more details.)

## Using the Chapter List menu **+RW**

- 1 Press LIST/DISC MENU to display Title List menu.
- 2 Use  $\nabla$  V b B to choose the title you want to view Chapter List menu then press ENTER. Title List options appears on the left side of the menu.
- 3 Use  $\nabla$  /  $\blacktriangledup$  to select "Chapter" from Title List options then press ENTER. Chapter List menu appears on the TV screen.



- 4 To view Chapter List options, select the chapter you want then press ENTER. Chapter List options appears on the left side of the menu.
- 5 Use  $\nabla$  /  $\blacktriangledup$  to select an option then press ENTER to confirm.

<b>Play</b>	<b>Play:</b> Starts playback of the selected chapter.
<b>Title</b>	<b>Title:</b> Moves to Title List menu of the chapter. (refer to left on this page)
<b>Combine</b>	<b>Combine:</b> Combines two chapters into one. (page 57)
<b>Hide (Show)</b>	<b>Hide (Show):</b> Hides (or Shows) the selected chapter.

- 6 Press RETURN (O) repeatedly to exit Chapter List menu.

## Using the Title List menu **+R**

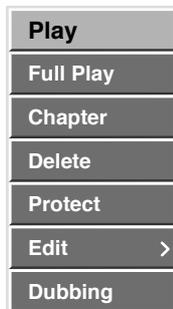
The Title List is where you build and edit your Playlist, and where you can delete titles and make other changes to the Original content of the disc. You can also play individual titles directly from the Title List menu.

The recorder must be stopped in order to edit using the Title List menu.

- 1 Press LIST/DISC MENU repeatedly to display the Title List-Original menu.
  - Use the v/V buttons to display the previous/next page if there are more than 6 titles or chapters.
  - To exit the menu, press RETURN (O).



- 2 To view Title List options, select the title you want then press ENTER. Title List options appears on the left side of the Title List display.
- 3 Use v / V to select an option then press ENTER to confirm.



**Play:** Start playback of the selected title.

**Full Play:** Starts playback the selected title including the hidden chapters.

**Chapter:** Shows the Chapter List menu of the title (Refer to right on this page).

**Delete:** Deletes the title from the Title List menu. (page 56)

**Protect:** Protects accidental recording, editing or deleting of the title. (page 58)

**Edit:** Selects Edit options.

- **Title Name:** Edits the title name. (page 57)
- **Divide:** Unavailabel (DVD+RW only).
- **Hide (Show):** Hides (or Shows) the all chapters within the title. (page 59)

**Dubbing:** Copys the title to a VHS tape.



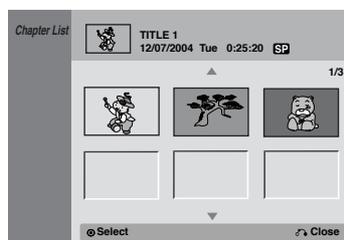
- 4 Press RETURN (O) repeatedly to exit the Title List menu.

### Tip

Press DISPLAY to display more detailed title information for selected title.

## Using the Chapter List menu **+R**

- 1 Press LIST/DISC MENU repeatedly to display Title List menu.
- 2 Use v V b B to choose the title you want to view Chapter List menu then press ENTER. Title List options appears on the left side of the Title List display.
- 3 Use v / V to select "Chapter" from Title List options then press ENTER. Chapter List menu appears on the TV screen.



- 4 To view Chapter List options, select the chapter you want then press ENTER. Chapter List options appears on the left side of the Chapter List display.
- 5 Use v / V to select an option then press ENTER to confirm.



**Play:** Starts playback of the selected chapter.

**Title:** Shows the Title List menu of the chapter (refer to left on this page)

**Combine:** Combines two chapters into one. (page 57)

**Hide (Show):** Hides (or Shows) the selected chapter. (page 59)

- 6 Press RETURN (O) repeatedly to exit Chapter List menu.

## Title and Chapter Editing

Edits you make to the Original content changes the actual content of the disc. For example, if you delete a title or chapter from the Original content (Title or Chapter), that title or chapter is deleted from the disc, freeing up extra recording time.

When you edit the Playlist, on the other hand, you are not changing the content of the disc. For example, when you delete a title from the Playlist, you are just telling the recorder not to play that title; nothing is actually deleted from the disc.

