



# DVD Recorder Receiver System OWNER'S MANUAL

**MODEL:LH-R5500SB**

(Main Unit: LH-R5500W

Speakers: LHS-55SBS, LHS-55SBC,  
LHS-55SBW)



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

## Safety Precautions



### CAUTION

RISK OF ELECTRIC SHOCK  
DO NOT OPEN



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



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



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

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

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

CLASS 1 LASER PRODUCT  
KLASSE 1 LASER PRODUKT  
LUOKAN 1 LASER LAITE  
KLASS 1 LASER APPARAT  
CLASSE 1 PRODUIT LASER

### CAUTION:

This product employs a Laser System.

To ensure proper use of this product, please read this owner's manual carefully and retain it for future reference. Should the unit require maintenance, contact an authorized service center. Performing controls, adjustments, or carrying out procedures other than those specified herein may result in hazardous radiation exposure.

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

### CAUTION:

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

### CAUTION concerning the Power Cord

**Most appliances recommend they be placed upon a dedi-  
cated 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.

The appliance is not intended for use by young children or infirm persons without supervision.

Young Children should be supervised to ensure that they do not play with appliance.

If the appliance is supplied from a cord extension set or electrical portable outlet device, the cord extension set on electrical portable outlet device must be positioned so that it is not subject to splashing or ingress of moisture.

### 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. \_\_\_\_\_

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

## G-CODE®

G-CODE is a registered trademark of Gemstar Development Corporation.

The G-CODE System is manufactured under license from Gemstar Development Corporation.

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## DVD Recorder Receiver Overview

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

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



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

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

### The recommendable recordable DVD discs

DVD-R	DVD+R	DVD-RW	DVD+RW
SONY (8x, 16x)	SONY (2.4x, 4x, 8x, 16x)	Victor (1x, 4x)	SONY (2.4x)
TDK (4x, 8x)	TDK (4x)	Maxell (1x, 2x, 4x)	TDK (2.4x)
Verbatim (4x, 8x)	Mitsubishi (4x, 8x)	TDK (2x)	Philips (4x)
Panasonic (2x, 4x)	Ricoh (2x, 4x, 8x)	Mitsubishi (2x)	Ricoh (2.4x)
-	-	-	HP (2.4x, 4x)

#### Note:

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



## DVD Recorder Receiver Overview

### 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.
- 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.)

#### Regional code of the recorder and DVDs



This recorder is designed and manufactured for playback of Region 4 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 4 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

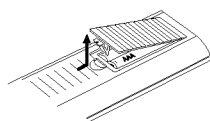
Some playback operations of DVDs and Video CDs may be intentionally fixed by software manufacturers. As this unit plays DVDs and Video CDs according to disc content designed by the software manufacturer, some playback features of the unit may not be available or other functions may be added.

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.

### Remote Control Operation

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

#### Remote Control Battery Installation



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



**Caution**

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

## DVD Recorder Receiver Overview (Continued)

### 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.

#### Title (DVD only)

The main film content, accompanying feature content, or music album.

Each title is assigned a title reference number enabling you to locate it easily.

#### Chapter (DVD only)

Sections of a picture or a musical piece that are smaller than titles. A title is composed of one or several chapters. Each chapter is assigned a chapter number to enable you to locate the chapter you want. Depending on the disc, chapters may not be labeled.

#### Track (Video CD and Audio CD only)

Sections of a picture or a musical piece on a Video CD or an Audio CD. Each track is assigned a track number, enabling you to locate the track you want.

#### Scene

On a Video CD with PBC (Playback control) functions, moving pictures and still pictures are divided into sections called "Scenes". Each scene available is displayed on the Scene menu and assigned a scene number, enabling you to locate the scene you want.

A scene may be composed of one or several tracks.

#### DivX

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

### Types of Video CDs

There are two types of Video CDs:

#### Video CDs equipped with PBC (Version 2.0)


PBC (Playback control) functions allow you to interact with the system via menus, search functions, or other typical computer-like operations. Moreover, high resolution still pictures can be played if they are included on the disc.

#### Video CDs not equipped with PBC (Version 1.1)

Operated in the same way as audio CDs, these discs allow playback of video pictures as well as sound, but they are not equipped with PBC.





### About Symbols












#### About the symbol display

" " may appear on the TV screen during operation. This icon means the function explained in this owner's manual is not available on that specific disc, or at that time.

#### About the disc symbols for instructions

A section whose title has one of the following symbols are applicable only to those discs represented by the symbol.

Many functions provided on this Recorder are dependent on the recording mode. One or more of the symbols (, , , ) appear by each function (explained in this manual) so that you can see at a glance whether it's applicable to the disc loaded.

	DVD-R/RW with Video recording mode
	DVD-RW with VR recording mode
	DVD+R disc
	DVD+RW disc
	DVD-Video disc
	Video CDs
	Audio CDs
	DivX files
	MP3 files
	WMA files
	JPEG files

The finalized DVD disc is a DVD-Video disc.

## DVD Recorder Receiver Overview (Continued)

### About recordable discs

#### How are recordable discs different?

The essential difference among DVD-R, DVD-RW, DVD+R and DVD+RW is that DVD-R and DVD+R are record-once medium, while DVD-RW and DVD+RW are re-recordable/erasable medium. You can re-record/erase a DVD-RW and DVD+RW disc approximately 1,000 times.

#### Can I play my recordable discs in a regular DVD player?

Generally, DVD-R, DVD+R and DVD-RW discs recorded in Video mode are playable in a regular DVD player, but they must be 'finalized' first. This process fixes the contents of the disc to make them readable to other DVD players as DVD-Video discs.

DVD-RW discs recorded in VR (Video Recording) mode are playable in some players.

Unfinalized DVD+RW discs are playable in a regular DVD player.



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

#### What are 'recording modes'?

There are various recording modes available using this Recorder. When recording to a DVD-R, DVD+R or DVD+RW disc, recordings are always in Video mode. DVD-RW discs can be formatted for VR mode recording or Video mode recording.

#### VR mode recording **VR**

- 4 different picture quality/recording time settings available (HQ, SQ, LQ, EQ)
- Not playable on regular DVD players
- Recordings can be extensively edited

#### Video mode recording **Video**

- 4 different picture quality/recording time settings available (HQ, SQ, LQ, EQ)
- Playable on regular DVD players (after finalization)
- Limited editing features

#### DVD+RW mode recording **+RW**

- 4 different picture quality/recording time settings available (HQ, SQ, LQ, EQ)
- Playable on regular DVD players
- The edited contents is playable on regular DVD players only after finalizing
- Recordings can be edited the title/chapter

#### DVD+R mode recording **+R**

- 4 different picture quality/recording time settings available (HQ, SQ, LQ, EQ)
- Playable on regular DVD players (after finalization)
- Any edited contents are not be compatible on regular DVD players. (Hide, chapter combine, added chapter mark, etc.)
- Limited title/chapter editing features.

#### Note :

DVD-Video Format (Video mode) is a new format for recording on DVD-R/RW and DVD+R/RW discs that was approved by the DVD Forum in 2000. You may therefore experience problems playing recordable DVD discs in some players. Symptoms include video artifacts, audio and/or video dropouts and playback suddenly stopping.

Our company cannot take responsibility for problems playing discs recorded on this Recorder in other players.

#### Is editing a DVD like editing a video tape?

No. When you edit a video tape you need one video deck to play the original tape and another to record the edits. With DVD, you edit by making a 'Playlist' of what to play and when to play it. On playback, the Recorder plays the disc according to the Playlist.

#### About word 'Original' and 'Playlist'

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

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

Disc type	Disc format	Recording mode	Functions
DVD-Video	Video format	n/a	Playback only
DVD-RW	Video Recording format (default)	VR mode	Playback, Recording, Original/Playlist Editing
	Video format	Video mode	Playback, limited Recording, limited Editing
DVD-R	Video format	Video mode	Playback, limited Recording, limited Editing
DVD+RW	+RW Video format	DVD+RW	Playback, limited Recording, Title/Chapter Editing
DVD+R	+R Video format	DVD+R	Playback, limited Recording, limited Title/Chapter Editing

## DVD Recorder Receiver Overview (Continued)

### About DVD recording

#### Notes :

- This recorder cannot make recordings on CD-R or CD-RW discs.
- Our company takes no responsibility for recording failure due to power outages, defective discs, or damage to the Recorder.
- Fingerprints and small scratches on a disc can affect playback and/or recording performance. Please take proper care of your discs.

### Disc types and recording formats, modes, and settings

This recorder can play five different kinds of DVD discs: pre-recorded DVD-Video discs, DVD-RW, DVD-R, DVD+RW and DVD+R discs. The disc format for DVD-R discs is always "Video format"—the same as pre-recorded DVD-Video discs. This means that once finalized, you can play a DVD-R in a regular DVD player. By default, the DVD-RW disc format is Video Recording (VR) format, though you can change this to Video format, if required. (Reinitializing the disc will erase the contents of the disc.)

