



## DVD Recorder Operating Instructions



**WARNING:**

**TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF PLUG TO WIDE SLOT, FULLY INSERT.**



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



This symbol warns the user of uninsulated voltage within the unit that can cause dangerous electric shocks.



This symbol alerts the user that there are important operating and maintenance instruction in the literature accompanying this unit.

**CAUTION:**

THIS DVD VIDEO PLAYER IS A CLASS 1 LASER PRODUCT. USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE. DO NOT OPEN COVERS AND DO NOT REPAIR YOURSELF. REFER SERVICING TO QUALIFIED PERSONNEL.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

**FCC NOTE:**

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

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

**Note:**

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.

# Important Safeguards and Precautions

## Caution

READ THE SAFETY AND OPERATING INSTRUCTIONS before operating your DVD video recorder and retain the instructions for future use.

FOLLOW INSTRUCTIONS AND HEED ALL WARNINGS on your DVD video recorder and in this manual.

## Installation

1. Operate only from a power source indicated on your DVD video recorder or in this manual. If you are unsure of your power supply, ask local power company.

2. As a safety feature, your DVD video recorder is equipped with a 3-wire grounded plug (a third pin for grounding). The 3 wire grounded plug will fit only into a grounding-type power outlet.

If the plug does not fit, ask your qualified electrician to replace your obsolete outlet. Do not modify the plug. To do so will void the safety feature.

3. Protect and route power cords so they will not be stepped on or pinched by anything placed on or against them. Be especially careful at plug-ins, convenience receptacles, or cord exit points from the DVD video recorder. Frayed power cords or damaged plugs are hazardous. Have them replaced by a qualified service technician.

Overloaded wall outlets and extension cords may cause fire or electrical shock hazards.

4. Do not cover or block ventilation holes in the DVD video recorder cabinet. Doing so may damage the DVD video recorder or DVD video disc.

Do not place your DVD video recorder on a soft surface, which could block ventilation holes on the bottom. Avoid enclosed installations such as bookshelves or racks unless ventilation is adequate.

5. Avoid excessive humidity, sudden temperature changes, or temperature extremes. This will avoid the build up of dew form inside your DVD video recorder or DVD video disc.

6. To avoid costly damage or injury, place your DVD video recorder flat on a solid, stable surface free from vibrations; do not place any heavy objects on top of it. Use only a firm stand or table recommended by the manufacturer; follow all instructions regarding their use exactly.

7. An appliance and stand or table combination should be moved with care. Quick stops excessive force and uneven surfaces may cause the appliance and cart combination to overturn.

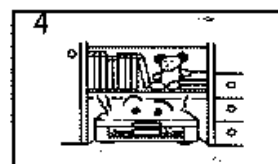
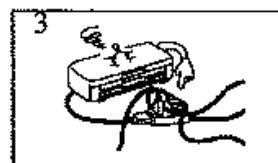
8. Do not use attachments not recommended by the product manufacturer as they may cause hazards.

9. Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:

- a) When the power-supply cord or plug is damaged.
- b) If liquid has been spilled, or object have fallen into the product.
- c) If the product has been exposed to rain or water.
- d) If the product does not operate normally by following the operating instructions. Adjust only those controls may result in damage and will often require extensive work by a qualified technician to restore the product to its normal operation.
- e) If the product has been dropped or damaged in any way.
- f) When the product exhibits a distinct change in performance- this indicates a need for service.

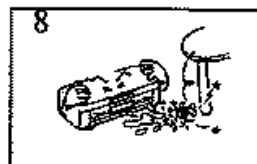
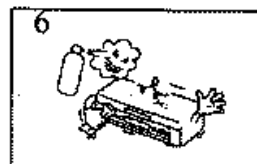
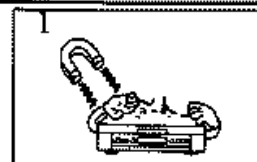
10. The product should be mounted to a wall or ceiling only as recommended by manufacturer.

11. The product should be situated away from heat source such as radiators, heat registers, stoves, or other products that produce heat.



## Operation/Cleaning

1. Keep your DVD video recorder away from strong magnetic objects.
2. Keep your DVD video recorder away from wet locations such as bathtubs, sinks, laundries, wet basements, and swimming pools.
3. Use only accessories recommended by the manufacturer to avoid fire, shock or other hazards.
4. If your DVD video recorder has been exposed to rain, moisture or strong impact, unplug it and have it inspected by a qualified service technician before resuming use.
5. For added protection for your DVD video recorder during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the cable system. This will prevent damage to the product due to lightning and power-line surges.
6. Unplug your DVD video recorder before cleaning. Use a damp cloth for cleaning. Do not use cleaning fluids or aerosols, which could enter the unit and cause damage, fire, or electrical shock. These substances may also tarnish and affect the finish of your DVD video recorder.
7. Never open or remove covers or make any adjustments not described in this manual. Attempting to do so could expose you to dangerous electrical shock or other hazards. It may also cause serious damage to your DVD video recorder. This should be carried out by a qualified service engineer.
8. Keep liquids and foreign objects away from your DVD video recorder. Never operate your DVD video recorder if any liquid or foreign object has entered. Electrical shorts could result in and possibly cause fire or shock hazards. Unplug your DVD video recorder immediately and have it inspected by a qualified service technician.



## Service

1. Do not attempt to service this DVD video recorder yourself. Instead, unplug it and contact a qualified service technician.
2. Be sure the service technician uses authorized replacement parts or their equivalents. Unauthorized parts may cause fire, electrical shock, or other hazards.
3. Following any service or repair, be sure the service technician performs safety checks to certify that your DVD video recorder is in safe operating order.

## Copy Protection

This DVD video recorder supports Macrovision copy protection.

On DVD discs that include a copy protection code, if the contents of the DVD disc are copied using a VCR, the copy protection code prevents the videotape copy from playing normally.

Apparatus Claims of U.S. Patent Nos. 4,631,603, 4,577,216, 4,819,098 and 4,907,093 licensed for limited viewing uses only.

## Recommended Measures for Optimum Picture Excellence

The unit is a precision device that is constructed using extremely accurate technology.

Soiling or friction affecting the pickup lens or disc drive can impair the image quality. At the worst, neither video nor audio will be played back. To obtain optimum picture quality, the recorder should be checked (cleaning and replacement of some parts) every 1,000 hours. Note that this period varies depending on the environment (temperature, humidity, dust, etc.) in which the recorder is used. Contact your authorized retailer/supplier for details.

## Warning of Dew Formation

Dew may form on the pickup lens in the following conditions.

- Immediately after a heater has been turned on.
- In a steamy or very humid room.
- When the unit is suddenly moved from a cold environment to a warm one.

If dew forms inside this unit, it may not operate properly.

In this case, turn on the power and wait about one hour for the dew to evaporate.

## Other

For Your information: Your full understanding of the following is appreciated: Parliament by statute has decreed that it is illegal to make copies of copyrighted material of any manner or kind without the consent of the copyright owner, subject to the "Fair Dealing" exceptions in the Act. Penalties may be imposed on those guilty of making such copies.

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## Precautions for safety

- The power supply of this DVD recorder is AC100~240V, 60Hz, please don't use incorrect power outlets.
- Please obey the rule of operation seriously, or there may cause a radiation damage.
- The laser light in this machine will hurt human eyes, please don't open the case. If there is a need for repair, please call for help to professional technician for checking.
- In order to avoid fire or electric shock, please don't let this machine expose on rain or highly humid environment.
- Use of power cord :
  1. When you put out the power plug, please don't hold the cable only.
  2. Don't touch the power cord with a wet hand, it may lead to a short on circuit or you may get electric shock.
  3. Don't let other apparatus or furniture press on the power cord.
  4. Don't take a knot on the power cord or use any cable to tie it up.
  5. Please put the power cord in a place that you won't be trodden on it and avoid to be stumbled over.
- Location of placing the DVD recorder :
  1. Please don't put it in a sealed area in prevention of sudden uprising heat may damage the unit. It should place in area in good ventilation.
  2. Don't put this unit exposed under sunshine or closed to any heat source.

### ■ Emergency

Please unplug the power cord immediately while during below situation and contact with service people without repair by self.

1. When liquid or metal drop into machine.
2. When abnormal playback status appears.

- Under the following situation, the dew may be formed :
  1. Just turn on the heater.
  2. A place with steam or a highly humid room.
  3. Or moving this unit from a cold place to a hotter place. If the dew is found in the recorder, it may be worked in abnormal. If you find the dew, please turn on the power, and the dew will be vaporized about an hour.
- Cleaning
 

Put out the plug from electricity outlet before cleaning, and use with a wet cloth. Please don't use cleaning liquid or aerosol. Because the liquid may run into the recorder, it may cause fire or electric shock. And these kind of liquids will erode the surface of the coating also.
- When the recorder is not in use...
 

When the recorder is not in use temporarily, please set the Power in stand-by. If the recorder won't be used in a long time, please put out the AC plug from the electricity outlet.
- Repairing service
 

Please don't fix the DVD recorder by yourself. If there is a Fixing in need, please take it to your close after sales service center.

### CLASS 1 LASER PRODUCT

This unit is grade one laser product.

Danger: If there is a disorder in the function or damage inside, there may be an unseen radiation Energy after you open the case. Please don't look at the light directly.

Features of laser diode:

Wavelength: DVD 650+/-15nm CD790+/-20nm

Way of shooting: successive

Laser output: Maximum 0.7mW

# Copy right protection and use of disc

## ● Copy right


About the copy right of the video and audio content and subject. Without the relevant license or authorization and allowance from copyright owner, no copy or duplication will be allowed. SAMPO has no right to authorize and allow the copy of the content.

## ● Copy protection

Our DVD recorder admits the patent right of Macrovision. In regard of copying a DVD disc with CSS protection code, the anti-copy protection function will be started to prevent illegal copy.

This DVD recorder is used with the technology from Macrovision, and it is protected by US relevant Patent right items. The intellectual right is belonged to Macrovision company and it's owners. The use of this kind of technology under patent should be permitted by Macrovision. Without the authorization and allowance from Macrovision, no one has the right to use this kind of technology on home appliance and other specified video apparatus. It is forbidden to use illegally or to decompose the patent in behavior.

## ● Compatible Disc Media with this recorder.

Disc type	Size/side/layer	Maximum playing time (capacity)
	DVD	MPEG2
	12cm(5")/DVD-R/RW	
	12cm(5")/DVD+R/RW	133 min. (4.7 GB)
	12cm(5")/one/single	242 min. (8.5 GB)
	12cm(5")/one/double	266 min. (9.4 GB)
	12cm(5")/two/single	484 min. (17 GB)
	12cm(5")/two/double	
	8cm(3")/one/single	41 min.
	8cm(3")/one/double	75 min.
	8cm(3")/two/single	82 min.
	8cm(3")/two/double	150 min.

**Note: Please use DVD+R/RW discs for recording.**

## ● Use of disc

1. Take out the disc as picture in right; hold with the edge or center of the disc. Don't touch the varnish side as it is for storage of information.



2. Don't put any sticker on the disc surface; it will cause weight bias on disc and lead to abnormal playing.



3. Please don't scratch, spot the varnish side, it may cause abnormal playing (halt or mosaic)



4. The rotational speed of the disc is very high. Please don't use any broken, scratched, cracked or bent disc for playing. Or it will damage the DVD recorder.



## ● Disc cleaning

The finger print or dirty spot on the disc will reduce the reflection, and it will lead to poor signal receiving directly; With



the poor signal, the playing performance will be in worse. Please use a soft cloth to wipe the disc from center to the outer edge straightly. If the disc is too dirty, you can use a wet soft cloth to wet it at first, and then wipe it with a dry soft cloth.