### Titles, Chapters and Parts

Titles in the disc's original content contain one or more chapters. When you insert a title into the Playlist, all the chapters within that title also appear. In other words, chapters in the Playlist behave exactly as chapters on a DVD-Video disc do. Parts are sections of Original or Playlist titles. From the Original and Playlist menu you can add or delete parts. Adding a chapter or title to the Playlist creates a new title made up of a section (ie., chapter) of an Original title. Deleting a part removes part of a title from the Original or Playlist menu.

#### Caution

- When editing using the Delete, Add and Move functions, the start and end frames may not be exactly as set in the start and end point display.
- During Playlist playback, you may notice a momentary pause between edits. This is not a malfunction.

## Adding Chapter Markers



You can put a chapter marker anywhere in a title during recording or playback.

Once the chapter is marked, you can use the Chapter Search feature, as well as Erase, combine and move chapters in the Chapter List menu.

- 1 Play the title (Original or Playlist).
- 2 At the point you want to start a new chapter, press CHP ADD.  
A chapter marker icon appears on the TV screen.

#### Notes:

- Chapter markers are inserted at regular intervals automatically. You can change this interval from the Initial Setup menu (see Auto Chapter on page 26).
- You can also put chapter markers during recording.

## Changing Title Thumbnails



Each title displayed in the Title List menu is represented by a thumbnail picture taken from the start of that title or chapter.

If you prefer, select a different still picture from within a title.

- 1 Play the title (Original or Playlist).
- 2 Press THUMBNAIL to make the currently displayed picture the one that appears in the Original or Playlist menu.  
The still picture that you choose appears in both the Original or Playlist menu.

#### Tip:

You can also change the thumbnail picture of the title on the Chapter List-Original or Chapter List-Playlist menu. Select a chapter on the Chapter List-Original or Chapter List-Playlist menu then press THUMBNAIL. The thumbnail picture of the title that includes the chapter is changed.

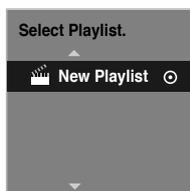
## Making a New Playlist **VR**

Use this function to add an Original title or chapter to the Playlist. When you do this, the whole title or chapter is put into the Playlist (you can delete bits you don't need later — see Deleting a Title/Chapter on page 56).

The title appears in the Playlist complete with the chapter markers that appear in the Original. However, if you add more chapter markers to the Original later, these are not automatically copied over into the Playlist title.

If you only want to add a chapter of a title, use the Adding Additional Title/Chapter to the Playlist on this page.

- 1 Press LIST/DISC MENU repeatedly to display Title List-Original menu.  
If you want to display the Chapter List-Original menu, refer to “Using the Chapter List-Original menu” on page 49.
- 2 Choose a title or chapter on the Original menu to put into the Playlist, then press ENTER.  
The Title List-Original or Chapter List-Original options appear on the left side of the screen.
- 3 Use v / V to select “Playlist Add” from the Original (Title or Chapter) options then press ENTER.

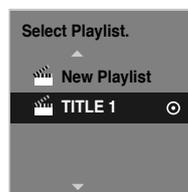


- 4 Select 'New Playlist' then press ENTER.  
The new title appears in the updated Playlist. All chapters of the title are added to the Playlist.

## Adding Additional Titles/Chapters to the Playlist **VR**

You can add an Original title or chapter to add to a Playlist title even if it is already registered.

- 1 Press LIST/DISC MENU repeatedly to display Title List-Original menu.  
If you want to show the Chapter List-Original menu, refer to “Using the Chapter List-Original ” on page 49.
- 2 Choose an Original title or chapter to put into the Playlist, then press ENTER.  
The Title List-Original or Chapter List-Original options appear on the left side of the screen.
- 3 Use v / V to select 'Playlist Add' from the Title List-Original or Chapter List-Original options then press ENTER.



- 4 Choose a title that is already registered to insert a title, then press ENTER.  
The title appears in the updated Playlist menu.
- 5 Repeat steps 1-4 to continue adding to the Playlist.
- 6 Press RETURN (O) repeatedly to exit the menu.

## Deleting a Title/Chapter

**VR** **+RW** **+R**

When you erase a title or chapter from the Playlist menu on DVD+R, DVD+RW or DVD-RW discs formatted in VR mode, you only remove it from the Playlist; the title/chapter remains in the Original menu.

If you choose to delete a title or chapter from Title List or Chapter List menu, the title or chapter is actually deleted from the disc and the remaining time available for recording increases. Titles/chapters deleted from the Original are also removed from the Playlist.

ote

It may not be possible to delete chapters that are less than 5 seconds long.