The recording mode is closely related to the disc format. If the disc format is Video Recording format, then the recording mode is VR mode; if the disc format is Video mode, then the recording mode is Video mode (except for DVD-Video, which is not recordable, and so does not have a recording mode).

Within the recording modes (which are fixed for them whole disc) are the record settings. These can be changed as required for each recording and determine the picture quality and how much space the recording will take up on the disc.

### Notes for recording

- The recording times shown are not exact because the recorder uses variable bit-rate video compression. This means that the exact recording time will depend on the material being recorded.
- When recording a TV broadcast, if the reception is poor or the picture contains interference, the recording times may be shorter.
- If you record still pictures or audio only, the recording time may be longer.
- The displayed times for recording and time remaining may not always add up to exactly the length of the disc.
- The recording time available may decrease if you heavily edit a disc.
- If using a DVD-RW disc, make sure you change the recording format (Video mode or VR mode) before you record anything on the disc. See page 30 (Initialize) for how to do this.
- When using a DVD-R disc, you can keep recording until the disc is full, or until you finalize the disc. Before you start a recording session, check the amount of recording time left on the disc.
- When using a DVD-RW disc in Video mode, recording time available will only increase if you erase the last title recorded on the disc.
- The Erase Title option in the Title List-Original menu only hides the title, it does not actually erase the title from the disc and increase the recording time available (except for the last recorded title on a DVD-RW disc in Video mode).
- Overwrite recording is available using DVD+RW discs.

## DVD Recorder Receiver Overview (Continued)

### Restrictions on video recording

- You cannot record copy-protected video using this recorder. Copy-protected video includes DVD-Video discs and some satellite broadcasts. If copy-protected material is encountered during a recording, recording will pause or stop automatically and an error message will be displayed on-screen.
- Video that is 'copy-once only' can only be recorded using a DVD-RW disc in VR mode with CPRM (see below).
- NTSC format signals from the analog or the DV inputs is not recorded correctly with this recorder.
- Video signals in SECAM format (from the built-in TV tuner or from the analog inputs) are recorded in PAL format.

### What is 'CPRM'?

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

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

### Copyright

- Recording equipment should be used only for lawful copying and you are advised to check carefully what is lawful copying in the area in which you are making a copy. Copying of copyright material such as films or music is unlawful unless permitted by a legal exception or consented to by the rights owner.
- This product incorporates copyright protection technology that is protected by method claims of certain U.S. patents and other intellectual property rights owned by Macrovision Corporation and other rights owners. Use of this copyright protection technology must be authorized by Macrovision Corporation, and is intended for home and other limited viewing uses only, unless otherwise authorized by Macrovision corporation. Reverse engineering or disassembly is prohibited.
- CONSUMERS SHOULD NOTE THAT NOT ALL HIGH DEFINITION TELEVISION SETS ARE FULLY COMPATIBLE WITH THIS PRODUCT AND MAY CAUSE ARTIFACTS TO BE DISPLAYED IN THE PICTURE. IN CASE OF 625 PROGRESSIVE SCAN PICTURE PROBLEMS, IT IS RECOMMENDED THAT THE USER SWITCH THE CONNECTION TO THE 'STANDARD DEFINITION' OUTPUT. IF THERE ARE QUESTIONS REGARDING OUR TV SET COMPATIBILITY WITH THIS MODEL 625p DVD Recorder Receiver, PLEASE CONTACT OUR CUSTOMER SERVICE CENTER.

## DVD Recorder Receiver Overview (Continued)

### Precautions

#### Handling the unit

##### When shipping the unit

The original shipping carton and packing materials come in handy. For maximum protection, re-pack the unit as it was originally packaged at the factory.

##### When setting up the unit

The picture and sound of a nearby TV, VCR, or radio may be distorted during playback. In this case, position the unit away from the TV, VCR, or radio, or turn off the unit after removing the disc.

##### To keep the surface 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. They will leave marks on the surface.

#### Cleaning the unit

##### To clean the cabinet

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.

##### To obtain a clear picture

The DVD Recorder Receiver is a high-tech, precision device. If the optical pick-up lens and disc drive parts are dirty or worn, the picture quality will be poor. Regular inspection and maintenance are recommended after every 1,000 hours of use. (This depends on the operating environment.)

For details, please contact your nearest dealer.

### Notes on Discs

#### Handling discs

Do not touch the playback side of the disc. Hold the disc by the edges so that fingerprints will not get on the surface. Do not stick paper or tape on the disc.



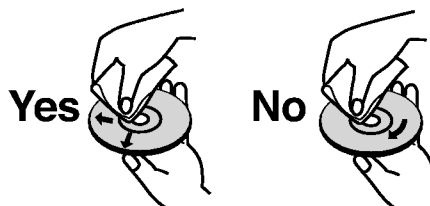
#### Storing discs

After playing, store the disc in its case.

Do not expose the disc to direct sunlight or sources of heat, or leave it in a parked car exposed to direct sunlight, as there may be a considerable temperature increase inside the car.

#### 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 outward.

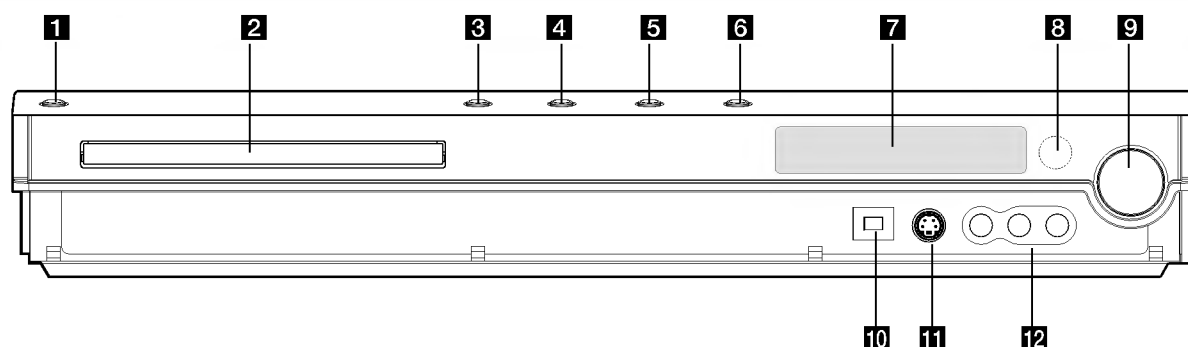


Do not use strong solvents such as alcohol, benzene, thinner, commercially available cleaners, or anti-static spray intended for older vinyl records.

### 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.

## Front Panel



### 1 POWER

Switches the DVD Recorder Receiver ON or OFF.

### 2 Disc Tray

Insert a disc here.

### 3 OPEN/CLOSE (▲)

Opens or closes the disc tray.

### 4 ► (PLAY)

Starts playback.

### 5 ■ (STOP)

Stops playback or recording.

### 6 ● (REC)

Starts recording. Press repeatedly to set the recording time.

### 7 Display window

Shows the current status of the recorder.

**REC:** The recorder is recording.

**MUTE:** The speaker sound is muted.

**DD**, **DD** : Indicates encoding format of the current disc.

**DOLBI** : Indicates sound mode is DOLBY PRO LOGIC or DOLBY PRO LOGIC II.

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

**00:00:00:00:00:00** : Indicates clock, total playing time, elapsed time, title number, radio frequency, volume, Surround, chapter/track number, channel, etc.

### 8 Remote Sensor

Point the recorder remote control here.

### 9 VOLUME CONTROL

Turn the knob clockwise to increase sound level, counterclockwise to decrease sound level.

### 10 DV IN

Connect the DV output of a digital camcorder.