Never use cleaning liquid, methylbenzene, diluted formula, anti-static liquid or other solution for disc cleaning, it may damage the surface of the disc.

## ● Storage of the disc

1. Put the discs in the original box, and it can prevent deformation and bend.
2. Don't put the discs in a high temperature, high humid place or an area in direct sunshine. It will damage the discs.
3. Please read the instruction on the disc label carefully.

## Features

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- **Progressive scan and interlace video output**  
This DVD recorder can play in NTSC and PAL under progressive or interlace scan output.
- **Home theater surround sound**  
Connect this unit with Dolby Digital or DTS compatible amplifier / receiver, you can enjoy the surround sound from Dolby Digital and DTS in a DVD disc.
- **Easy and quick way to search the content**  
In different with videotape under proper sequence, you can find any content under title, chapter or time in a DVD disc.
- **Schedule/ Manual Record function**  
You can record the cable or wireless TV signal through the antenna or record the video and audio from external input (AV IN).  
Schedule record procedure can arrange 8 sets of time recording program in maximum.
- **Connection with digital video camcorder**  
This unit is equipped with internal DV (digital video) input connector; it can connect with digital video camcorder. And the Video and audio signal from digital video camcorder can transfer to DVD+R/+RW
- **Picture quality adjustment function**  
If you want to make a copy from a old video tape cassette, you can upgrade the picture quality before copying the video information into the disc. This unit has 5 modes for your choice, or you can reduce the recording time to exchange for better picture quality as per the satisfaction of your specific need.

## Package contents

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- Remote control (Batteries AAA x 2)
- Power Cord
- RF cable
- Blank DVD+RW disc
- Video signal cable
- Audio signal cable
- User manual
- Guarantee letters

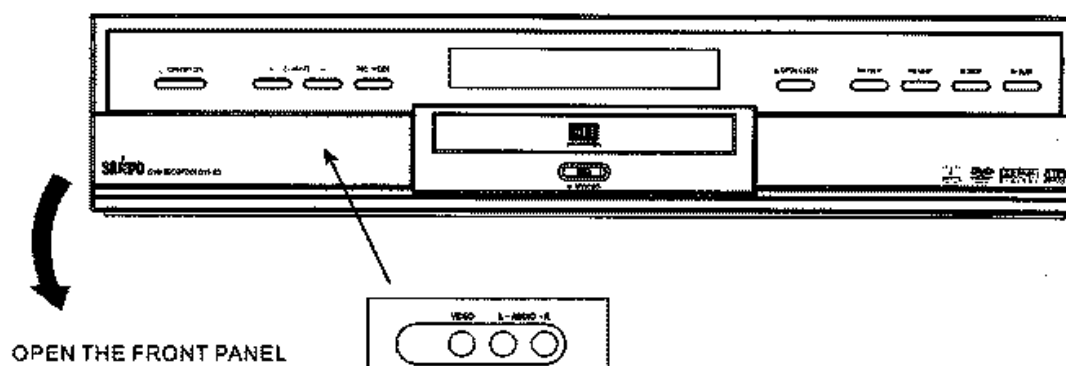
## Relevant Information

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- **Compatibility**  
This unit can record for CD+R and CD+RW disc. Besides, even making the disc record under the compatible mode from a personal computer. The disc may not be played due to the issue of software from disc format.
- **Playable disc type**  
Suitable system: DVD Video, SVCD, DVD+RW, DVD+R, CD-R, DVD-RW, DVD-R, CD-RW, Audio CD, MP3, and JPEG



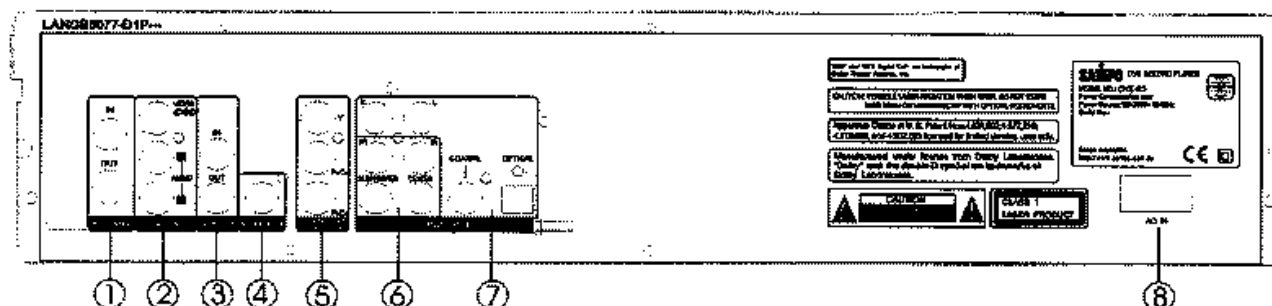
## ● Front Panel input connectors



**VIDEO** : Video input connector, connect with video input from an external apparatus.

**AUDIO L/R** : Connect with stereo sound (L/R) input from an external apparatus.

## ● Rear panel



1. **ANTENNA** : Connect with TV antenna or Cable to IN, and output to TV set from OUT.
2. **AV IN** : External video and audio signal input.
3. **S-VIDEO** : For connecting to a TV or monitor's S-Video input jack.
4. **VIDEO OUT** : Video signal output.
5. **COMPONENT VIDEO OUT** : component signal output, connection with component (Y/CB/CR)/ Progressive scan (Y/PB/PR) compatible TV set.
6. **AUDIO OUT** : 5.1 audio output jacks.
7. **DIGITAL** : Digital audio signal output connector, use in connection with Digital Audio Receiver/ Audio DA Converter).
8. **POWER CORD SOCKET**.

# ● Basic Connection

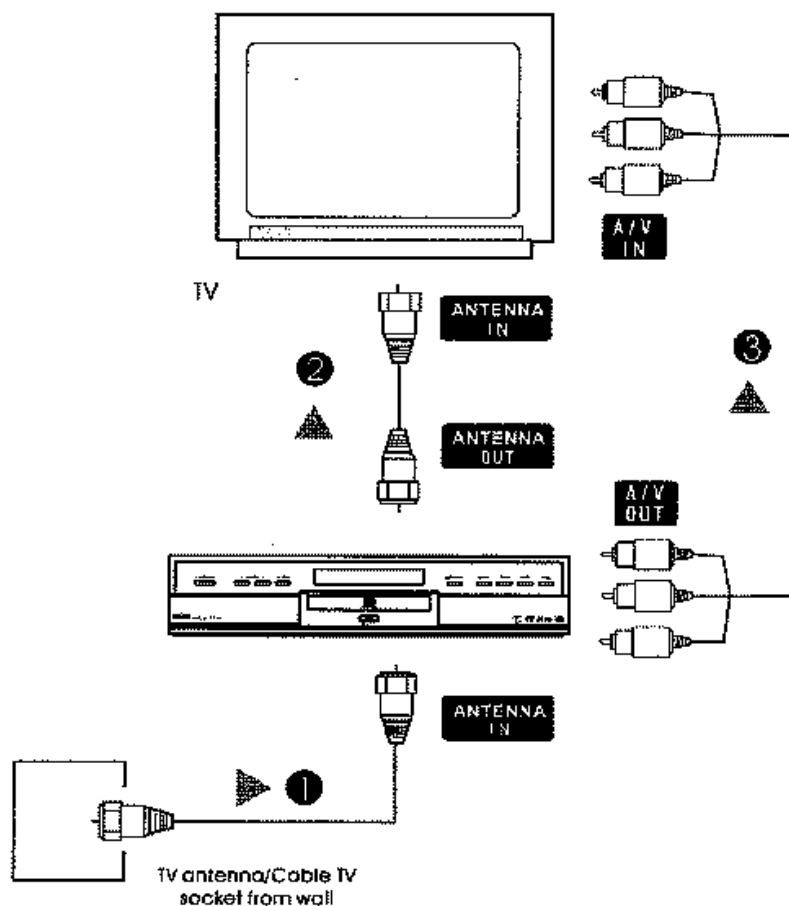
The following chart is showing about the basic connection, and other way of connection will be introduced later.



## Reminder

In the proceeding or before changing the connection on rear panel, please make sure all the apparatus sets has already turned off without the plug at the electricity outlet.

1. Connect the TV antenna / CATV coaxial cable with ANTENNA IN of recorder.
2. Use CATV coaxial cable to connect the ANTENNA OUT with RF input of TV.
3. Connect the VIDEO connector from VIDEO OUT and FR, FL from AUDIO OUT to A/V input from TV.

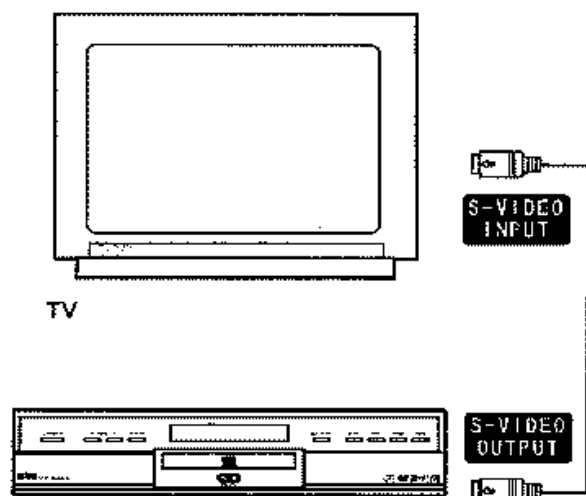


## ● Use with other video outputs

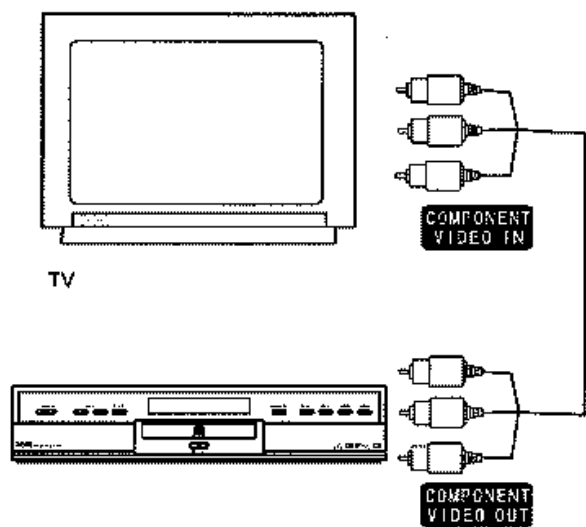
This DVD recorder is equipped with standard video signal connector, S-Video connector, and component (YPBPR/ YCBCR) video input. And their major difference will be resulted from the picture quality. The picture quality from S-Video is better than standard Video signal in transmission, and component is better than S-Video.

It is flexibility at different choice of output, you can choose the feasible way of connection to link with specific apparatus.

### A.



### B.



### A. Use with S-Video

S-Video will separate the color and brightness from video signal in transmission.

There are 2 sets of S-Video output connectors for connection with TV, monitor, VCR or other apparatus.