- 1 On the Title List or Chapter List menu, use v V b B to choose a chapter or title you want to delete then press ENTER.
- 2 Options appears on the left side of the screen.
- 2 Select 'Delete' option on the options on the menu. e.g., If you select "Delete" on Title List-Original menu.



- 3 Press ENTER to confirm. The confirm message for deleting will appear.
- 4 Use b / B to select "Yes" then press ENTER. The selected chapter or title is deleted. After pressing ENTER, the new, updated menu is displayed.
- 5 Repeat steps 1- 4 to continue to delete from the menu.
- 6 Press RETURN (O) repeatedly to exit the menu.

ote

When DVD+RW recording, the deleted title's name is changed to 'Deleted Title'.

If more than two titles are repeatedly deleted, the titles are combined into one.

## Deleting a Part **VR**

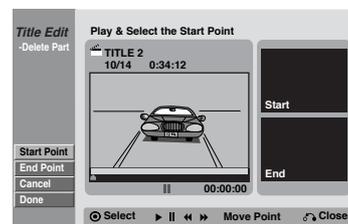
You can delete a part which you do not want in the title.

- 1 Press LIST/DISC MENU repeatedly to display Title List-Original or Title List-Playlist menu.

- 2 Use v V b B to choose a title you want to delete then press ENTER. The options appears on the left side of the menu.
- 3 Select 'Delete Part' from the options on the menu. e.g., If you select "Delete Part" on Title List-Original menu.



- 4 Press ENTER. The Title Edit (Delete Part) menu appears on the TV screen and the VCR/DVD Recorder goes into Pause mode. The Start Point option is highlighted.



- 5 Use PLAY, PAUSE/STEP, FF, REW, and Slow Motion playback to find the starting point. The segment is indicated in yellow on the Progress Bar.
- 6 Press ENTER at the starting point of the segment you want to erase. The End Point option is highlighted.
- 7 Use PLAY, PAUSE/STEP, FF, REW, and Slow Motion playback to find the ending point.
- 8 Press ENTER at the ending point of the section you want to erase. The Done option is highlighted. To cancel the Edit mode, select "Cancel" using v / V then press ENTER.
- 9 Press ENTER to delete the selected part. When the confirm message appears, select "Yes" using b / B then press ENTER. To erase additional segments, repeat steps 5-9.
- 10 When finished editing, press RETURN (O). The Title List-Original or Title List-Playlist menu appears.

### **Note:**

If you select "Cancel" then press ENTER, the VCR/DVD Recorder will go to previous option and into Pause mode.

## Naming a Title

VR

Video

+RW

+R

You can name Original and Playlist titles independently.

- 1 On the Title List menu, use v V b B to choose the title you want to name then press ENTER.

Options appears on the left side of the menu.

- 2 Use v/V to select "Title Name" option then press ENTER. The Keyboard menu appears.

e.g., If you select "Title Name" on Title List-Original menu.



- 3 Enter a name for the title. Use v V b B to select a character then press ENTER to confirm your selection. Refer step 5 as shown on page 28 (Disc Label).



- 4 Choose OK then press ENTER to save the name and return to the previous menu screen.
- 5 Press RETURN (O) repeatedly to exit the menu.

### Notes:

- Names can be up to 32 characters long.
- For discs formatted on a different DVD Recorder, you will see only a limited character set.
- When recording in DVD-R, DVD+R or DVD+RW, the entered name is displayed on the DVD player only after finalizing.

## Combining Two Chapters Into One

VR

+RW

+R

Use this function to combine two adjacent Playlist or Original chapters into one.

- 1 On the Chapter List menu, select the second chapter of the two chapters you want to combine then press ENTER.

Chapter List options appears on the left side of the menu.

e.g., If you select "Combine" on Chapter List-Original menu.



- 3 Use v / V to select "Combine" option then press ENTER. After pressing ENTER, the new, updated menu is displayed.
- 4 Repeat steps 1 - 3 to continue to combine from the menu.
- 5 Press RETURN (O) repeatedly to exit the menu.

### Notes:

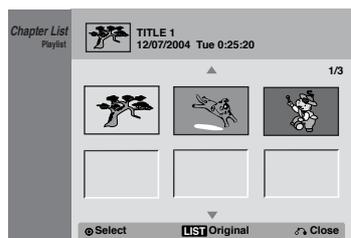
This function cannot operate listed as below;

- If there is only one chapter within the title.
- If two chapters created by erasing a part from an original title.
- If two chapters created from different titles.
- If two chapters created by moving an order from an original title.

## Moving a Playlist Chapter **VR**

Use this function to re-arrange the playing order of Playlist chapters on the Title List-Playlist menu.