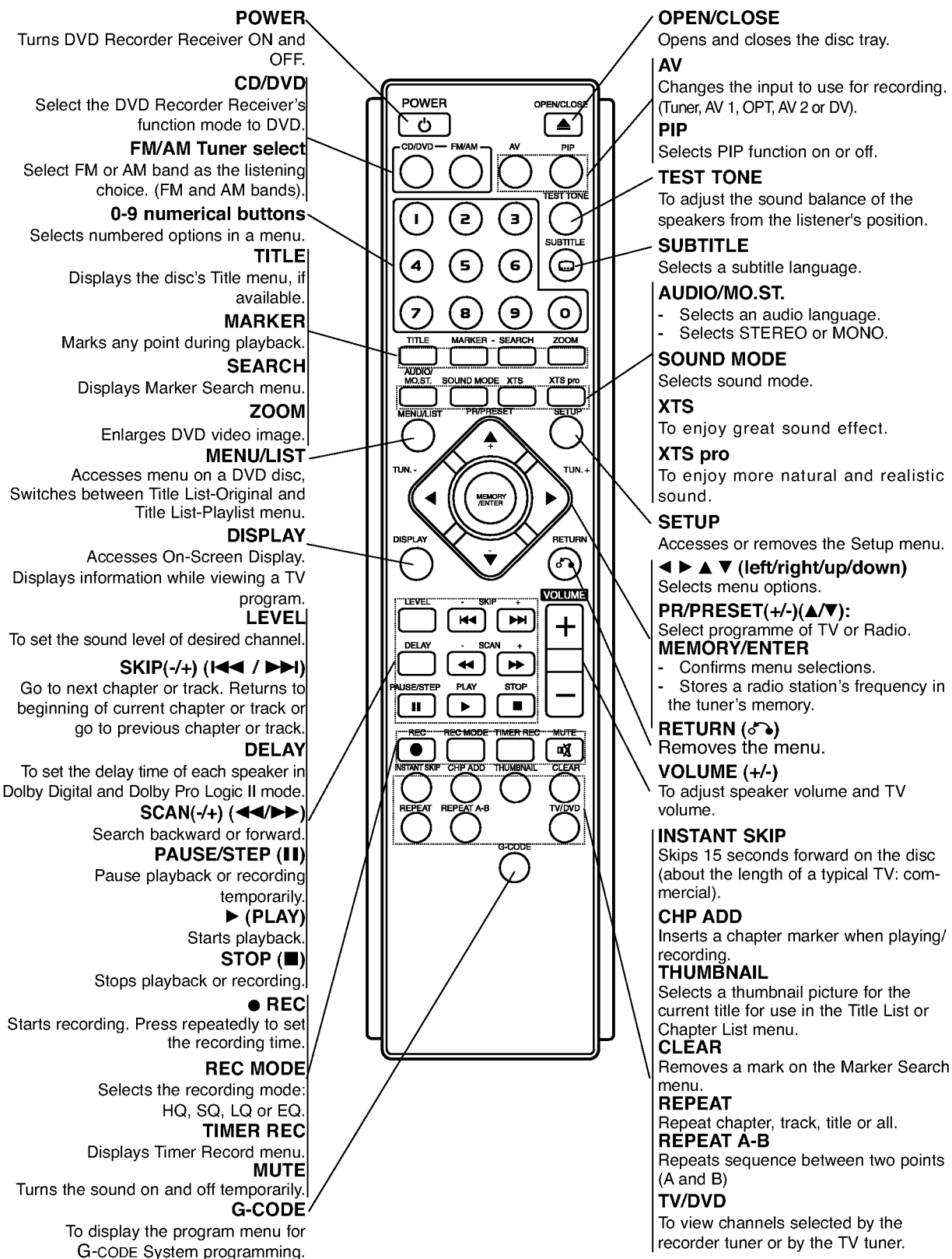
### 11 S-VIDEO IN

Connect the S-Video output of an external source (TV/ Monitor, VCR, Camcorder, etc.).

### 12 AV 2 (VIDEO IN/AUDIO IN (Left/Right))

Connect the audio/video output of an external source (Audio system, TV/ Monitor, VCR, Camcorder, etc.).

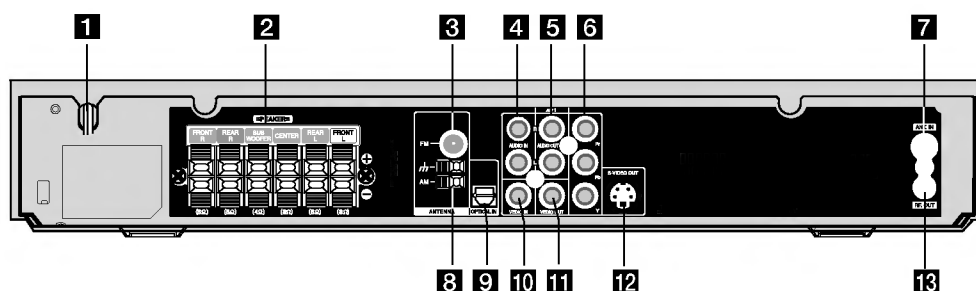
## Remote Control Overview





## Connections

### Rear Panel Connections



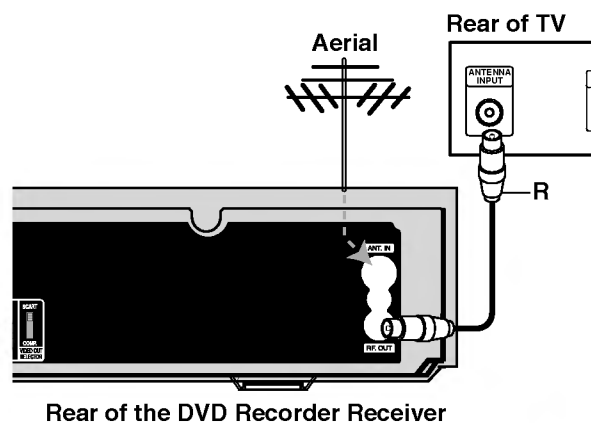
- |  |   |
|--|---|
| <p><b>1 AC Power Cord</b><br/>Plug into the power source.</p> <p><b>2 SPEAKER CONNECTORS</b><br/>Connect the six supplied speakers to these terminals.</p> <p><b>3 FM ANTENNA CONNECTORS</b><br/>Connect the FM antenna to this terminal.</p> <p><b>4 AUDIO IN 1 (Left/Right)</b><br/>Connect the audio output of an external source (Audio system, TV/Monitor, VCR, Camcorder).</p> <p><b>5 AUDIO OUT (Left/Right)</b><br/>Connect to a TV with audio inputs.</p> <p><b>6 COMPONENT VIDEO OUT/PROGRESSIVE SCAN (Y Pb Pr)</b><br/>Connect to a TV with Y Pb Pr inputs.</p> <p><b>7 ANT.IN</b><br/>Connect the aerial to this terminal.</p> | <p><b>8 AM ANTENNA CONNECTORS</b><br/>Connect the AM antenna to this terminal.</p> <p><b>9 OPTICAL IN Connector</b><br/>Connect an optical output of Digital Device.</p> <p><b>10 VIDEO IN 1</b><br/>Connect the video output of an external source (Audio system, TV/Monitor, VCR, Camcorder).</p> <p><b>11 VIDEO OUT</b><br/>Connect to a TV with video inputs.</p> <p><b>12 S-VIDEO OUT (DVD OUT)</b><br/>Connect to an S-Video Input on TV.</p> <p><b>13 RF. OUT</b><br/>Passes the signal from the AERIAL to your TV/monitor</p> |
|--|---|

### Connecting to the Aerial

Remove the aerial cable plug from your TV set and insert it into the aerial socket at the back of the recorder. Plug one end of the aerial cable into the TV socket on the recorder and the other end into the aerial input socket on your TV set.

#### RF coaxial connection

Connect the RF. OUT jack on the DVD Receiver Recorder to the aerial input jack on the TV using the 75-ohm Coaxial Cable supplied (**R**). The RF. OUT jack passes the signal through from the AERIAL jack.



## Connections (Continued)

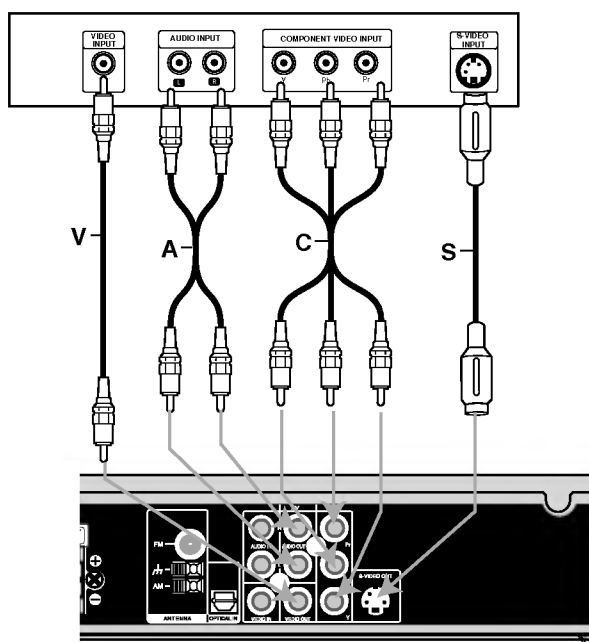
### Tips

- Depending on your TV and other equipment you wish to connect, there are various ways you could connect the recorder. Use only one of the connections described below.
- Please refer to the manuals of your TV, VCR, Stereo System or other devices as necessary to make the best connections.

### ⚠ Caution

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

Rear of TV



Rear of the DVD Recorder Receiver

## Connections to Your TV

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

### S-Video connection

Connect the S-VIDEO OUT jack on the DVD Recorder to the S-Video in jack on the TV using the S-Video cable (S).

### Video connection

Connect the VIDEO OUT jack on the DVD Recorder Receiver to the video in jack on the TV using the video cable (V).

### Component Video connection

Connect the COMPONENT VIDEO OUT jacks on the DVD Recorder Receiver to the corresponding input jacks on the TV using an Y Pb Pr cable (C).