#### Attention

If you want to set S-Video output mode. (Please purchase S-Video cable by yourself)

### B. Use with component

1. Use video signal cable in connection with the COMPONENT VIDEO OUT from rear panel to correspondent connectors from Television.
2. If your television is installed with another set of Progressive Scan connector, please connect with this connector (normally is labeled in Y /CB/CR)



#### Attention

If you want to set component output mode, please Refer to video output setup on page 26. (please purchase component cable by yourself)

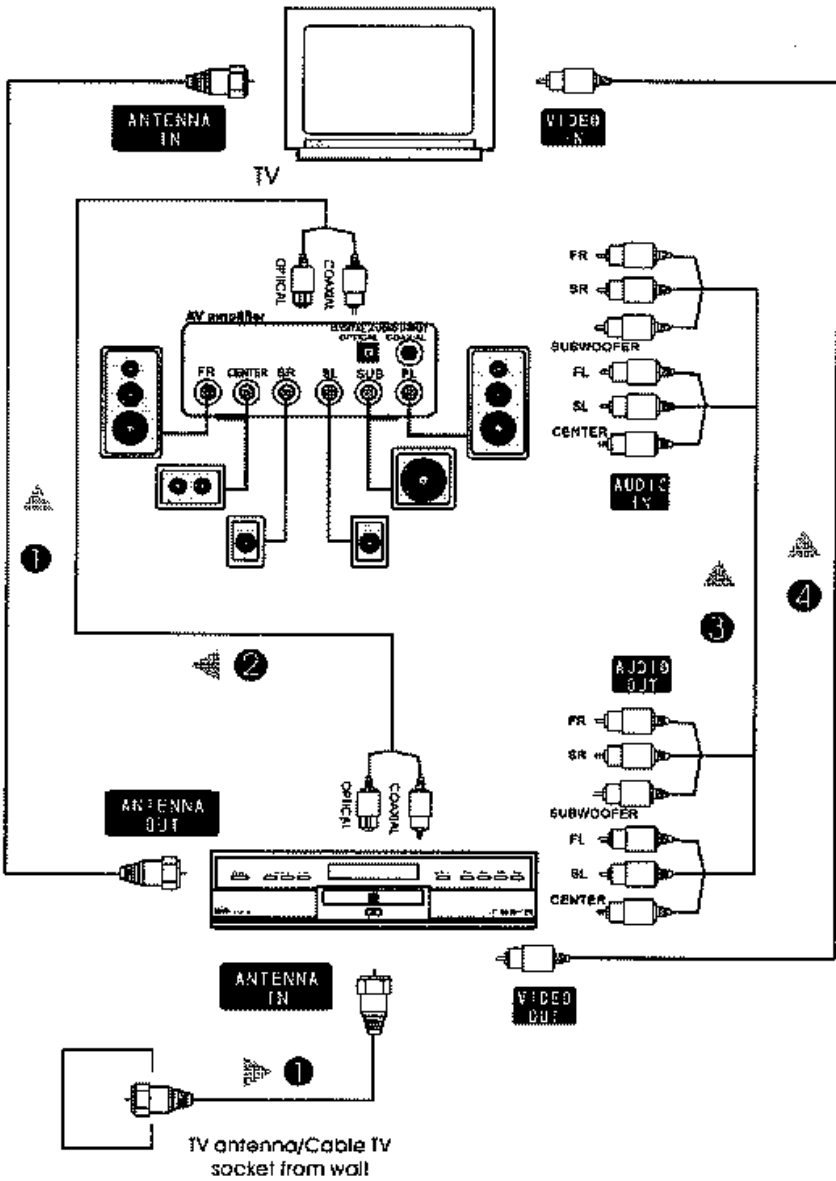
# ● Connection with AV amplifier

If you want to enjoy multi channel surround sound effect, you have to use digital optical or digital coaxial audio output, and link it with AV Amplifier/ Receiver. Please refer to your actual situation for connection. (It's not necessary to connect with both)

Besides digital connection, it is our suggestion to use analog 5.1 sound channels for connection also.

### 💡 Reminder

If the setup is not preceded in matching with AV Amplifier/ Receiver, a noisy may happen from loudspeaker. Please refer to Audio Setup on page 27.

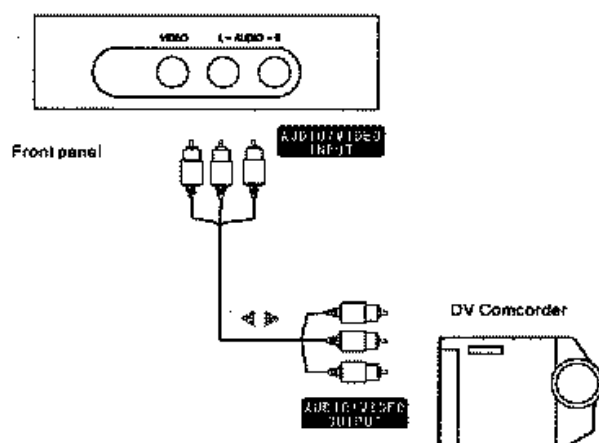


1. As per the chart, connect RF cable.
2. Connect DIGITAL OUT from this unit to DIGITAL IN from AV Amplifier.  
If you want to use optical connection, please connect OPTICAL DIGITAL OUT to OPTICAL DIGITAL IN from AV Amplifier.  
If you want to use coaxial connection, please connect COAXIAL DIGITAL OUT to COAXIAL DIGITAL IN from AV Amplifier.
3. Connect analog AUDIO OUTPUT and VIDEO OUTPUT to analog AUDIO INPUT and VIDEO INPUT from AV Amplifier. (If you select to use DIGITAL OUT connection, then you don't have to connect AUDIO OUT)
4. Connect the VIDEO OUT from this unit to VIDEO IN on TV.

⚠ Attention  
Please purchase optical and coaxial cables by yourself.

## ● Connection with other AV machine

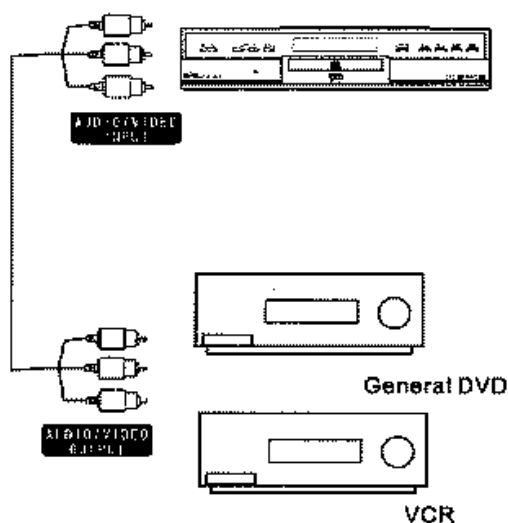
A.



A. Connect DV Camcorder

As per the chart, please connect DV Camcorder's DV OUT jack with recorder's Video/Audio jack of front panel for recording.

B.

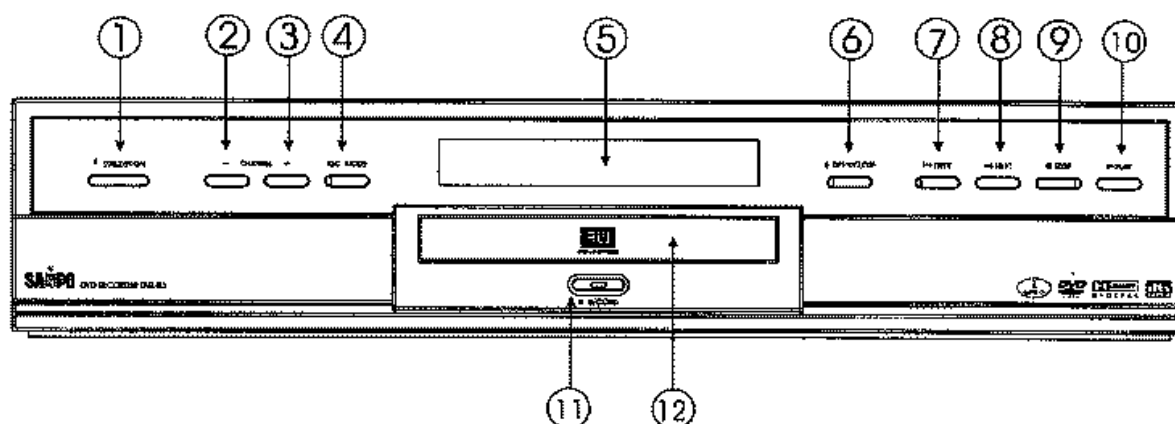


B. Connect VCR or general DVD

As per the chart, connect AUDIO/VIDEO OUTPUT from VCR or general DVD to AUDIO/VIDEO INPUT of this unit.

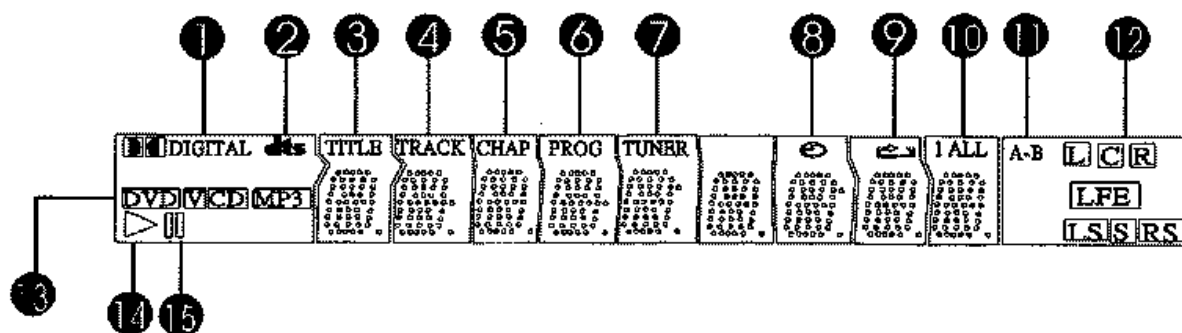
Thus, you can take DVD+RW disc to record the signal From VCR or general DVD.

## ● Front panel buttons



- |  |   |
|--|---|
| <p>1. <b>STANDBY/ON :</b><br/>Power on / off DVD record</p> <p>2. <b>CHANNEL - :</b><br/>Chose the next TV channel for record</p> <p>3. <b>CHANNEL+ :</b><br/>Chose the previous TV channel for record</p> <p>4. <b>REC MODE :</b><br/>Chose the mode and time of recording</p> <p>5. <b>IR receiver</b></p> <p>6. <b>OPEN/CLOSE :</b><br/>Open or close disc tray</p> | <p>7. <b>PREV :</b><br/>Goes to the previous chapter/track during playback</p> <p>8. <b>NEXT :</b><br/>Go to the next chapter/track during playback</p> <p>9. <b>STOP :</b><br/>Stop playback</p> <p>10. <b>PLAY :</b><br/>Play the inserted disc</p> <p>11. <b>RECORD :</b><br/>Record the current channel</p> <p>12. <b>DISC TRAY</b></p> |
|--|---|

# ● Display Window

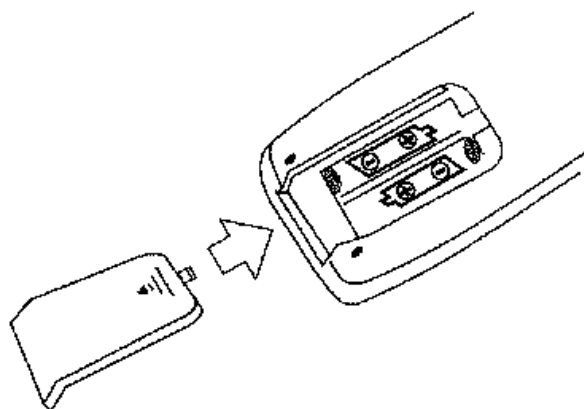


1. Dolby Digital sound display
2. DTS sound display
3. Title: Display the selected or played title (DVD)
4. Track: Display the selected or played track (VCD)
5. Chapter: Display the selected or played chapter
6. The selected song in program
7. External input for recording
8. Start schedule record