- 1 Press LIST/DISC MENU repeatedly to display Title List-Playlist menu.  
To display the Chapter List-Playlist menu, refer to "Using the Chapter List-Playlist" on page 50.



- 2 Select a chapter from the Chapter List-Playlist menu.
- 3 Press ENTER.  
Chapter List-Playlist options appears on the left side of the screen.
- 4 Use v / V to select "Move" from Playlist options then press ENTER.
- 5 Use v V b B to choose the place you want to move the chapter to then press ENTER.  
After pressing ENTER, the new, updated menu is displayed.
- 6 Repeat steps 2 - 5 to continue to move from the menu.
- 7 Press RETURN (O) repeatedly to exit the menu.

### **Note:**

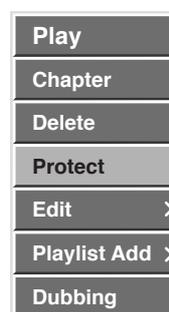
This function is not available if there is only one chapter.

## Protect a Title **VR** **+RW** **+R**

Use this function to protect accidental recording, editing or deleting of the title.

- 1 Press LIST/DISC MENU to display Title List menu.
- 2 Use v V b B to choose a title you want to protect then press ENTER.  
Options appears on the left side of the screen.
- 3 Select "Protect" option on the options.

e.g., If you select "Protect" on Title List-Original menu.



- 4 Press ENTER to confirm.  
The lock mark will appears on the title's thumbnail.

### **Tip:**

If you select a title that has already been protected on the Title List menu, you can 'unprotect' it by choosing "Unprotect" from the Title List menu options. After doing this, you can edit and/or delete the title.

## Hide a Title/Chapter +RW +R

Use this function to hide a title/chapter on the Title List or Chapter List menu.

- 1 On the Title List or Chapter List menu, use v V b B to choose a title or chapter you want to hide then press ENTER. Options appears on the left side of the screen.
- 2 Select 'Hide' option on the options. e.g., If you select "Hide" on Title List menu.



- 3 Press ENTER to confirm. The title's thumbnail will be dim.

### Tip:

If you select a title that has already been dim on the Title List menu, you can 'show' it by choosing "Show" from the Title List menu options. After doing this, you can see the title.

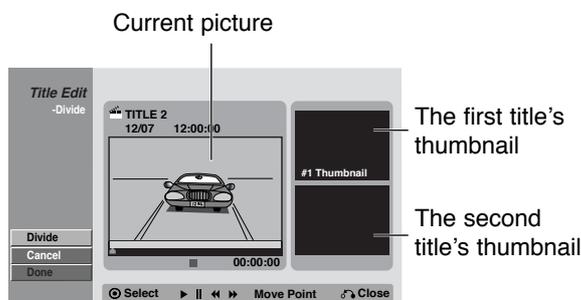
## Divide One Title Into Two +RW

Use this command to split a title up into two new titles.

- 1 On the Title List menu, select a title you want to divide then press ENTER. The menu options appears on the left side of the screen.



- 2 Select "Divide" from the Title List menu options and press ENTER. Title Edit-Divide menu appears and goes into STOP mode. "Divide" option is highlighted.



- 3 Use PLAY, PAUSE/STEP, FF, REW, and Slow Motion playback to find the dividing point. The segment is indicated in yellow on the Progress Bar.
- 4 Press ENTER at the point of the section you want to divide the title. The Done option is selected. To cancel the dividing point, select "Cancel" using v / V then press ENTER.
- 5 Press ENTER to fix the dividing point. The title is divided into two new titles. It take up to 4 minutes to divide.

## Overwrite Recording

To overwrite a new video recording to a previously recorded title, follow these steps. This feature is not available on DVD+R, which always record at the end of the Disc.

- 1 Select input source you want to record (channel, AV1-2, DV).
- 2 Press LIST/DISC MENU to display the Title List menu.
- 3 Use  $\downarrow$   $\uparrow$   $\leftarrow$   $\rightarrow$  to choose a title you want to overwrite.
- 4 Press  $\rightarrow$  REC to start overwrite recording.

Overwrite recording is started from the start point of the title.

- 5 Press STOP (x) to stop the overwrite recording.

The new title is created and updated menu is displayed.