### Progressive Scan connection

If your television is a high-definition or "digital ready" television, you may take advantage of the recorder's progressive scan output for the highest video resolution possible. If your TV does not accept the Progressive Scan format, the picture will appear scrambled if you try Progressive Scan on the recorder.

Connect the COMPONENT VIDEO OUT/PROGRESSIVE SCAN jacks on the recorder to the corresponding in jacks on the TV using the Y Pb Pr cable (C).

### Notes :

- Set the Progressive to "On" on the setup menu for progressive signal, see page 25.
- Set the progressive to "Off" by removing any disc from the unit and close the disc tray. See that "NO DISC" is displayed on the display window. Then press STOP and hold it for five seconds before releasing it.
- Progressive scan does not work with the analog video connections (yellow VIDEO OUT jack).

### Audio (Left/Right) Connection

Connect the left and right AUDIO OUT jacks of the DVD Recorder Receiver to the audio left and right IN jacks on the TV using the audio cables (A). Do not connect the DVD Recorder Receiver's AUDIO OUT jack to the phono in jack (record deck) of your audio system.

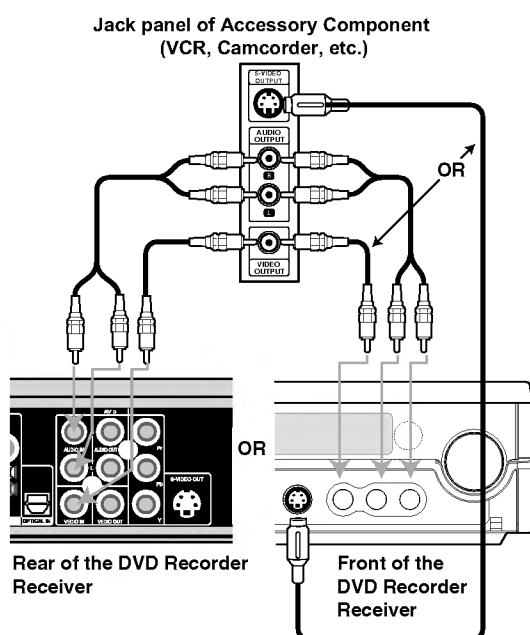
## Connections (Continued)

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

Connect the input jacks (AV1, AV2) on the DVD Recorder Receiver to the audio/video out jacks on your accessory component, using audio/video cables.

**Note:**

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



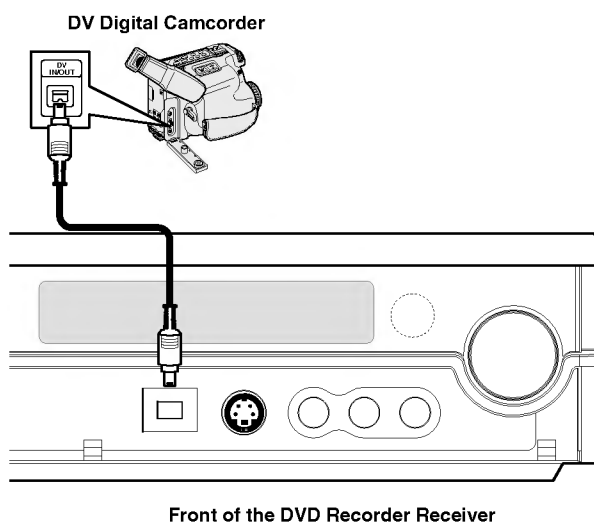
### Connecting a Digital Camcorder

Using the front panel DV IN jack, it is possible to connect a DV digital camcorder and digitally transfer DV tapes to DVD.

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

**Note:**

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

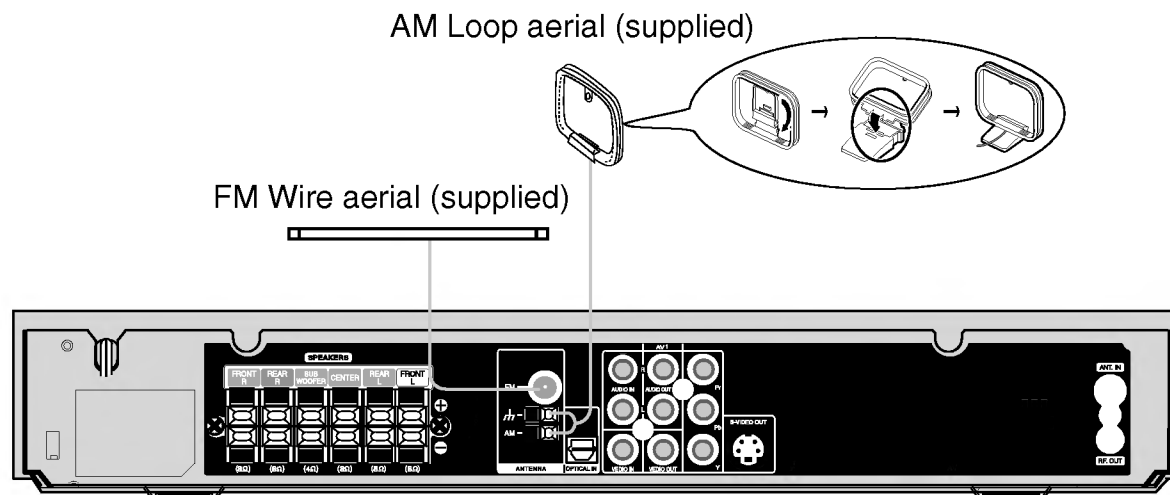


## Connections (Continued)

### Radio Aerial Connections

Connect the supplied FM/AM aerial for listening to the radio.

- Connect the AM Loop aerial to the AM aerial connector.
- Connect the FM Wire aerial to the FM aerial connector.



#### Notes:

- To prevent noise pickup, keep the AM Loop aerial away from the DVD/CD Receiver and other components.
- Be sure to fully extend the FM wire aerial.
- After connecting the FM Wire aerial, keep it as horizontal as possible.

### About Ferrite Core

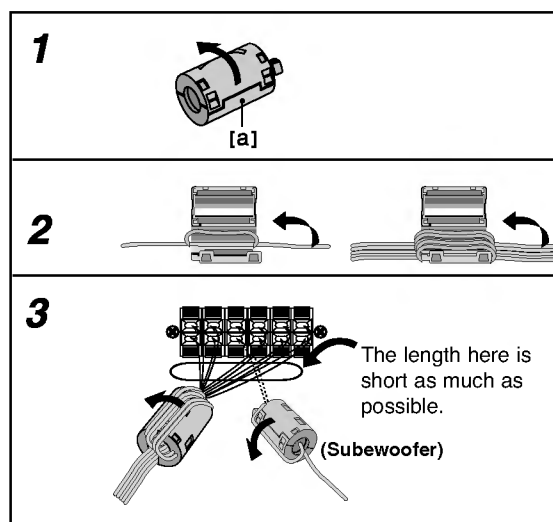
Be sure to attach the ferrite core to the speaker cables (for connecting to this unit). This ferrite core can reduce noises.

#### How to attach the ferrite core

- 1 Press the stopper [a] of the ferrite core to open.
- 2 Wind the cable once on the ferrite core.
- 3 Close the ferrite core until it clicks.

#### Note:

- Attach the ferrite core near the unit (Refer to the fig.3 and comment.).



## Speaker System Connection

Connect the speakers using the supplied speaker cords.

To obtain the best possible surround sound, adjust the speaker parameters (volume, distance, etc.).



### Notes

- Be sure to match the speaker cable to the appropriate terminal on the components: + to + and – to –. If the cables are reversed, the sound will be distorted and will lack base.
- If you use front speakers with low maximum input rating, adjust the volume carefully to avoid excessive output on the speakers.

## Before Operation

### Speaker Positioning

In the case of normal position use the 6 speakers (2 front speakers, 1 center speaker, 2 rear speakers and subwoofer).

If you want to play the excellent bass sound, DTS digital surround or Dolby Digital surround, you should connect a subwoofer.

- **Front speakers**

According to your listening position set up the speakers for equal distance. And by hearing position set up the interval between speakers to 45 degree.

- **Center speaker**

The center speaker and front speakers are ideally the same height. But normally place it above or below the television.