9. Title in repeat play
10. A to B repeated playback
11. Channel from external AV amplifier
12. Progressive Scan :  
Shift general Component to Progressive Scan mode. If there is no signal display, it indicates the current Status is in general Component interlace.
13. Display the disc type: DVD, VCD, MP3
14. Playing in process
15. Play/record pause

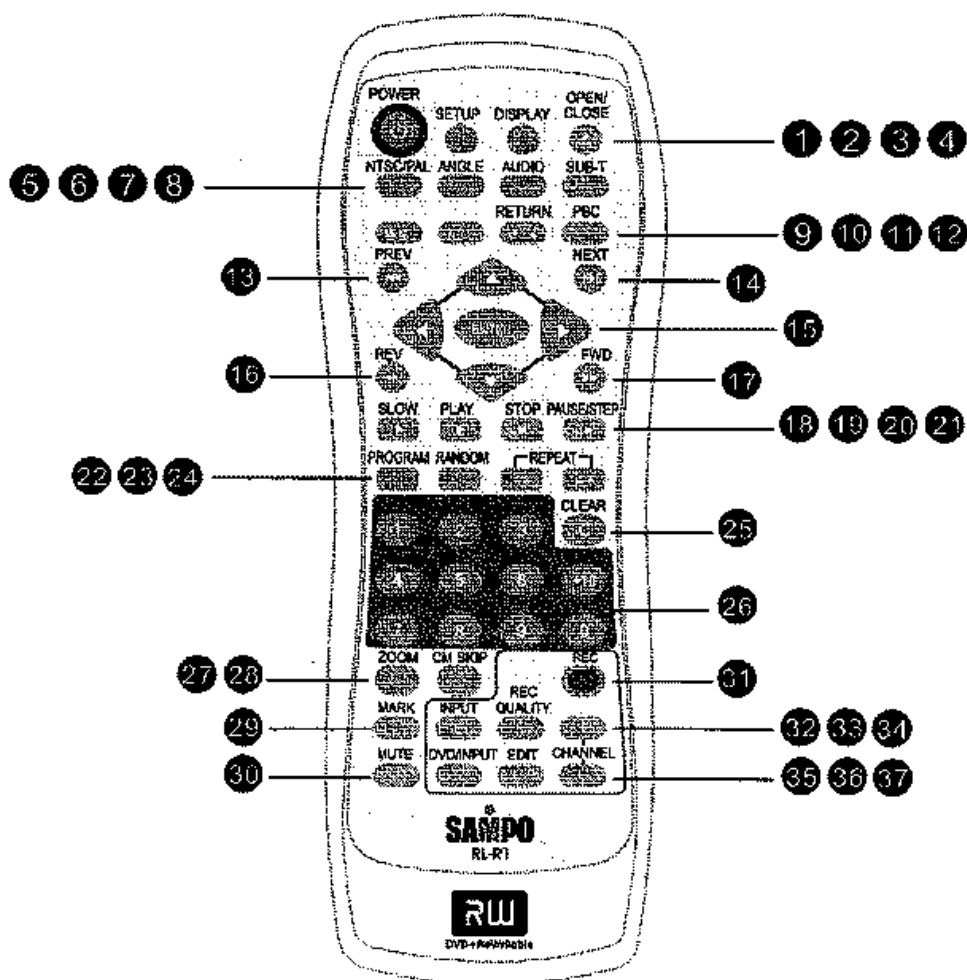
# ● Remote Control

Use remote control to operate DVD recorder. Put 2 pieces of batteries (AA) into the battery container, please notice the +/- terminal must be the same direction with the label on the battery container. Face the remote control in straight of the remote receiver in DVD recorder.



## ⚠ Attention

- ① Please don't use the batteries together in different brand or type and don't use a new and an old battery together..
- ① If you find the remote distance is reduced, please change 2 pieces of battery together at the same time.
- ① If you won't operate this unit for a long period, please take out the batteries from remote control. Otherwise, the remote control may be damaged by battery liquid coming out in erosion.
- ① Please don't put the remote control at the place in high temperature or high humidity.
- ① Please don't open the case this unit.





# ● Remote Control Buttons

1. **POWER**  
Turn on/ off DVD recorder unit
2. **SETUP**  
Functional setup menu (please refer to page 25)
3. **DISPLAY**  
Show working status on screen
4. **OPEN/CLOSE**  
Open or close disc tray
5. **NTSC/PAL**  
Choose NTSC or PAL TV system
6. **ANGLE**  
Choose the different view angle of the playback
7. **AUDIO**  
If a DVD have more than 2 languages, this button can select a language for playback
8. **SUB-T**  
During playback a DVD with more than two subtitle language, this button toggles between subtitle language or disables subtitle function (please refer to page 23)
9. **MENU**  
Some DVD have menu program, this button allows access to this menu. (please refer to page 23)
10. **TITLE**  
Press this button in the playing, it can enter to title menu in DVD disc. (please refer to page 23)
11. **RETURN**  
When it is playing in VCD mode, press this button can return to the previous menu
12. **PBC**  
Some VCD have complex submenus, this button allows access to these submenus. (please refer to page 24)
13. **PREV**  
It can jump to the previous chapter while the playback is proceeded.
14. **▶▶NEXT**  
It can jump to next chapter while the playback is proceeded.
15. **▲/▼/◀/▶**  
Use for up, down, left, right direction in menu selection.  
**ENTER**  
Confirm selection of an item in the setup menu.
16. **REV◀◀**  
It can rewind for searching while the playback is proceeded.
17. **FWD▶▶**  
It can forward for searching while the playback is proceeded.
18. **SLOW**  
Slow speed for forward/rewind in playback.
19. **PLAY**  
Start playing the disc.
20. **STOP**  
Terminate the playback
21. **PAUSE/STEP**  
Pause playback and Step playback. Press this button allows a step move of a picture motion.
22. **PROGRAM**  
Program playback of the disc (Please refer to page 22)
23. **RANDOM**  
Random playback for CD/VCD
24. **REPEAT**  
**1/A** : Repeat for one chapter or all the titles in a disc(please refer to page 21)  
**A-B** : Playback from A to B(please refer to page 21)
25. **CLEAR**  
Clear the wrong number in press
26. **1,2,3...**  
For Menu, song selection or for time, password input
27. **ZOOM**  
Zooming mode in playback. (please refer to page 24)
28. **CM SKIP**  
Skip about 30 seconds playback time on DVD playback. (about a general TV commercial time)
29. **MARK**  
Mark memory setup (please refer to page 24)
30. **MUTE**  
Cease the sound output
31. **REC**  
Record the current channel
32. **INPUT**  
Shift to external input signal (please refer to page 30)
33. **REC QUALITY**  
Choose the mode and time of recording
34. **CHANNEL+**  
Choose the previous TV channel for record
35. **DVD/INPUT**  
Switch between normal DVD playback and External input.
36. **EDIT**  
When using with DVD=RW disc, this button can show edit menu and it can erase title and chapter.
37. **CHANNEL -**  
Choose the next TV channel for record

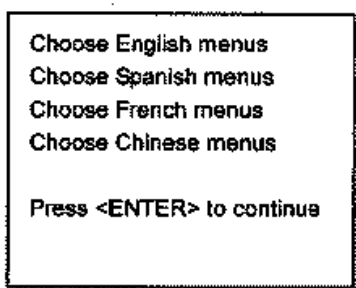
## Preparation :

- ☞ Connect to TV, turn on the power and choose the TV/VIDEO mode on TV at the proper channel.
- ☞ If there is connecting to an audio system, please turn on AV amplifier at first and make sure about output and input are under proper connection.
- ☞ Welcome to use this DVD recorder and first time when you power on this DVD recorder, please follow the instruction of steps on screen.

## ● Primary Setting

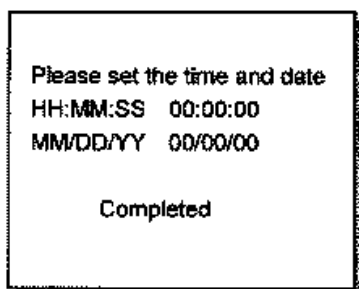
- ☞ All functions of this DVD recorder can be set easily by using ▲▼◀▶ navigation keys. Please move the Highlight Bar (Yellow color) to the desired item and the presses ENTER to confirm.

1. After power on the DVD recorder, TV screen shows the following message :



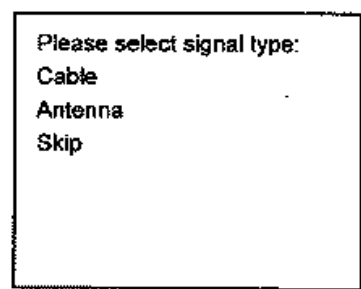
- ☞ Press ▲▼ direction keys to choose the language of menu, then press **ENTER** to confirm.

2. Time and date setting :

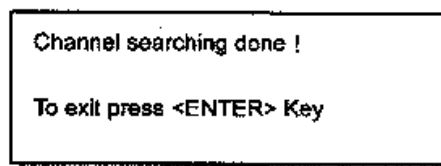


- ☞ The first row indicates time, and second row indicate date (MM/DD/YY). Use ◀▶ direction keys to move the cursor and press ▲▼ direction keys to change the correct the numbers. Last, move to 「Completed」 to finalize the setting.

3. Selection of input signal:



- ☞ Press ▲▼ direction keys to select the signal input source. Press **ENTER** to confirm or move to 「Skip」 to leave this setting.
4. Whatever the selection of the input signal, there is a auto-search to the channel. After search, then the screen shows:



5. After setting, press **ENTER** to skip and playback can be started.

## ● Start playback

1. Press **OPEN/CLOSE** to open the disc tray.
2. Put the disc on the disc tray in the proper position and then close the disc tray
3. Press **PLAY** button to play the disc.



### Reminder

- ① In DVD disc playback, some menu selection can be workable in the processing of playback only.
- ① In PBC playback on VCD, a PBC displays on the screen.
- ① If there is no PBC function on VCD/CD, the disc plays immediately.

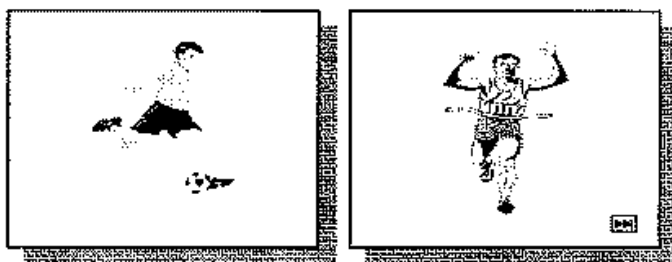
## ● Skip playback

### DVD playback

- Press **NEXT** ►► skip to next chapter.

Chapter 1

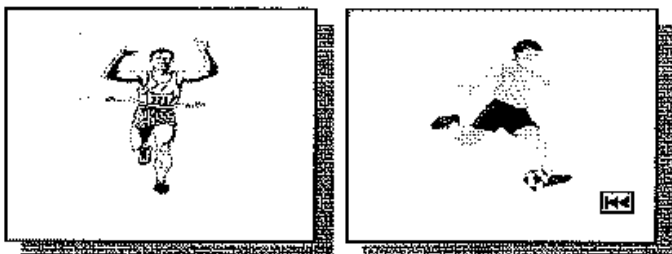
Chapter 2



- Press **PREV** ◄◄ skip to beginning or previous chapter.