### Notes:

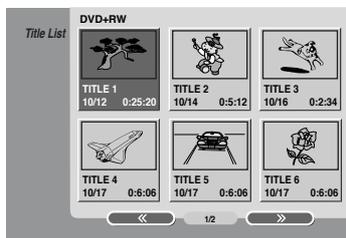
- This function is not available with a protected title.
- If the overwriting is elapsed more than the recording length of the current title, the next title is overwritten. But if next title is protected, the overwriting is stopped at the starting point of the title.
- If the selected title's recording length is less than 10 seconds, the next title is overwritten. But if next title is protected, the overwriting is impossible.

## Viewing Title List menu displayed on other DVD recorders or players

You can view the Title List menu displayed on the another DVD player that is capable of playing DVD+RW or DVD+R discs.

- 1 Insert DVD+R or DVD+RW disc recorded already.
- 2 Press TITLE.

Title List menu will appear as below.



- 3 To play back a title, select the title you want then press ENTER or N (PLAY).

### Tip:

You can remove the Title List menu by pressing STOP (x).

## Playing Your Recordings on Other DVD Players (Finalizing a Disc)

Most regular DVD players can play finalized discs recorded in Video mode, finalized DVD+R or DVD+RW. A small number of players can also play DVD-RW discs recorded in VR mode, finalized or not. Check the manual that came with the other player to check what kinds of discs it will play.

Finalizing 'fixes' the recordings and editings in place so that the disc can be played on a regular DVD player or computer equipped with a suitable DVD-ROM drive.

Finalizing a Video mode disc creates a menu screen for navigating the disc. This is accessed by pressing LIST/DISC MENU or TITLE.

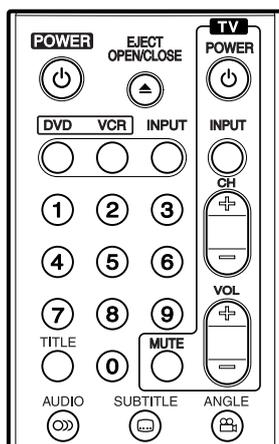
To finalize a disc, refer to "Disc Finalize" on page 27.

### Notes:

- Unfinalized DVD+RW is playable on regular DVD players.
- The edited contents of DVD+RW disc is compatible on regular DVD players only after finalizing.
- Any edited contents of the DVD+R disc are not be compatible on regular DVD players. (Hide, chapter combine, added chapter mark, etc.)

## Controlling Your TV with the Supplied Remote

You can control the sound level, input source, and power switch of your LG TV with the supplied remote. You can control your TV using the buttons below.



By pressing	You can
POWER	Turn the TV on or off.
INPUT	Switch the TV's input source between the TV and other input sources.
CH +/-	Scans up or down through memorized channels.
VOL +/-	Adjust the volume of the TV.
MUTE	Turns on or off TV sound.

### Note:

Depending on the unit being connected, you may not be able to control your TV using some of the buttons.

## Controlling other TVs with the remote

You can control the sound level, input source, and power switch of non-LG TVs as well. If your TV is listed in the table below, set the appropriate manufacturer code.

1. While holding down TV POWER button, press the number buttons to select the manufacturer code for your TV (Refer to table on the right column).
2. Release TV POWER button.

## Code numbers of controllable TVs

If more than one code number is listed, try entering them one at a time until you find the one that works with your TV.

Manufacturer	Code Number	Manufacturer	Code Number
ADMIRAL	16,33,37,44,45	MONTGOMERY	01,06,08,09
AIWA	70	WARD	23,24,32,33,34
AKAI	01	NEC	01,08
AMARK	09	NOBLEX	07
AOC	01	PACKARD BELL	43
BELL & HOWELL	33	PANASONIC	07,11,13,25,35,36
BROKSONIC	18,19	PHILCO	01,06,07,08,09,
CANDLE	51		15,38,43,58
CCE	07	PHILIPS	06,07,43,61,62,65
CENTURION	08	PIONEER	30
CINERAL	43	PORTLAND	09
CITIZEN	49,50,51,52,53,54,55	PROSCAN	03,37,44
CORONADO	09	QUASAR	11,13
CROWN	09	RADIO SHACK	16,17,23
CURTIS MATHES	01,03,08,33,35,37,44	RCA	01,03,37,44,69
DAEWOO	16,38,39,40,41,42,43	REALISTIC	16,17,23
DAYTRON	01,08	SAMPO	08
EMERSON	01,09,16,17,18,19	SAMSUNG	01,08,09,25,68
FISHER	28,29	SANYO	28,29
FUNAI	46,47	SCOTT	01,08
GENERAL ELECTRIC	03,10,11,13,37,44	SEARS	09,25,26,27,28,29
GRADIENTE	01,56,57,63,67	SEMP	64
HITACHI	09,14,15,43	SHARP	09,22,23,24,60,66
JC PENNEY	01,08,10,27,35	SIGNATURE 2000	01,06,08,09,10,
JVC	20,21,63,67		23,24,33,34
KIOTE	43	SONY	12,62
KMC	09	SOUNDESIGN	51
KTV	01,08,09,31	SYLVANIA	01,04,05,06,07,
LG (GOLDSTAR)	01,07,08,09,35,39,40		08,35,51
LODGENET	33	SYMPHONIC	46,47
LOGIK	33	TATUNG	11
LXI	09,24,25,26,27,28,29	TEKNIKA	07,09,16,33,51
MAGNAVOX	01,02,04,05,06,	TELERENT	09,33
	07,08,09,20,	THOMSON	69
	34,35,43,51,61,62,65	YORX	08
MAJESTIC	33	TOSHIBA	01,25,26,27,64
MARANTZ	01,32	WARDS	01,06,08,09,10,33,34
MEMOREX	33	XR1000	48
MGA/MITSUBISHI	01,08,32,34	ZENITH	01,02,33,59