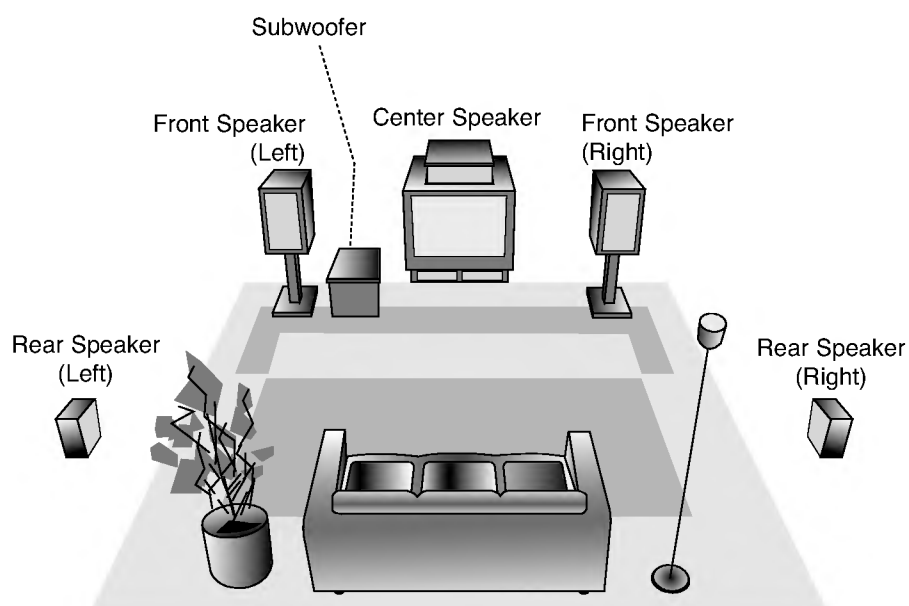
- **Rear speakers**

Place left and right behind the listening area. These speakers recreate sound motion and atmosphere required for surround sound playback. For best results, do not install the rear speakers too far behind the listening position and install them at or above the level of the listener's ears. It is also effective to direct the rear speakers towards a wall or ceiling to further disperse the sound.

In the case of a smaller room size, if the audience is near to the rear wall set the rear speakers opposite each other, and set the rear speakers above 60 - 90 cm than the listener's ears.

- **Subwoofer**

This can be placed in any front position.



Speaker Positioning Example

## Before Operation (Continued)

### Mini Glossary for Sound Mode

#### **dts**

Allows you to enjoy 5.1(or 6) discrete channels of high quality digital audio from DTS program sources bearing the trademark such as discs, DVD and compact discs, etc. DTS Digital Surround delivers up to 6 channels of transparent audio(which means identical to the original masters) and results in exceptional clarity throughout a true 360 degree sound field. The term DTS is a trademark of DTS Technology, LLC. Manufactured under license from DTS Technology, LLC.

#### **DOLBY DIGITAL**

The Dolby Digital surround format lets you enjoy up to 5.1(or 6) channels of digital surround sound from a Dolby Digital program source. If you play DVDs with "DOLBY DIGITAL" mark, you can enjoy even better sound quality, greater spatial accuracy, and improved dynamic range.

#### **DOLBY PRO LOGIC (II)**

Dolby Pro Logic II creates five full-bandwidth output channels from two-channel sources. This is done using an advanced, high-purity matrix surround decoder that extracts the spatial properties of the original recording without adding any new sounds or tonal colorations.

##### **MOVIE mode:**

The Movie mode is for use with stereo television shows and all programs encoded in Dolby Surround. The result is enhanced soundfield directionality that approaches the quality of discrete 5.1-channel sound.

##### **MUSIC mode:**

The Music mode is for use with any stereo music recordings, and provides a wide and deep sound space. The Music mode includes controls that allow the sound to be tailored to individual listening tastes.

##### **MATRIX mode:**

The Matrix mode is the same as the Music mode except that the directional enhancement logic is turned off. It may be used to enhance mono signals by making them seem "larger." The Matrix mode may also find use in auto systems, where the fluctuations from poor FM stereo reception can otherwise cause disturbing surround signals from a logic decoder. The ultimate "cure" for poor FM stereo reception may be simply to force the audio to mono.

#### **HALL 1**

When playing recordings of live music and classic, this mode provides a feeling similar to actually being in a small concert hall.

#### **HALL 2**

When playing recordings of live music and classic, this mode provides a feeling similar to actually being in a large concert hall.

#### **THEATER**

This mode provides a three dimensional effect similar to that of a movie theater.

#### **BYPASS**

Outputs the sound from the front left and right speakers and subwoofer.

**You can select BYPASS by pressing SOUND MODE on the remote control.**

## Before Operation (Continued)

### Delay Time Setting

In Dolby Digital or Dolby Pro Logic mode it is assumed that the distance from the listener to each of the speakers is equal. If not then setting the delay times of the center or rear speakers the sound will be heard simultaneously by the listener.

The interval from the speakers to the listener. If the distance from the listener to each speaker is the same, in the Dolby Digital and Dolby Pro Logic mode the delay time of each speaker is as follows

#### In Dolby Digital mode

Center delay time : 0 ~ 5ms

Rear delay time: 0 ~ 15ms

#### In Dolby Pro Logic mode

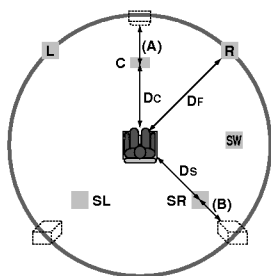
Center delay time : cannot be set

If the rear delay time is set in Dolby Digital mode, in the Dolby Pro Logic mode the delay time will be automatically set.

The delay time is 1 msec per 30 cm.

If the Center and rear speakers are further than the front speakers from the listener, the delay time will be at minimum.

#### Surround delay time setting



If the distance of Ds is equal to or longer than the Df in the left figure, set the Surround Delay Time as 0ms.

Otherwise, change the setting according to the below.

Ex) If the distance from front speakers to the listener is 3 m and from rear speakers from the listener is 1.5 m, in the Dolby Digital mode the rear delay time is 5 msec.  
 $3\text{m (Df)} - 1.5\text{m (Ds)} = 1.5\text{m (B)}$   
 $1.5\text{m (B)} = 150\text{cm} / 30\text{cm} = 5\text{msec}$

In Dolby Pro Logic II (Surround delay time):

- Pro Logic: 15 ~ 30msec
- Movie: 10 ~ 25msec
- Music: 0 ~ 15msec
- Matrix: 0 ~ 15msec

#### Center delay time setting (Dolby Digital mode only)

If the distance of DF is equal to the distance of DC in the left figure, set the Center Delay Time as 0ms.

Otherwise, change the setting according to the table below.

Ex) If the distance from the front speakers to the listener is 3m and from the center speaker to the listener is 2.4m, the center delay time is 2msec.

$3\text{m (Df)} - 2.4\text{m (Dc)} = 60\text{cm (A)}$   
 $60\text{cm (A)} / 30\text{cm} = 2\text{msec}$

### Setting the delay time in the Dolby Digital and Dolby Pro Logic (II) mode

#### 1 Press DELAY.

The current surround delay time appears in the Display Window.

#### 2 Press ▲/▼ to change the delay time.

#### 3 If setting is complete, press DELAY.

#### Note:

You can adjust the center delay time only in the Dolby Digital mode and its delay time appears.

### Setting the Sound Effects in the Music mode of Dolby Pro Logic (II)

#### 1 Press SOUND MODE repeatedly to select the Music mode.

Each time you press these buttons, the sound mode is changed in the following order;

PRO LOGIC → PLII MOVIE → PLII MUSIC →  
PLII MATRIX → HALL 1 → HALL 2 → THEATER →  
BYPASS ...

#### 2 Press DELAY.

The current surround delay time appears in the Display Window.

#### 3 Press ◀/▶ to select a desired Sound mode.

Each time you press the ◀/▶ button, it is changed in the following order;

PANO ↔ C WIDT ↔ DIMEN...

#### 4 Press ▲/▼ to change the steps.

- C WIDT: 0 ~ +7
- DIMEN: -3 ~ +3
- PANO: ON/OFF

#### 5 If setting is complete, press DELAY.



## Before Operation (Continued)

### PANO (PANORAMA)

This control extends the front stereo image to include the surround speakers for an exciting “wraparound” effect with side-wall imaging. It is particularly effective for recordings which have strong left- or right-channel elements in the mix, as these are detected and accentuated by the Panorama process.

### C WIDT (Center Width)

This control allows center-channel sounds to be positioned between the center speaker and the left/right speakers over a range of eight steps. Step “3” uses a combination of all three front speakers to give the best vocal imaging and most seamless soundstage presentation, and is recommended for most recordings. Step “0” places all center sound in the center speaker. Step “7” places all center sound equally in the left/right speakers, just as in conventional stereo.

### DIMEN (DIMENSION)

This control allows the user to gradually adjust the sound field either towards the front or the rear. This can be useful to help achieve the desired balance from all the speakers with certain recordings that may contain either too much or too little spatial effect. Step “0” is the recommended setting, which has no effect on the sound. Steps 1, 2, and 3 gradually move the sound forward, and steps -1, -2, and -3 move the sound towards the surrounds.

## Sound Level

You can set the sound level of the desired channel.

### 1 Press LEVEL on the remote control.

The level indicator will appear in the Display Window.