Chapter 2

Chapter 1



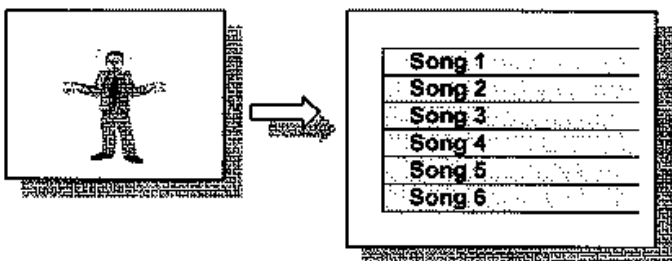
### VCD / Audio CD playback

Under PBC on :

- In VCD playback, press **TITLE** goes to PBC menu.

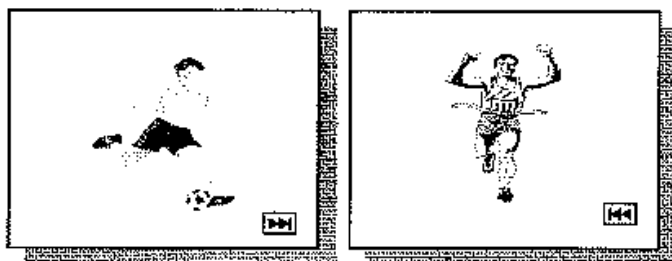
PLAYING

VCD PBC MENU



Under PBC off :

- Press **NEXT** ►► or **PREV** ◄◄ button to skip to next or previous section on a CD.

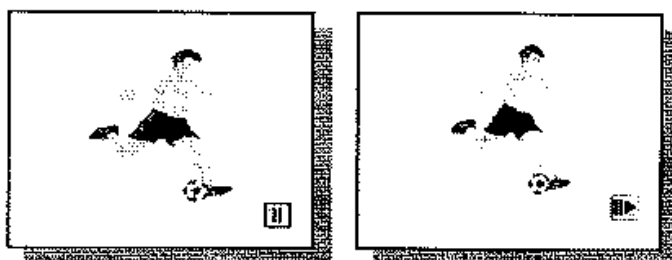


## ● Pause/Step

- Except CD disc, picture on disc can play under one step at motion in one press.
- Press **PAUSE/STEP** to pause the picture, one more press skips to next motion step playback.
- Press **PLAY** goes back to normal playback.

PAUSE

STEP



## ● FWD/REV selection

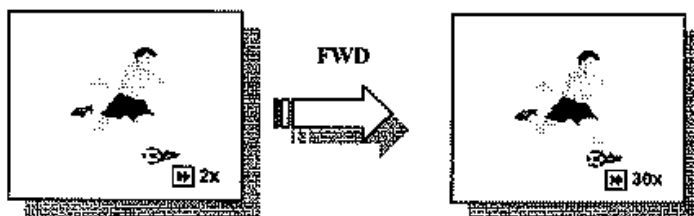
- Press **FWD** ►► and **REV** ◄◄ to speedy forward and rewind selection.
- In **FWD** ►► and **REV** ◄◄ searching, press **PLAY** to recover normal playback.

### DVD playback

- Press **FWD** ►► or **REV** ◄◄ button to speed up the playback in 2→4→8→16→30→60 in circle choice.

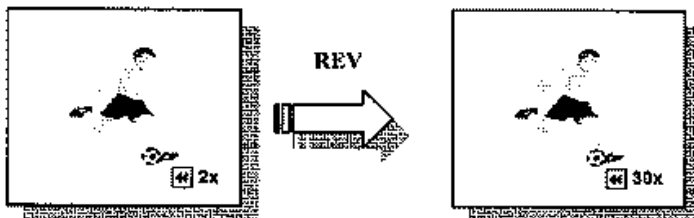
2X

30X

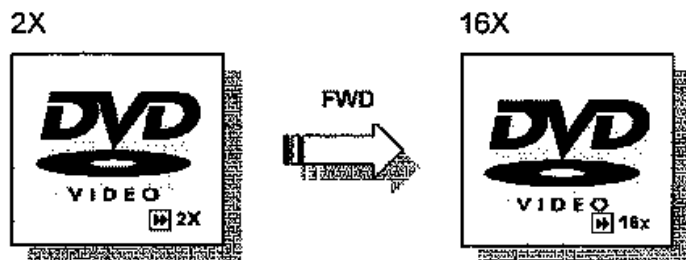


2X

30X



- Press **FWD** or **REV** button to speed up the playback in **2→4→8→16** in circle choice.

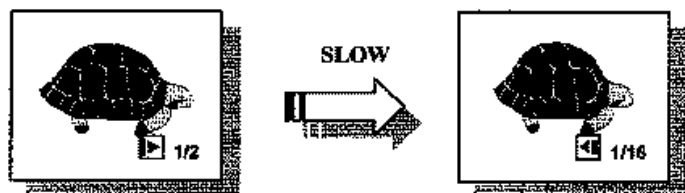


## ! Attention

When forward/rewind motion in processing, picture will be interrupted in no sound effect.

## ● Slow playback

- Press **SLOW** to slow down in **1/2→1/4→1/8** under circle choice.
- In slow searching, press **PLAY** can recover to normal playback.

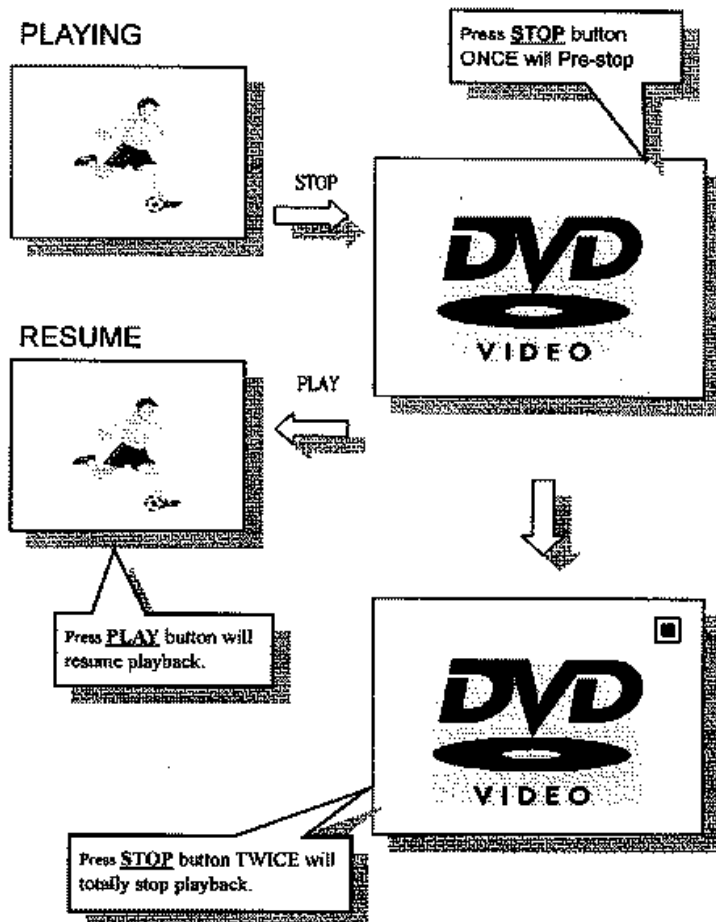


## ! Attention

During slow-motion play, you will not be able to hear the audio portion of the track.

## ● Stop Playback

- Press **STOP** in playback processing can stop the playback temporarily (press **PLAY** to play Continuously). Press one more time on **STOP** to stop playback completely.

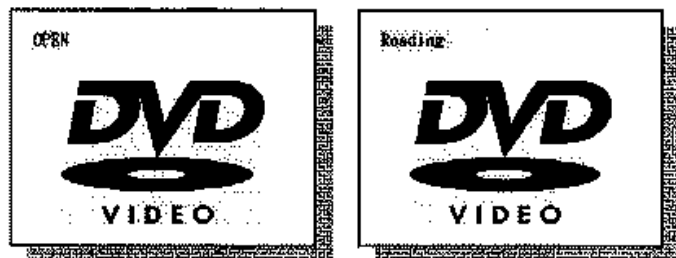


## ! Attention

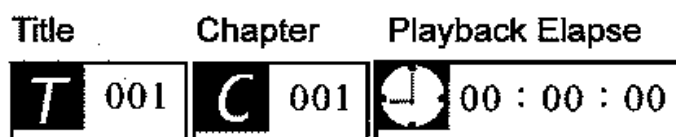
If you won't use this unit, please take out the disc and press "POWER" to turn it off.

## DVD OSD

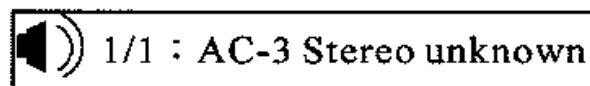
- Display related operation OSD on screen.



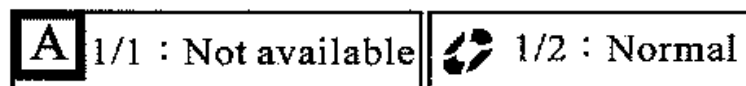
- Display current title, chapter and elapsed time.
- Press **DISPLAY** on remote control, screen shows related OSD information as follows in sequence :



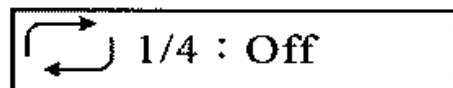
## Audio channel selection



## Subtitle Random playback



## Repeat playback



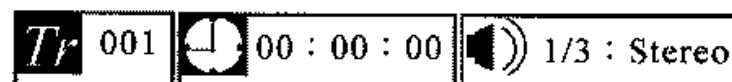
- Press **◀▶** arrow direction keys for moving, and press **ENTER** to confirm, use **▲▼** arrow direction keys to choose playback mode.
- Disc with multi titles and chapters, please use **▲▼** key to select desired title or chapter or direct input number by digits then press **ENTER** key to confirm.
- Direct input desired time then press **ENTER** key to confirm.
- Press **DISPLAY** key to cancel OSD display.
- Above selection is worked under circle choice. Display is in yellow before final confirmation, press

**ENTER** to confirm and turns to white color in setup accomplishment. Press one more **DISPLAY** button to disappear the screen display.

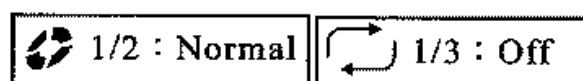
## VCD / Audio CD OSD

- Display current title, chapter and elapsed time.
- Press **DISPLAY** on remote control, screen shows related OSD information as follows in sequence :

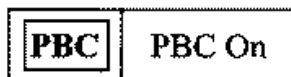
Title Playback Elapse Channel selection



Random playback Repeat playback



## PBC ON/OFF



- Press **◀▶** arrow direction keys for moving, and press **ENTER** to confirm, use **▲▼** arrow direction keys to choose playback mode.
- Disc with multi titles and chapters, please use **▲▼** key to select desired title or chapter or direct input number by digits then press **ENTER** key to confirm.
- Direct input desired time then press **ENTER** key to confirm.
- Press **DISPLAY** key to cancel OSD display.
- Above selection is worked under circle choice. Display is in yellow before final confirmation, press **ENTER** to confirm and turns to white color in setup accomplishment. Press one more **DISPLAY** button to disappear the screen display.

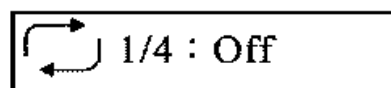
## ● Repeat playback

### DVD playback

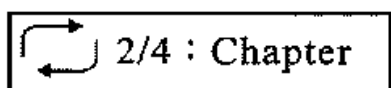
#### ☞ Repeat playback

1. Press **1/ALL** on remote control to enable repeat function.
2. Press **ENTER** to enter select mode and use ▲▼ arrow keys for selection.