### Notes:

- Depending on your TV, some or all buttons may not function on the TV, even after entering the correct manufacturer code.
- If you enter a new code number, the code number previously entered will be erased.
- When you replace the batteries of the remote, the code number you have set may be reset to the default setting. Set the appropriate code number again.

# 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 country 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
No power.	<ul style="list-style-type: none"> <li>The power cord is disconnected.</li> </ul>	<ul style="list-style-type: none"> <li>Plug the power cord into the wall outlet securely.</li> </ul>
The power is on, but the DVD+VCR does not work.	<ul style="list-style-type: none"> <li>DVD or VCR button is not switched properly.</li> </ul>	<ul style="list-style-type: none"> <li>Refer to page 6.</li> </ul>
	<ul style="list-style-type: none"> <li>No disc is inserted.</li> <li>No tape is inserted.</li> </ul>	<ul style="list-style-type: none"> <li>Insert a disc or tape. (Check that the disc or tape indicator in the display window is lit.)</li> </ul>
No picture.	<ul style="list-style-type: none"> <li>The TV is not set to receive DVD+VCR signal output.</li> </ul>	<ul style="list-style-type: none"> <li>Select the appropriate video input mode on the TV so the picture from the DVD+VCR player appears on the TV screen.</li> </ul>
	<ul style="list-style-type: none"> <li>The video cable is not connected securely.</li> </ul>	<ul style="list-style-type: none"> <li>Connect the video cable into the jacks securely.</li> </ul>
	<ul style="list-style-type: none"> <li>The Progressive Scan is set to On on the setup menu but is connected to a standard(analog) television with component video input.</li> </ul>	<ul style="list-style-type: none"> <li>Set Progressive Scan to Off (see page 17).</li> </ul>
	<ul style="list-style-type: none"> <li>Mismatch setting between TV and this unit.</li> </ul>	<ul style="list-style-type: none"> <li>Select the correct Video Output in SETUP menu.</li> </ul>
	<ul style="list-style-type: none"> <li>Wrong connection.</li> </ul>	<ul style="list-style-type: none"> <li>Check the connection.</li> </ul>
No sound.	<ul style="list-style-type: none"> <li>The equipment connected with the audio cable is not set to receive DVD+VCR signal output.</li> </ul>	<ul style="list-style-type: none"> <li>Select the correct input mode of the audio receiver so you can listen to the sound from the DVD+VCR.</li> </ul>
	<ul style="list-style-type: none"> <li>The audio cables are not connected securely.</li> </ul>	<ul style="list-style-type: none"> <li>Connect the audio cable into the jacks securely.</li> </ul>
	<ul style="list-style-type: none"> <li>The power of the equipment connected with the audio cable is turned off.</li> </ul>	<ul style="list-style-type: none"> <li>Turn on the equipment connected with the audio cable.</li> </ul>
	<ul style="list-style-type: none"> <li>The AUDIO options are set to the wrong position.</li> </ul>	<ul style="list-style-type: none"> <li>Set the AUDIO options to the correct position.</li> </ul>
The playback picture is poor.	<ul style="list-style-type: none"> <li>The disc is dirty.</li> </ul>	<ul style="list-style-type: none"> <li>Clean the disc.</li> </ul>
	<ul style="list-style-type: none"> <li>The TV channels are not tuned in properly.</li> </ul>	<ul style="list-style-type: none"> <li>Check tuning, carry out tuning again.</li> </ul>
	<ul style="list-style-type: none"> <li>Tape heads are dirty.</li> </ul>	<ul style="list-style-type: none"> <li>Clean video heads.</li> </ul>
	<ul style="list-style-type: none"> <li>Tape is a rental or was recorded on another VCR.</li> </ul>	<ul style="list-style-type: none"> <li>Use CH/TRK (+/-) for manual tracking adjustment while tape is playing.</li> </ul>
	<ul style="list-style-type: none"> <li>This unit can only output 525p Progressive scan picture.</li> </ul>	<ul style="list-style-type: none"> <li>Make sure that your TV can support 525p Progressive scan picture or set Progressive scan to off.</li> </ul>