### 2 Press ◀/▶ to select a desired speaker to set.

Each time you press the ◀/▶ button, it is changed in the following order;

FL (Front Left) → C (Center) → FR (Front Right) →  
SR (Surround Right) → SL (Surround Left) →  
SW (Subwoofer) → FL (Front Left) ...

### 3 Press ▼/▲ to adjust the sound level of the selected channel. (-6dB ~ +6dB)

### 4 Repeat step 2-3 and adjust the sound level of the other channels.

### 5 If setting is complete, press LEVEL.

## Test Tone

This function allows you to can easily adjust the sound balance of the speakers from the listener's position.

### 1 Select the test tone mode by pressing TEST TONE.

A hiss noise comes out for 2 seconds from each speakers in the following order;

FL (Front Left) → C (Center) → FR (Front Right) →  
SR (Surround Right) → SL (Surround Left) →  
SW (Subwoofer) → FL (Front Left) ...

### 2 You can adjust the sound level while the test tone is operating. First press LEVEL then press the ▼/▲ buttons, so that the sound level from all the speakers is same from the listener's position.

- During the test tone, if you adjust the sound level, it will be paused in the current speaker channel.

### 3 If setting is complete, press TEST TONE.

## XTS (Excellent True Sound)

You can enjoy the vivid stereophonic sound of the digital original source without any signal distortion.

**Each time you press XTS during 2 channel mode, the setting changes in the following order.**

XTS- 1 → XTS- 2 → XTS- 3 → XTS OFF ...

### Tips:

- XTS- 1: When playing the movie with the weak bass sound relatively to the general music, it enforces the sense of sound at woofer for you to satisfy with.
- XTS- 2: In the mode of 2 CH BYPASS, It creates the high display effect by playing the sound source via the rear speakers same as the front speakers.
- XTS- 3: You can operate both XTS- 1 and XTS- 2 simultaneously and it can complement the relative degrading of the sound pitch of the woofer at the XTS- 2 mode.

### Note:

- The XTS- 2 mode is temporarily disabled when changing from 2.1 CH to 5.1 CH and it is enabled when changing it to 2.1 CH.

## XTS pro

The unique sound quality of the LG Technology creates the optimum sound for you to play the perfect playback of the original sound and to feel the living sound source.

Each time you press **XTS pro** the setting changes in the following order.

XTS-PRO ON → XTS-PRO OFF

## Pre-operation Setup

### 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. If you press **SETUP**, only the first and second level of the menu system will appear on the TV screen. The third level can be displayed by pressing **►**. For navigating the menu levels, you will see “**►**” on the right side of the menu label to help you go to the next level.

#### To bring up and exit the Menu:

Press **SETUP** to bring up the menu. A second press of **SETUP** will take you back to initial screen.

#### To go to the next level:

Press **►** on the remote control.

#### To go back to the previous level:

Press **◀** on the remote control.

### General Operation

- 1** Press **SETUP**.  
The Setup menu appears.
- 2** Use **▲ / ▼** to select the desired option.
- 3** While the desired item is selected, press **►** to move to the second level.
- 4** Use **▲ / ▼** to select the second desired option.
- 5** Press **►** 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.

### General

#### Auto Programming

This DVD Recorder Receiver is equipped with a frequency synthesized tuner capable of receiving up to 88 TV channels.

#### Preparation:

- Connect the DVD Recorder Receiver to the desired type of aerial, as shown in Connecting to the Aerial on page 13.



- 1** Press **SETUP**.  
The Setup menu appears.
- 2** Use **▲ / ▼** to select the General option.
- 3** While the General option is selected, press **►** to move to the second level.
- 4** Use **▲ / ▼** to select the Auto Programming option.
- 5** Press **►** to move to the third level.  
“Start” icon is highlighted.
- 6** 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 :

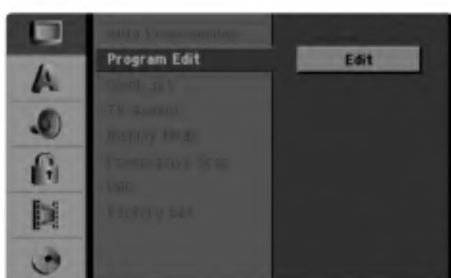
After you have connected your DVD Recorder Receiver for the very first time. If you press **SETUP** for initial setting, you can only set the “Auto Programming” option. Then you can set the other options.

## Pre-operation Setup (Continued)

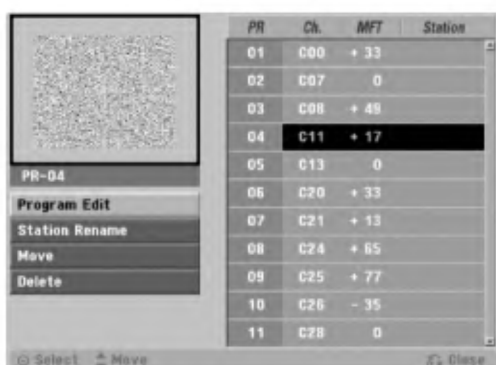
### Program Edit

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

- 1** Press **SETUP**.  
The Setup menu appears.
- 2** Use **▲ / ▼** to select the **General** option.
- 3** While the **General** option is selected, press **▶** to move to the second level.
- 4** Use **▲ / ▼** to select the **Program Edit** option then press **▶** to move to the third level.  
"Edit" icon is highlighted.



- 5** Press **ENTER**.  
Program List menu appears.
- 6** Use **▲ / ▼** to select a **PR** number then press **ENTER**.  
Program List options appears on the left side of the menu display.



- 7** Use **▲ / ▼** to select an option then press **ENTER** to confirm.

**Program Edit:** Edits the selected program.

**Station Rename:** Edits the station name.

**Move:** Moves the program's location on the program list.

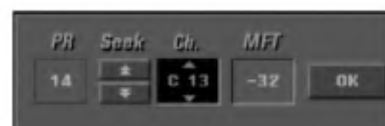
**Delete:** Deletes the program from program list.

- 8** Press **RETURN** (↵) repeatedly to exit **Program List** menu.

### Program Edit

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

1. Use **▲ / ▼** to select a program on the Program List menu then press **ENTER**.  
Program List options appears on the left side of the Program Edit menu.
2. Use **▲ / ▼** to select 'Program Edit' option from the options then press **ENTER**.  
Program Edit menu appears.
3. Use **◀ / ▶** to select the item and press **▲ / ▼** to change the setting.



- [PR] indicates the selected programme position.
  - [Seek] Searches for a channel automatically. Searching stops when the recorder tunes in a channel.
  - [Ch.] Changes the channel number.
  - [MFT] Fine tunes the channel to obtain a clearer picture.
4. Choose **OK** then press **ENTER** to confirm the setting and returns to the Program List menu.

## Pre-operation Setup (Continued)

### Program Edit (Continued)

#### Station Rename

You can name stations independently. Names can be up to 5 characters long.

1. Use ▲ / ▼ to select a program on the Program List menu then press ENTER.  
Program List options appears on the left side of the Program List menu.
2. Use ▲ / ▼ to select 'Station Rename' option from Program List options then press ENTER.  
Keyboard menu appears.



3. Enter a name for the station. Use ▲ ▼ ◀ ▶ to select a character then press ENTER to confirm your selection.
  - **Alphabet Capital:** Switches the keyboard upper case characters.
  - **Alphabet Small:** Switches the keyboard to lower case characters.
  - **Symbol:** Switches the keyboard to symbol characters.
  - **OK:** Select to finish.
  - **Cancel:** Select to exit the menu.
  - **Space:** Inserts a space at the cursor position.
  - **Delete:** Deletes the previous character at the cursor position.
  - **◀ / ▶:** Moves cursor to left or right.

#### Tip

##### Remote control buttons for entering a name

**Numbers (0~9):** Enters the character of corresponding location on the selected column.

4. Choose 'OK' icon then press ENTER to fix the name and returns to the Program List menu.

#### Sorting TV channels manually

You can sort the program's position on the Program List menu.

1. Use ▲ / ▼ to select a program on the Program List menu then press ENTER.  
Program List options appears on the left side of the Program List menu.
2. Use ▲ / ▼ to select 'Move' option from Program List options then press ENTER.
3. Use ▲ / ▼ to select a desired position then press ENTER to store.

#### Deleting a program

You can delete a program on the Program List menu.

1. Use ▲ / ▼ to select a program on the Program List menu then press ENTER.  
Program List options appears on the left side of the Program List menu.
2. Use ▲ / ▼ to select 'Delete' option from Program List options then press ENTER. The Program is deleted.

## Pre-operation Setup (Continued)

### Manual Clock Set

- 1** Press **SETUP**.  
The Setup menu appears.
- 2** Use **▲ / ▼** to select the **General** menu.
- 3** While the **General** option is selected, press **►** to move to the second level.
- 4** Use **▲ / ▼** to select the **Clock Set** option.
- 5** Press **►** to move to the third level.