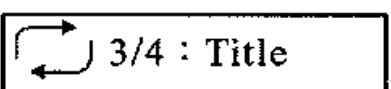
Switch off



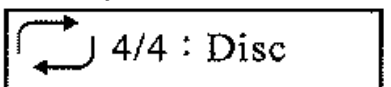
Chapter repeat



Title repeat



ALL repeat



#### Chapter repeat:

Repeat current playing chapter.

#### Title repeat:

Repeat current playing title.

#### Disc repeat:

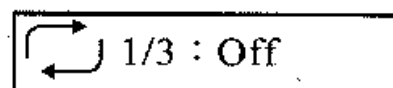
Repeat all titles on disc.

3. Press **ENTER** button to confirm and press **1/ALL** key to exit.

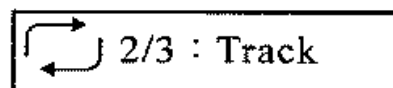
### VCD / Audio CD playback

1. Press **1/ALL** on remote control to enable repeat function.
2. Press **ENTER** to enter select mode and use ▲▼ arrow keys for selection.

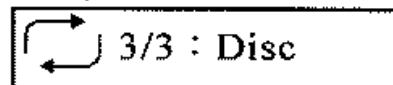
Switch off



Track repeat



All repeat



3. Press **ENTER** button to confirm and press **1/ALL** key to exit.

#### ☞ A-B repeat playback

Repeat playback between two points.

1. Press **A-B** button to set up a start point (A), on screen display (OSD) shows "A" with a square icon.
2. Press one more **A-B** button to set up an end point (B), OSD shows "B" with a square icon. Then the playback between A and B starts.
3. Press **A-B** button for cancellation and comes with normal playback. No OSD shows.

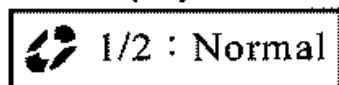


## ● Random playback

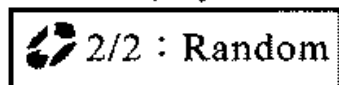
Only available in VCD (PCB off) or CD-DA playback.

1. Press **RANDOM** to enable random function. And the TV screen shows as follows :

Normal playback



Random playback



2. Press **ENTER** to enter select mode, use ▲▼ arrow key for selection
3. After setup, the message shows on the TV screen continuously. Playback in proceeding, another song plays in random automatically after a song is finished.
4. Press one more **RANDOM** goes back to normal playback, no OSD shows on the screen.

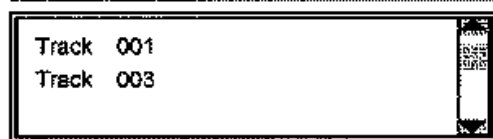
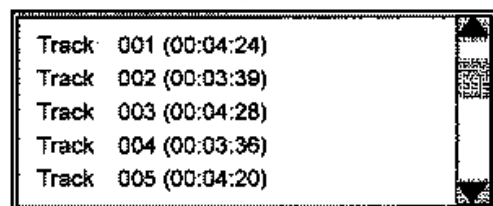
## ● Program Playback

Program songs playback can be used on ISO file, CD-DA or VCD under PBC off only.

☞ CD-DA 、 MP3 、 JPEG 、 VCD playback

1. Place MP3 recorded disc into recorder and the recorder will automatically playback the first file.
2. Press **STOP** key twice to enter **Program List** screen.

Program List



3. Use ▲▼ keys to select desired song (file) then press **ENTER** key to confirm selection.

4. Use ◀▶ key to move highlight bar to **PLAY** or **CLEAR ALL** area. When choose **PLAY** and press **ENTER** key, recorder will start **PROGRAM** playback immediately.
5. During **STOP** status, user can switch program mode and all programmed songs (files) will keep in program area.

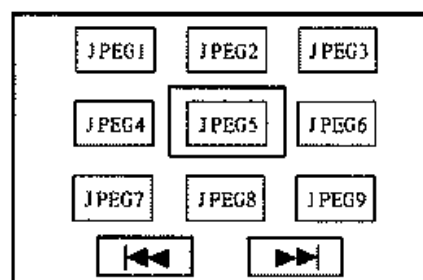
## ● Cancel Program Playback

1. Choose **CLEAR ALL** will delete all programmed songs (files).
2. Press **PLAY** key will return to normal playback.

## ● Jpeg playback

☞ JPEG picture playing

1. Put a disc with JPEG files into the recorder, it goes to selection menu automatically. Press **STOP** to enter little picture screen.
2. Little picture screen can show 9 pcs. It can help you to find your picture in need easily. Choose the picture in need and press **ENTER** to turn little picture to full screen.



3. Press **STOP** repeatedly to enter selection menu. Move ▲▼ direction keys to choose picture and press **ENTER** to play.
4. Move cursor to ◀◀ can jump to previous page, choose ▶▶ can jump to next page.

## ● Title Playback (DVD only)

Some DVD have title menu for title playback selection, and this function can be achieved in this kind of DVD only.

1. Press **TITLE** in playback proceeding to show title menu (depends on disc design)
2. Move **▲▼** arrow direction key and press **ENTER** to choose title or press the numerals directly for title selection.

### Attention

Content on DVD, which is divided by section named with Title, and title is divided into several chapters.

Menu is not belonged any title. A movie in a disc can have one title only but with several chapters.


## ● DVD Menu (DVD only)

Some DVDs have complex content with many languages in subtitles and audio language selection with different angle for choice also. In this case, DVD menu can choose audio language, subtitles and angle.

1. If the disc contains with menu program, press **MENU** to show DVD menu.
2. Use **▲▼◀▶** arrow direction key to select and Press **ENTER** to confirm. Or press the numeral keys for selection.

## ● Different Angle Playing

Some DVDs have multiple view angle video segments (depends on disc design). For multiple view angle section in playback, press **ANGLE** key to choose different view angle.

1. Play a DVD section with multiple view angle, OSD on screen shows “” mark.
2. Press **ANGLE** to select the available scope of view angle in circle choice.

## ● Change Subtitle

During playback for a DVD with more than 2 languages in subtitle, press **SUB-T** to change or cancel subtitle.

1. Press **SUB-T** to choose available subtitles or “off” under circle choice.
2. Screen shows subtitle's number, and presses **ENTER** to confirm. Press one more **SUB-T** disappears screen message.

### Attention

- ① Some subtitle language can be selected from DVD menu only but not in playback proceeding.
- ① Available subtitles are depended on the design of DVD.

## ● Change Audio Language

If a DVD have more than 2 language for playback, Press **AUDIO** to change audio language.

1. Press **AUDIO** in circle choice for available audio language.
2. Screen shows Audio language's number, presses **ENTER** to confirm selection. Press one more **AUDIO** to disappear the screen message.

### Attention

- ① Some audio language can be selected from DVD menu only but not in playback proceeding.
- ① Available audio language is depended on the design of DVD.

## ● Direct Selection

1. When DVD, VCD or Audio CD playback is proceeding, press numeral keys on remote control for selection directly, it can jump to the selected chapter or song for playback.
2. Press **+10** button when the song is placed over 10 positions. For example “22”, press **+10** and then press **2**.



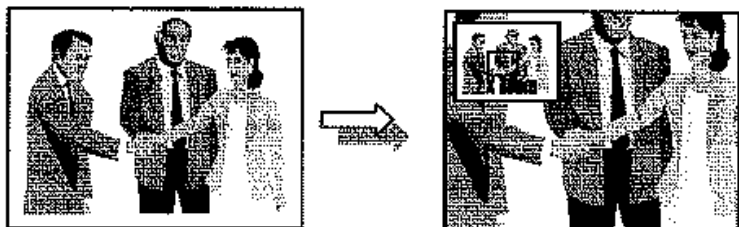
## ● PBC Playback Control

Only VCD in 2.0 edition or above has this function. The functional operation is different caused by different disc Design. Please refer to the instruction manual from the disc.

1. Press **PBC** to turn on/off PBC function. OSD show "PBC on" or "PBC off".
2. If the disc contains PBC menu, press **PREV** and **NEXT** goes previous page or next page.
3. In PBC menu, all the selection has to be used with numeral keys.
4. In VCD 2.0 edition playback, set PBC "off" is better for operation.
5. When PBC is on, press **TITLE** goes back to PBC menu.

## ● Zoom Function on Playing Disc

1. In DVD, VCD playback proceeding, press **ZOOM** to zoom the picture to **x2** → **x4** → **x8** → normal in circle choice. A little picture in original size shows on the upper left of the screen.
2. Press **ZOOM** and use **▲▼◀▶** arrow direction keys to move within scope.

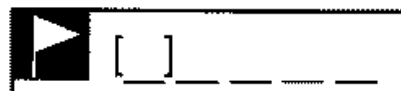


## ● Mark Memory

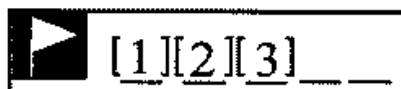
This unit supports 5 storage of mark memory.

### ☞ Store Mark Memory

Press **MARK** when the playback is proceeding, and Mark Memory menu shows on screen as follows :



1. Playback is proceeding, press **ENTER** to enter menu, first column displays **[1]** , a numeral indicates a Mark in memory storage. And space indicates no Mark Memory in storage.
2. Use **▶** key skips to next column storing new mark memory.
3. Playback is proceeding; press **ENTER** to memorize present time as a mark point. Then this position takes place by numeral as follows :



4. After setup, press **MARK** again to leave Mark Memory menu.

### ☞ Play/ Cancel Mark Memory

1. Enter into menu, press **◀▶** arrow direction keys to choose the position of numerals.
2. Press **ENTER** to start playback from mark point.
3. Press **CLEAR** to clear Mark Memory.

## ● Setup Menu Structure

Main Function List	First Level Function List	Second Level Function List
1.Language	1.OSD	English
		Spanish
		French
		Chinese
	2.Menu	English
		Spanish
		French
		Chinese
	3.Audio	English
		Spanish
		French
		Chinese
4.Subtitles	English	
	Spanish	
	French	
	Chinese	
2.Video Setup	1.Aspect Ratio	16 : 9 Wide
		4 : 3 Letterbox
		4 : 3 PanScan
		Antenna Cable
	2.Channel Search	Antenna Cable
	3.Add/Del Channel	Antenna Cable
	4.Cable/Antenna	Antenna Cable
	5.Video Output	Progressive Component
	6.TV System	NTSC
	3.Audio Setup	1.Audio Output
Surround +5.1		
LR Stereo		
Dual Mono		
Center Only		
LRC		
LR+Surround		
LRC+Surround		
2.SP/DIF		LRC+LR Surround
		PCM Bitstream
4.System Info	1.DATE and TIME	1.G
		2.
		3.PG
		4.PG 13
		5.
		6.R
		7.NC 17
		8.NO Limit
	2.Ratings	Confirm
		Cancel
		Confirm
		Cancel
5.Disc Media	1.Finalize	Confirm
	2.Erase	Cancel
6.Recording	1.Record Speed	HQ
		SP
		LP
		EP
		SLP
		On
	2.Auto Chapter	Off
7.Schedule		

- Press **SETUP** on remote control to enter into General Setup, Screen shows the following message :



<SETUP> Exit      <▲/▼> Select  
<ENTER> Confirm Selection

### ⚠ Attention

When playback is proceeding, it stops after entering into General Setup. And it goes normal in playback after the Setup procedure is made.