Symptom	Cause	Correction
The DVD+VCR does not start playback.	• An unplayable disc is inserted.	• Insert a playable disc. (Check the disc type and Regional code.)
	• The disc is placed upside down.	• Place the disc with the playback side down.
	• The disc is not placed within the guide.	• Place the disc on the disc tray correctly inside the guide.
	• The disc is dirty.	• Clean the disc.
	• The Rating level is set.	• Cancel the Rating function or change the rating level.
Video tape cannot be inserted.	• Is the cassette compartment empty?	• Eject the tape in.
The remote control does not work properly.	• There is an obstacle in the path of the remote control and this unit.	• Remove the obstacle.
	• The batteries in the remote control are exhausted.	• Replace the batteries with new ones.
	• The remote control is not pointed at the remote sensor of the DVD+VCR.	• Point the remote control at the remote sensor of the DVD+VCR.
	• The remote control is too far from the DVD+VCR.	• Operate the remote control within 23ft (7m).
	• This remote control use the same buttons for VCR and DVD functions (ex.PLAY).	• When using a VCR, first press the VCR button. When using a DVD, first press the DVD button.
Camcorder image is not shown.	• Camcorder is off.	• Turn camcorder on and operate properly.
Camcorder image via AV input to DVD+VCR is not shown on TV screen.	• DVD+VCR SOURCE SELECT is not set to LINE1 or LINE2.	• Press INPUT to select LINE input channel (LINE1 or LINE2).
Timer recording is not possible.	• Clock in DVD+VCR is not set to correct time.	• Set clock to correct time.
	• Timer has been programmed incorrectly.	• Reprogram Timer.
	• $\odot$ indicator light does not appear after programming timer.	• Reprogram Timer and turn DVD+VCR off to enable timer.
TPicture from external input is distorted.	• The video signal from the external component is copy-protected.	• You cannot connect via the VCR/DVD Recorder. Connect the component directly to your TV.
Some channels are skipped over when using CH ( $\blacktriangle$ / $\blacktriangledown$ ).	• The skipped channels were deleted with the CH. Add/Del feature.	• Use the CH. Add/Del feature to restore channels. See "To Add or Erase Channels from Memory" on page 21.

Symptom	Cause	Correction
Picture or sound of broadcasting channel is weak or missing.	• Antenna or cables are loose.	• Tighten connections or replace cable.
	• Wrong Tuning Band is selected in the VCR/DVD Recorder Setup menu.	• Try "Tuning Band Select" options; see page 20 for details.
Can't play disc recorded on this VCR/DVD Recorder on another DVD player.	• The disc was recorded in Video mode.	• Finalize the disc; see page 27.
	• Some players will not play even a finalized disc recorded in Video mode.	• No solution.
	• The disc was recorded in VR mode.	• The other player must be RW compatible in order to play it.
	• Discs recorded with copy-once material cannot be played on other players.	• No solution.
Cannot record or did not record successfully.	• The remaining blank space on the disc is insufficient.	• Use another disc.
	• The source you are trying to record is copy-protected.	• You cannot record the source.
	• When setting the recording channel, the channel is tuned on the TV's own tuner.	• Select the channel on the VCR/DVD Recorder's built-in TV tuner.
	• When recording to a Video mode disc, programs that are copy-once protected cannot be recorded.	• Use a VR mode formatted disc for copy-once material.
Stereo Audio Record and/or Playback not present.	• TV is not Stereo-compatible.	• No solution.
	• Broadcast program is not in stereo format.	• No solution.
	• VCR/DVD Recorder A/V Out jacks are not connected to TV A/V In jacks.	• Make A/V connections. Stereo is available only via A/V output from VCR/DVD Recorder.
	• VCR/DVD Recorder Audio/Video Out is not selected for viewing at the TV.	• Select AUX or A/V source as TV input.
	• VCR/DVD Recorder's TV audio channel is set to SAP or MONO.	• Set TV audio channel mode to Stereo. See "Changing TV Audio Channel" on page 29.