- 6** 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.
- 7** Press **ENTER** to confirm your setting, then press **SETUP** to exit the Setup menu.

### TV Aspect Ratio

You can choose:

- 4:3: Select when a standard 4:3 TV is connected.
- 16:9: Select when a 16:9 wide TV is connected.

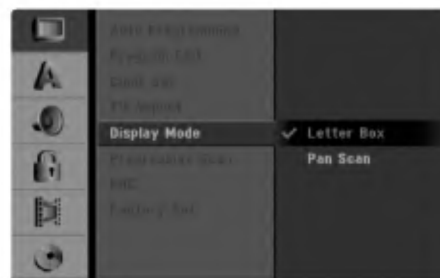


### Display Mode

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

You can choose:

- Letter Box: Displays a wide picture with bands on the upper and lower portions of the screen.
- Pan Scan: Automatically displays the wide picture on the entire screen and cuts off the portions that do not fit.



### Progressive Scan

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

If you are using the COMPONENT VIDEO OUT/ PROGRESSIVE SCAN jacks, but are connecting the recorder to a standard (analog) television, set Progressive Scan to [OFF].

If you are using the COMPONENT VIDEO OUT/ PROGRESSIVE SCAN jacks for connection to a TV or monitor that is compatible with a progressive scan signal, set Progressive Scan to [ON].



### Caution

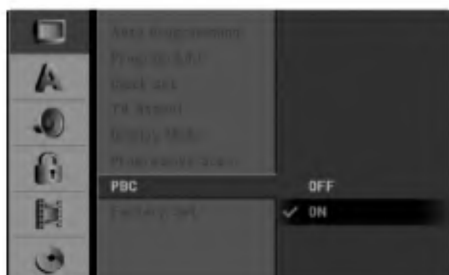
Once the setting for Progressive Scan output is entered, an image will only be visible on a Progressive Scan compatible TV or monitor. If you set Progressive Scan to [ON] in error, you must reset the recorder. First, remove the disc in the recorder. Next, press **STOP** (■) and hold it for five seconds 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.

## Pre-operation Setup (Continued)

### PBC

The PBC setting can be changed. Set Playback Control (PBC) to ON or OFF.

- ON: Video CDs with PBC are played according to the PBC.
- OFF: Video CDs with PBC are played the same way as Audio CDs.

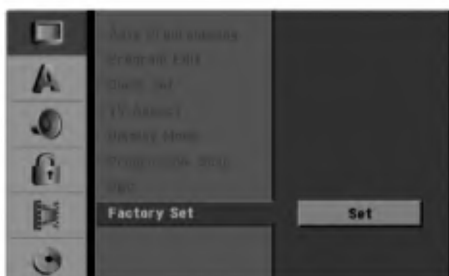


### Factory Set

If you need to, you can reset the Recorder to all its factory settings. Select "Set" icon then press ENTER.

#### Note :

Some options cannot be reset. (Rating, Password, and Area Code)



## Language

### Display Language

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



### Disc Language

Select a language for the disc's Menu, Audio, and 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 page 57). If you enter the wrong language code, press CLEAR.
- [Off](for Disc Subtitle) : Turn off Subtitle.



## Audio

### Dolby Digital

- [Bitstream]: Select "Bitstream" when enjoying original Dolby Digital Audio (Set to this mode ordinary).
- [PCM]: DVDs encoded in Dolby Digital will be automatically downmixed to two-channel PCM audio (refer to Audio Channel Selection on page 35).



### 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). Then, you may listen to a movie at a lower volume without losing clarity of sound. Set DRC to [ON] for this effect.

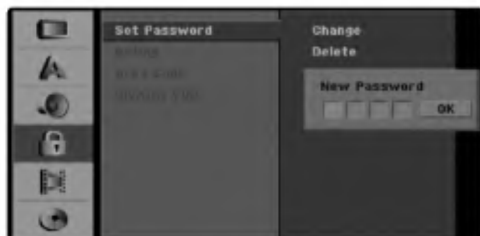


## Pre-operation Setup (Continued)

### Lock (Parental Control)

#### Set Password

##### Changing the 4-digit code



- 1** Press **SETUP**.  
The Setup menu appears.
- 2** Use **▲ / ▼** to select the **Lock** option.
- 3** While the **Lock** option is selected, press **▶** to move to the second level.
- 4** Use **▲ / ▼** to select the **Set Password** option.
- 5** Press **▶** to move to the third level.
- 6** If you have not entered a password yet;  
Enter a 4-digit password using the numbered buttons to create a personal 4-digit security password, then press **ENTER**. Enter the 4-digit password again and press **ENTER** to verify when "OK" is highlighted.  
If you have already entered a password;  
Enter a 4-digit password using the numbered buttons to confirm the personal 4-digit security password, then press **ENTER** when "OK" is highlighted.

#### Tip

If you make a mistake before pressing **ENTER**, press **◀** repeatedly to delete password numbers one by one then correct it.

- 7** While "Change" is selected, press **ENTER**.  
If you select "Delete" then press **ENTER**. The password is deleted.
- 8** Enter a 4-digit password using the numbered buttons to create a personal 4-digit security password then press **ENTER** when "OK" is highlighted.
- 9** Enter the 4-digit password again and press **ENTER** to verify when "OK" is highlighted.

#### Tip

If you make a mistake before pressing **ENTER**, press **◀** repeatedly to delete password numbers one by one then correct it.

### If you forget your 4-digit code

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

1. Press **SETUP** to display the Setup menu.
2. Use the Number buttons to enter the 6-digit number "210499".
3. Select "OK" then press **ENTER**. The 4-digit password is cleared. Enter a new code as shown left.

### Rating

Movies on DVDs may contain scenes not suitable for children. Therefore, discs may contain Parental Control information that applies to the complete disc or to certain scenes on the disc. These scenes are rated from Level 1 to 8, and alternatively, more suitable scenes are available for selection on some discs. Ratings are country-dependent. The Parental Control feature allows you to prevent discs from being played by your children or to have certain discs played with alternate scenes.



- 1** Follow steps 1-3 as shown above to the left (Set Password).
- 2** Use **▲ / ▼** to select the **Rating** option.
- 3** Press **▶** to move to the third level.
- 4** Follow step 6 as shown above to the left (Set Password).
- 5** Select a rating from 1 to 8 using the **▲ / ▼** buttons. One (1) has the least playback restrictions. Eight (8) has the most playback restrictions.  
**No limit:** If you select No limit, Parental Control is not active. The disc will play in full.  
**Level 1 to 8:** Some discs contain scenes not suitable for children. If you set a rating for the Recorder, all disc scenes with the same rating or lower will be played. Higher rated scenes will not be played unless an alternate scene is available on the disc. The alternate scene must have the same rating or a lower one. If no suitable alternate scene is found, playback will stop. You must enter the 4-digit password or change the rating level in order to play the disc.
- 6** Press **ENTER** to confirm your rating selection, then press **SETUP** to exit the menu.

## Pre-operation Setup (Continued)

### Area Code

Enter the code of a country/area whose standards were used to rate the DVD video disc, referring to the list (See "Area Codes", page 57.).



- 1** Press **SETUP**.  
The Setup menu appears.
- 2** Use **▲ / ▼** to select the **Lock** option.
- 3** While the **Lock** option is selected, press **▶** to move to the second level.
- 4** Use **▲ / ▼** to select the **Area Code** option.
- 5** Press **▶** to move to the third level.
- 6** **If you have not entered a password yet;**  
Enter a 4-digit password using the numbered buttons to create a personal 4-digit security password, then press **ENTER**. Enter the 4-digit password again and press **ENTER** to verify when "OK" is highlighted.  
**If you have already entered a password;**  
Enter a 4-digit password using the numbered buttons to confirm the personal 4-digit security password, then press **ENTER** when "OK" is highlighted.

#### Tip

If you make a mistake before pressing **ENTER**, press **◀** repeatedly to delete password numbers one by one then correct it.

- 7** Select the first character using the **▲ / ▼** buttons.
- 8** Shift the cursor using **▶** buttons and select the second character using **▲ / ▼** buttons.
- 9** Press **ENTER** to confirm your area code selection, then press **SETUP** to exit the menu.

### DivX(R) VOD **DivX**

We provide you the DivX® VOD (Video On Demand) registration code that allows you to rent and purchase videos using the DivX® VOD service. For more information, visit [www.divx.com/vod](http://www.divx.com/vod).

1. Select **[DivX(R) VOD]** option then press **▶**.
2. Press **ENTER** while **[Enter]** is selected and the registration code will appear.



3. Use the registration code to purchase or rent the videos from DivX® VOD service at [www.divx.com/vod](http://www.divx.com/vod). Follow the instructions and download the video onto a disc for playback on this unit.

#### Note:

All the downloaded videos from DivX® VOD can only be played back on this unit.