## ● How to setup

- As per the screen picture above, use the ▲▼ arrow direction key to choose the functional item in need. Then press **ENTER** to enter into first layer of functional table.
- In the first layer of functional table, press ▲▼ arrow direction key to choose the item in need. Next, press **ENTER** to enter into second layer of functional table. Or press ◀ key to return to previous page.
- In the same way, press ▲▼ key to choose the item in need at the second layer functional table. Then, press **ENTER** to accomplish functional setup.
- After functional setup, press **SETUP** skips from functional setup screen.

### ⚠ Attention

If you find there is a difference in the above structure table please take the functional structure table on the recorder as the priority,

## ● Language

- ☞ There are four items relate to language setup OSD, MENU, AUDIO, SUBTITLES.

SETUP	LANGUAGE
Language	OSD
Video Setup	Menu
Audio Setup	Audio
System Info	Subtitles
Disc Media	
Recording	
Schedule	

<SETUP> Exit    <▲/▼> Select  
<◀> Return    <ENTER> Confirm Selection

- ☞ OSD screen shows language. It is available to choose other language in display. This unit has 4 OSD languages for selection: English, Spanish, French, Chinese.
- ☞ Disc contains Menu language, Audio language Subtitles language; those items can be selected when the playback is proceeding. If the disc has default setup on audio language and subtitle language, this recorder can play it automatically.

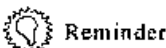
## ● Video Setup

SETUP	VIDEO SETUP
Language	Aspect Ratio
Video Setup	Channel Search
Audio Setup	Add/Del Channel
System Info	Cable/Antenna
Disc Media	Video Output
Recording	TV System
Schedule	

<SETUP> Exit    <▲/▼> Select  
< > Return    <ENTER> Confirm Selection

### ◆ Aspect Ratio

- ☞ 16 : 9 (Wide) ~ 16 : 9 wide screen TV video output.
- ☞ 4 : 3 (Letter box) ~ general 4:3 TV letter box type output.
- ☞ 4 : 3 (Pan Scan) ~ general 4:3 TV full pan scan video output.



Reminder  
The screen aspect of film labels in the instruction at the back of DVD box.

## ◆ Channel Search

- ☞ Confirm or cancel a channel searching.

### ◆ Add/Del Channel

- ☞ Add or delete the channel. Use **ENTER** to add or delete channel.

### ◆ Video Output

VIDEO SETUP	Progressive Component
Aspect Ratio	
Channel Search	
Add/Del Channel	
Cable/Antenna	
Video Output	
TV System	

<SETUP> Exit    <▲/▼> Select  
<◀> Return    <ENTER> Confirm Selection

- ☞ Progressive: Progressive scan (Y/Pb/Pr) output.
- ☞ Component: Component (Y/Cb/Cr) output.

### ◆ TV System

- ☞ NTSC : Whatever of the TV system in disc, this recorder compels it in NTSC TV system output.
- ☞ PAL : Whatever of the TV system in disc, this recorder compels it in PAL TV system output.

## ● Audio Setup

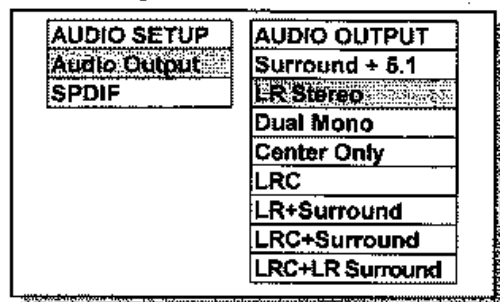
For the enjoyment of surround sound effect. Besides this recordable DVD recorder has to be connected with AV Amplifier/ Receiver. A setup is needed in this recorder to ensure the digital audio signal format is compatible with amplifier/receive.



#### Attention

If sending the incompatible digital signal to AV Amplifier/Receiver, it may cause a noisy sound from loudspeaker. It affects the harmony and it damages the loudspeakers also.

## ◆ Audio Output



☞ Surround +5.1 surround sound, Dolby Digital and MPEG-2 multiple sound channel mixes into a compatible 2 channel output at Dolby surround signal, it suits for apparatus in analog output.

☞ If the external sound source is standard stereo, set to Stereo when it is connecting to TV

☞ If each sound channel transmission is independent in accompanying sound, reset to Dual Mono.

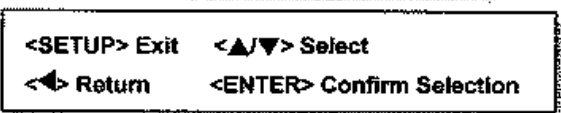
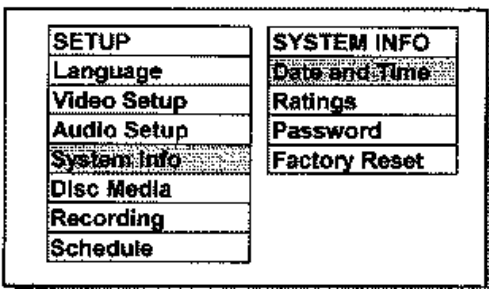
## ◆ Spdif

Use the following mode to connect the digital sound signal from this recorder to external amplifier, such as AV Amplifier.

☞ PCM : Dolby Digital and MPEG-2 multiple sound Signal transfers to Pulse Code PCM, it suits for Hi-fi apparatus or amplifier without digital multiple sound channel decoder.

☞ Bitstream : Select this function, and it can output the Dolby or digital primitive bit signal from DTS. Connect the digital output in this recorder to input connector from external AV Amplifier/ Receiver (Please refer to page 11 for connection)

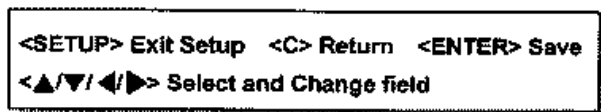
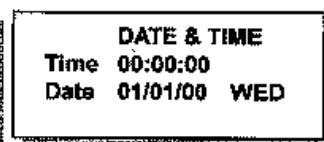
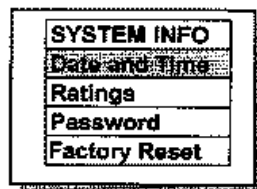
## ● System Info



## ◆ Date and Time

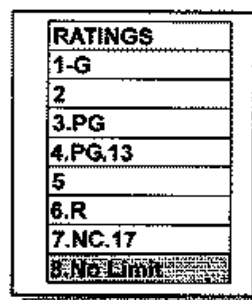
Before using schedule record, the time has to be set as follows.

1. Enter into Date and Time screen picture; press **ENTER** to enter setup.
  2. Use ◀▶ arrow keys to move cursor, and use ▲▼ arrow keys to modify Time and Date (Month/day/year)
  3. After confirmation, press **ENTER** to confirm setup, and it skips to previous setup page automatically.
- Press **SETUP** to skip from setup screen.



## ◆ Ratings

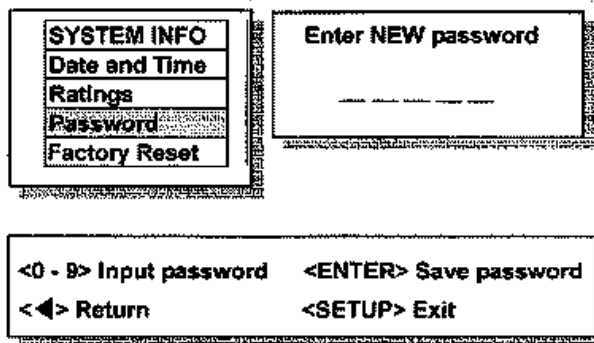
☞ Ratings separation by age. This function limits some adult film for playback, and limitation standard depends on the disc. If this function is on, all the playback is under controlled. This recorder has 8 ratings for age separation.



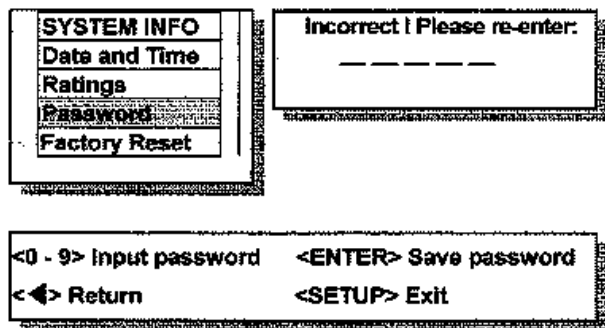
Reminder

Please set the password in advance before parental setting.

## ◆ Password



- ☞ Please enter 5 digits of passwords and press ENTER to confirm.
- ☞ If the passwords are not correct, screen will be displayed as follows:



- ☞ If you want to change new passwords, you have to enter the original passwords at first, and then enter the new passwords to confirm.

## ◆ Factory Reset

- ☞ Select "Reset" with confirmation, all of the setting will be turned to the original default. You have to reset in "Primary setting".

## ● Disc Media

For DISC MEDIA setup, it has to be made under recordable discs: DVD+RW or DVD+R.

- ☞ Finalize : Finalize a DVD+R (Please refer to page 34)
- ☞ Select ERASE to erase all of the information in a DVD+RW.

## ● Recording

### ◆ Record Speed

- ☞ Recording mode has HQ, SP, LP, EP, and SLP 5 modes, use **REC QUALITY** on remote control for selection. (Please refer to page 29)

### ◆ Auto Chapter

- ☞ Auto chapter setup, default is off.

## ● Schedule

- ☞ Schedule record setup: Record the scheduled programs from channel; choose this functional menu to information setup. (Please refer to page 29)

Before recording your favorite programs, please set the date/time at first in **SETUP MENU/ SYSTEM INFO** and then goes with the schedule record procedure.

## ● Schedule record

1. Load with a recordable disc first (DVD+R/RW).
2. Enter to schedule options



<SETUP> Exit      <▲/▼> Select  
<ENTER> Confirm Selection

3. Press **ENTER** goes to schedule record program.

No.	MM/DD/YY	Start	Stop	Source	Speed
01	__/__/__	__:__:__	__:__:__	---	---
02	__/__/__	__:__:__	__:__:__	---	---
03	__/__/__	__:__:__	__:__:__	---	---
04	__/__/__	__:__:__	__:__:__	---	---
05	__/__/__	__:__:__	__:__:__	---	---
06	__/__/__	__:__:__	__:__:__	---	---
07	__/__/__	__:__:__	__:__:__	---	---
08	__/__/__	__:__:__	__:__:__	---	---

<SETUP> Exit    <◀▶> Return    <C> Delete selection  
<▲/▼> Select    <ENTER> Confirm selection

4. Please enter the information for schedule record.
5. Cursor shows in yellow color, please move **▲▼** direction keys to choose the numbers for schedule record.
6. Press **ENTER** goes to setup screen, move **◀▶** direction keys and use **▲▼** keys to make the selection, and then enter the numerals for workable information directly.

No.	MM/DD/YY	Start	Stop	Source	Speed
00	__/__/__	00:00	00:00	CVBS1	HQ

<▲/▼/0~9> Select    <ENTER> Save & Return  
<◀/▶> Select field    <C> Return

7. Date setting: Move **▲▼** direction keys to choose that day or every day or every week as a recording mode.
8. Start setting: Starting point of a recording time.
9. Stop setting: End point of a recording time.
10. Source setting: Move **▲▼** direction keys to choose what source input for recording.
11. Speed setting: **HQ/SP/LP/EP/SLP** 5 kind of recording quality from time.
12. Press **ENTER** to confirm.
13. After setting, press **SETUP** to leave the setting menu.
14. When you finished schedule procedure, system will display a warning message to told user to turn off recorder for schedule recording program.



### Reminder

These messages store in schedule record function. 8 sets of schedule record program can be set in maximum.

## ● Recording Mode

Recording Mode is a selection either for better recording picture quality or longer recording time.