### Reset the VCR/DVD Recorder

If you observe any of the following symptoms...

- When the VCR/DVD Recorder is plugged in, but the power will not turn on or off.
- When the display window does not working.
- When the VCR/DVD Recorder does not operate normally.

You can reset the VCR/DVD Recorder as follows :

- Press and hold the POWER button for more than five seconds. This will force the VCR/DVD Recorder to power off. Press the POWER button again to turn the VCR/DVD Recorder back on.
- Unplug the power cord and then plug the power cord again after more than five seconds.

## Specifications

### General

Power requirements	AC 120V, 60 Hz
Power consumption	35W
Dimensions (approx.)	430 X 78.5 X 354 mm (16.9 x 3.1 x 13.9 inches) (w x h x d)
Mass (approx.)	5.6 kg (12.32 lbs)
Operating temperature	5°C to 35°C (41°F to 95°F)
Operating humidity	5 % to 90 %
Signal system	NTSC

### Recording

Recording format	DVD VideoRecording, DVD-VIDEO
Recordable discs	DVD-ReWritable, DVD-Recordable, DVD+ReWritable, DVD+Recordable
Recordable time	DVD ; Approx. 1 hour (XP mode), 2 hours (SP mode), 4 hours (LP mode), 6 hours (EP mode) VCR ; SP: 2 HOURS (T-120), SLP: 6 HOURS (T-120)/8 HOURS (T-160)

### Video recording format

Sampling frequency	27MHz
Compression format	MPEG 2

### Audio recording format

Sampling frequency	48kHz, 96kHz
Compression format	Dolby Digital

### VCR Specifications

Head system	Four head helical scan azimuth system
Timer	12-hour display type with AM, PM
Tape speed	SP: 33.35 mm/sec, LP: 16.67 mm/sec, SLP: 11.12 mm/sec
Tape width	12.7 mm
Rewind time	About 65 seconds (T-120)
Antenna	75 ohms (VHF/UHF)
VHF output signal	Channel 3 or 4 (Switchable)
Channel coverage	VHF: 2-13, UHF: 14-69, CATV: 1-125 (4A, A-W, W+1 - W+84, A-5 - A-1)
Frequency range	20Hz to 20kHz
Signal-to-noise ratio	43dB
Dynamic range	88 dB
Channel separation	60 dB

## DVD Specifications

Laser system	Semiconductor laser, wavelength 650 nm
Frequency response	DVD (PCM 48 kHz): 8 Hz to 22 kHz, CD: 8 Hz to 20 kHz
Signal-to-noise ratio	More than 95dB
Harmonic distortion	Less than 0.008%
Dynamic range	More than 90 dB

## Inputs

ANTENNA IN	Antenna or CATV input, 75 ohms
VIDEO IN (AV1,2)	1.0 Vp-p 75 ohms, sync negative, RCA jack x 2
AUDIO IN (AV1,2)	-6 dBm more than 47 kohms, RCA jack (L, R) x 2
S-VIDEO IN	(Y) 1.0 V (p-p), 75 $\Omega$ , negative sync, Mini DIN 4-pin x 1 (C) 0.286 V (p-p) 75 $\Omega$
DV IN	4 pin (i.LINK/IEEE 1394 standard)

## Outputs

VIDEO OUT	1 Vp-p 75 $\Omega$ , sync negative, RCA jack x 1
S-VIDEO OUT	(Y) 1.0 V (p-p), 75 $\Omega$ , negative sync, Mini DIN 4-pin x 1 (C) 0.286 V (p-p) 75 $\Omega$
COMPONENT VIDEO OUT (PROGRESSIVE SCAN)	(Y) 1.0 V (p-p), 75 $\Omega$ , negative sync, RCA jack x 1 (Pb)/(Pr) 0.7 V (p-p), 75 $\Omega$ , RCA jack x 2
Audio output (digital audio)	0.5 V (p-p), 75 $\Omega$ , RCA jack x 1
Audio output (optical audio)	Optical connector x 1
Audio output (analog audio)	1.1 Vrms (1 kHz, -6 dB), 600 $\Omega$ , RCA jack (L, R) x 2
RF OUT	Channel 3 or 4 (Switchable)

## Accessory:

Video cable . . . . .	1	Audio cable . . . . .	1
RF 75-ohm Coaxial Cable . . . . .	1	Remote control . . . . .	1
Batteries . . . . .	2		

*Design and specifications are subject to change without notice.*