## Pre-operation Setup (Continued)

### Recording

#### Record Mode Set

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



#### Auto Chapter

When recording, chapter markers are put in at the specified interval. You can set this interval to 5 minutes, 10 minutes, or 15 minutes. If you select None, it switches automatic chapter marking off, no separations.



#### Record Aspect Ratio

When recording, you can set the recording aspect ratio to suit the material you're recording (16:9 widescreen, or 4:3 standard).



#### 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 port.

Some digital camcorders have two stereo tracks for audio. One is recorded at the time of shooting; the other is for over-dubbing after shooting.

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

On the Audio 2 setting, the over-dubbed sound is used.



## Pre-operation Setup (Continued)

### Disc

#### Initialize

If you load a completely blank disc, the "Initialize" menu will appear. Select "Ok" then press ENTER. The Recorder will initialize the disc.

**DVD-R:** The Recorder initializes the disc for Video mode. The recording mode will always be Video mode.

**DVD-RW:** The Recorder initializes the disc for VR mode.

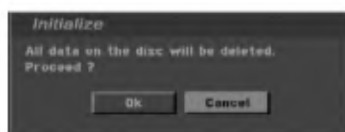
**DVD+R/ DVD+RW:** The Recorder initializes the disc. Also, you can format the disc from the Setup menu as below.



- 1** Press **SETUP**.  
The Setup menu appears.
- 2** Use **▲ / ▼** to select the **Disc** option.
- 3** While the **Disc** option is selected, press **▶** to move to the second level.
- 4** Use **▲ / ▼** to select the **Initialize** option.
- 5** Press **▶** to move to the third level.  
"Start" icon is highlighted.
- 6** Press **ENTER**.  
Initialize menu appears.
- 7** For DVD-RWs, use **◀ / ▶** to select a mode (DVD-VR or DVD-VIDEO) then press **ENTER**.  
For DVD+RWs, go to step 8.



- 8** Use **◀ / ▶** to select "Ok" then 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 Protect

When recording in DVD+RW / +R disc or VR mode formatted DVD-RW disc, set to ON to prevent accidental recording, editing or deleting of the disc loaded. If you need to unlock the disc to make edits, select OFF.



## Pre-operation Setup (Continued)

### 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 for navigating the disc. This is accessed by pressing MENU/LIST or TITLE.

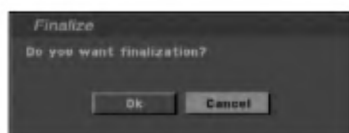


#### Caution

After you've finalized a disc recording on a DVD-R, DVD-RW, or a DVD+R disc, you can't edit or record anything else on that disc except on a DVD+RW disc.



- 1** Follow steps 1-3 as shown on page 30 (Initialize).
- 2** Use ▲ / ▼ to select the Finalize option.
- 3** Press ► to move to the third level. Finalize is highlighted.
- 4** Press ENTER. Finalize menu appears.



- 5** Select "Ok" then press ENTER. The recorder starts finalizing the disc.

#### Note :

How long finalization takes depends on the type of disc, how much is recorded on the disc, and the number of titles on the disc. A heavily recorded disc can take up to 4 minutes or more to finalize.

#### Tip

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.

### Disc Label

Use this 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 name can be up to 32 characters long.
- For discs formatted on a different DVD Recorder Receiver, you will see only a limited number of characters.




- 1** Follow steps 1-3 as shown Initialize on page 30.
- 2** Use ▲ / ▼ to select the Disc Label option.
- 3** Press ► to move to the third level. "Edit" icon is highlighted.
- 4** Press ENTER. Keyboard menu appears.



- 5** Enter a name for the disc. Use ▲ ▼ ◀ ▶ to select a character then press ENTER to confirm your selection.
  - **Alphabet Capital:** Switches the keyboard to upper case characters.
  - **Alphabet Small:** Switches the keyboard to lower case characters.
  - **Symbols:** Switches the keyboard to symbol characters.
  - **OK:** Select to finish.
  - **Cancel:** Select to exit the menu.
  - **Space:** Inserts a space at the cursor position.
  - **Delete:** Deletes the previous character at the cursor position.
  - **◀ / ▶:** Moves cursor to left or right.
- 6** Choose OK then press ENTER to save the name and return to the Setup menu.
- 7** Press SETUP to exit the menu.

## Pre-operation Setup (Continued)

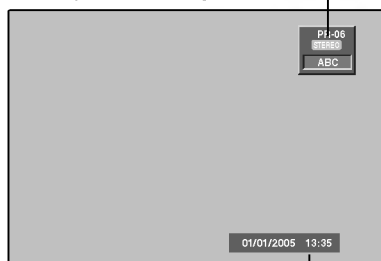
### Overview for the On-Screen Display

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

### Displaying Information While Watching TV

While viewing the TV channels, press **ENTER** to display the information displayed on-screen.

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



Indicates current date and time.

### Disc Information On-screen Display



You can display various information about the disc loaded on-screen.

**1** Press **DISPLAY** repeatedly to display/change the information displayed on-screen.

**2** To remove the On-Screen Display, press **DISPLAY** repeatedly until it disappears.

See the descriptions on the following pages for detailed explanations of displays as a disc is playing.







### Recorder Status Icon Displays

-  Resume play from this point
-  Action prohibited or not available




### Notes :

- Some discs may not provide all of the features on the On-Screen Display, examples shown the below.
- If no button is pressed for 10 seconds, the On-Screen Display will disappear.

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

Menu Options	Function (Use ▲ / ▼ to select desired option)	Selection Method
Title Number  1/6	Shows the current title number and total number of titles, and skips to the desired title number.	◀ / ▶, or Numbers, ENTER
Chapter Number  4/26	Shows the current chapter number and total number of chapters, and skips to the desired chapter number.	◀ / ▶, or Numbers, ENTER
Time Search  00:10:30	Shows the elapsed playing time, and searches the point by the elapsed time directly.	Numbers, ENTER
Audio Language (DVD only) and Digital Audio Output Mode  D 2CH	Shows the current audio soundtrack language, encoding method, and channel number, and changes the setting.	◀ / ▶
Subtitle Language  OFF	Shows the current subtitles language, and changes the setting.	◀ / ▶
Angle  1/3	Shows the current angle number, total number of angles, and changes the angle number.	◀ / ▶

**VCD**

Menu Options	Function (Use ▲ / ▼ to select desired option)	Selection Method
Track Number  1/6	Shows the current track number and total number of tracks or PBC On mode, and skip to the desired track number.	◀ / ▶, or Numbers, ENTER
Time  00:10:30	Shows the elapsed playing time, and searches the point by the elapsed time directly.	Numbers, ENTER
Audio Channel  Stereo	Shows the audio channel, and changes the audio channel.	◀ / ▶

## DVD and Video CD Operation

### DVD or Video CD Playback

#### Playback Setup

- Turn the TV on and select the video input source connected to the DVD Recorder Receiver.
- Audio System: Turn the Audio System on and select the input source connected to the DVD Recorder Receiver.

**1** Press OPEN/CLOSE (▲) to open the disc tray.

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

**3** Press OPEN/CLOSE (▲) to close the tray. READING appears on the display window, and playback starts automatically. If playback does not start, press ► (PLAY).  
In some cases, the disc menu might appear instead.

#### Tip

##### If a menu is displayed

A menu may be displayed first after loading a DVD or Video CD that contains a menu.

#### DVD

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

#### VCD

- Use the number buttons to select the track you want to view.  
Press RETURN (↵) to return to the menu display.
- Menu setting and the exact operating procedures for using the menu may differ depending on the disc. Follow the instructions on each menu screen.  
You may also set PBC to OFF in the Setup menu. See page 26.

#### Notes :

- If Parental Control is set and the disc is not within the Rating settings (not authorized), the 4-digit code must be entered and/or the disc must be authorized (see "Rating", on page 27).
- DVDs may have a Region Code.  
Your recorder will not play discs that have a region code different from your recorder. The region code for this Recorder is 4 (four).

### General Features

#### Note :

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

#### TITLE Selection

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

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

- Press DISPLAY then use ▲ / ▼ to select the title icon. Then, press the appropriate numbered button (0-9) or ◀ / ▶ to select a title number.

#### CHAPTER/TRACK Selection

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

- Press SKIP (◀◀ or ▶▶) briefly during playback to select the next chapter/track or to return to the beginning of the current chapter/track.
- Press SKIP (◀◀) twice briefly to step back to the previous chapter/track.
- To go directly to any chapter/track during playback, press DISPLAY. Then, use ▲ / ▼ to select chapter icon (or for a Video CD, select track icon). Then, enter the chapter/track number using the numbered buttons (0-9) or press ◀ / ▶.

#### Search

1. Press SCAN (◀◀ or ▶▶) during playback.
2. Press SCAN (◀◀ or ▶▶) repeatedly to select the required speed.  
DVD, DivX; 4 steps (forward and backward)  
Video CD; 3 steps (forward and backward)
3. To exit SEARCH mode, press ► (PLAY).

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

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