- ⇒ Use **REC QUALITY** key on remote control to switch in 5 modes **during external input status**. (Use DVD/INPUT)
  - ⇒ HQ : the best picture quality, 60 minutes for recording time.
  - ⇒ SP : Standard picture quality, 120 minutes for recording time.
  - ⇒ LP : Long recording time for 180 minutes.
  - ⇒ EP : Extended recording time for 240 minutes.
  - ⇒ SLP : Special long recording time for 360 minutes.

## ● Correct or Clear Schedule Record


1. Enter to setup menu screen, choose scheduled channel.
2. Press **ENTER** on selected item and the item will be marked.
3. Use ◀▶ direction keys to revise the information or erase the previous schedule. Choose the serial numbers and press **CLEAR**, next press **ENTER** to erase the selected channels.

## ● Stop the Proceeding Schedule Record

- ☞ While the record is in proceeding, press **STOP** can stop recording and go to DVD mode.
- ☞ While the record is in proceeding, press **POWER** to stop recording and go to stand-by status.

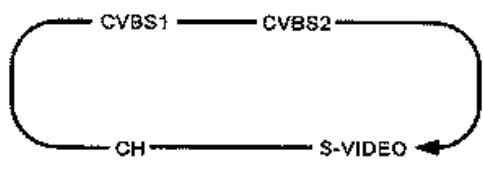
## ● Trouble Shooting of Schedule Recording

- ☞ Even the schedule record is set, the recording can't be made under the following situation :
1. No disc loaded.
  2. The disc is set under protection.
  3. Loaded is not a DVD recordable disc (DVD+R/RW).
  4. Disc already contained 49 titles. (MAX. title number)
  5. Record is proceeding.
  6. Date/Time is not set properly.
  7. The set time is passed.
  8. 8 sets of schedule record are made.
  9. No signal from set input source.

 **Attention**  
If the disc is damaged, the recording can be accomplished. Even shows in REC ok, the recording can be preceded.

## ● Manual Recording

4. Load with a recordable DVD disc.
5. Select channel for record, press **DVD/INPUT** on remote to switch to external input mode. Press **INPUT** key to select which source input for record.



6. Press **REC** on remote control or front panel to start recording.
  7. Press **STOP** to terminate recording, right below on screen shows "WAIT" After 15 to 17 seconds, screen shows "LIVE", and recording action is done.
  8. Press **DVD/INPUT** to switch to DVD mode, it will display recorded title on screen. Press **ENTER** to view for recorded video.
- ☞ After recording procedure, the following message will be stored also.
    - ⇒ Record date and channel source.
    - ⇒ Record time.
    - ⇒ Recording length and recording mode.
    - ⇒ Recording index screen.



Disc format :  
DVD+RW: After the clearance of the recorded information, disc can be retractable.  
DVD+R: After the clearance of the recorded information, disc can't be rewritten.  
Only one time can be recordable.

## ● Pause recording

1. Press **PAUSE/STEP** in recording. Such as you don't want to record the TV commercial.
2. Press one more **PAUSE/STEP** goes back to normal recording.

## ● Connection with other source for record

You can record the signal from external machine to this recorder, such as VCR, video camcorder (V8, Hi8), DVD recorder and etc.

1. Please confirm the connection is made properly between this unit and external equipment.
2. Select channel for record, press **DVD/INPUT** on remote to switch to external input mode. Press **INPUT** key to select which source input for record.

Input (internal tuner)	Screen Display (channel)
AV 1 IN	CVBS1
AV 2 IN	CVBS2
S-VIDEO	S-VIDEO
ANTENNA	CHANNEL

3. Press **REC** key to record immediately.

**Note:** Recording will **STOP** record automatically if there is no signal for input. (Such as the blank part of videotape of video camcorder or TV signal suddenly cut off.)

## ● Recording from DV

Connect DV to Video/Audio terminal from the front panel, and then this recorder can control and record the content from DV.

1. Connect the output from DV camcorder to Video/Audio with this recorder properly.
2. Put in a recordable DVD disc.
3. Turn on the DV and switch to VCR position.
4. Press **DVD/INPUT** on remote to switch to external input mode. Then press **INPUT** key to select source input from DV.
5. Press **REC** on remote or front panel to activate record function and at the mean time, recorder will control the DV camcorder without user operation.
6. Press **STOP** key will stop recording and the DV will stop playback.

**Note:** Recording will **STOP** record automatically if there is no signal from DV.



### Attention

- ① All recording signal must be in DVD-SD format.
- ① Date and time information can't be recorded from DV.
- ① You can't record the anti-copy protected disc or one-time duplicable disc.



## ● Initial A New Disc

Recorder will automatically initial the disc when users first time place a new DVD+R/RW disc into the recorder. It will be ready about 1 minute, then window and TV screen shows READING. After the procedure is complete, TV screen shows a blank title and indicate the recording capacity is 100%.

## ● Erase Whole Disc (DVD+RW only)

Please enter **SETUP MENU/ Disc Media** and then choose "**Erase**" item to erase whole disc. While all the content is erased in a disc, the index screen shows empty status in message about the disc.

## ● Erase one Title (DVD+RW only)

1. Press **EDIT** of remote on specific title under title menu, it shows edit option as follows :

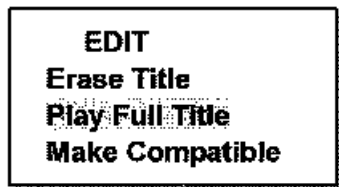


2. Select Erase Title to erase a title, press **ENTER** and wait for 15 to 18 seconds for erase proceeding.
3. After erase a title, disc can release more disc space. It can be helpful to increase recording time.

## ● Play All Title

If there is a hidden chapter in title, this setup can view all the contents.

1. Press **EDIT** on remote control under index screen to show edit menu.



2. Select **Play Full Title**. Press **ENTER** to play all titles.

## ● Edit DVD Compatibility

If there is more than one edited titles on disc, but it shows the original one title in DVD playback only. You can edit the disc to display the edited titles.

1. Press **EDIT** key of remote under index screen to show edit menu.



2. Select **Make Compatible** to edit DVD compatibility. Press **ENTER** to complete setup.

**Important:**

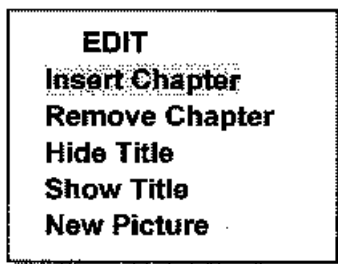
**Play the recorded disc in another DVD player**

We can't guarantee that you can play the recorded DVD+R/RW on another DVD player in no problem. You have to check the instruction manual of other DVD player in advance to confirm which kind of disc can be played.

## ● Insert Chapter

If activate (ON) **Auto Chapter** at **Recording** of setup menu, every 5 minutes will divide a chapter. But if users wish to divide chapters at specific points in a title, users can use **Insert Chapter** function here.


1. During title playback, press **EDIT** on remote to show edit menu.



2. Choose **Insert Chapter** and press **ENTER** key to add one chapter. Repeat above to add more chapters.

## ● Remove Chapter

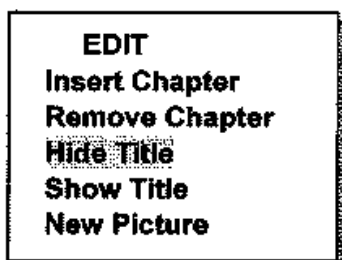
Chapter mark can be deleted after recording. While a movie is playing, press **EDIT** on remote control to show edit menu, choose "**Remove Chapter**", and you can remove current chapter mark of a title.

 **Reminder**  
If DVD+R has not been finalized, Insert/Remove Chapter Mark step can be made.

## ● Hide Title

All titles can be played under general setup. You can hide specific titles for title customized.

1. During film playback, press **EDIT** on remote control shows edit menu.

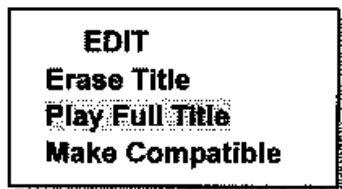


2. Press **ENTER** on "**Hide Title**" to confirm and complete setup
3. Press **TITLE** key to return to title menu.
4. In title menu, the hidden title still can be seen, but cannot be played.

## ● Show Title

If users wish to release hidden title, which was made by Hide Title function before, you can use Show Title to release it.

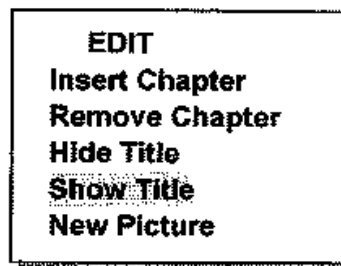
1. During title menu, press **EDIT** key on hidden title.



2. Press **ENTER** on "**Play Full Title**" to temporarily play hidden title.
3. While playing hidden title, there is an OSD

"HIDDEN" shows on the right top of the screen.

4. Press **EDIT** key again to show edit menu.



5. Press **ENTER** on "**Show Title**" to release hidden title.

## ● New Picture

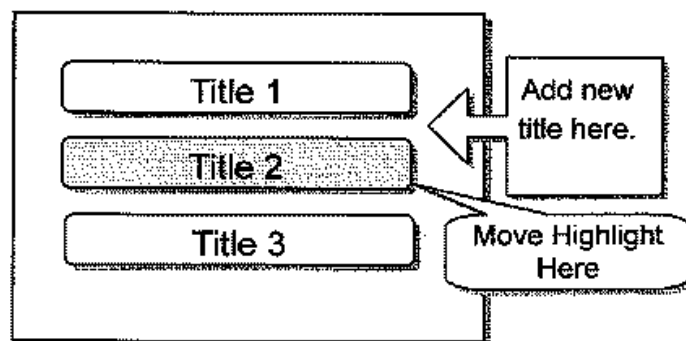
1. If you want to revise a new index scene of a title, you can press **EDIT** to show edit menu during movie playing.



2. Press **ENTER** on "**New Picture**" to grab specific scene.
3. Press **TITLE** key to return to title menu, the index screen of specific title will show with the new picture.

## ● Interpolate a Title

You can interpolate a new title between two original recorded titles.



1. Move the highlight on a title, which want to add a new title before it.
2. Press **REC** to switch into signal input mode, and then select the channel for recording.

3. Press one more time on **REC** key to start recording.
4. Press **STOP** key to end recording.
5. After recording done. Press **DVD/INPUT** to go back to title menu for checking recorded title status.

Note: When **STOP** key is pressed during recording, it will take more time to revise and complete the new title menu, so please be patient of waiting.



#### Reminder

This setting can be used by DVD+R to record new content. But it can record in the space after the latest stored video only. It can't interpolate between two existed video titles.

## ● Finalize a DVD+R disc

This function allows DVD+R disc to be playable at general DVD recorder. A finalized disc can't be recorded with new content or revised.

1. Press **SETUP** key and enter "**Disc Media**" item.
2. Press **ENTER** on "**Finalize**" to execute.
3. Screen displays the proceeding of this action and shows the time in need for this procedure.



#### Attention

The time in need for this function depends on the disc type, length of the recorded content and the quantity of the titles.

## ● Terminology

### ☞ DTS®

DTS is the abbreviation of Digital Theater System in English. DTS digital Surround a kind of coding/decoding system, it transfers "original sound" in 48KHz/20 bit.

### ☞ Dolby® Digital

It is a system designed by Dolby Laboratories, Inc. While a DVD recorder is connected with a Dolby digital 5.1 channel processor or amplifier, it sounds theater effect in frequency output.

### ☞ Subtitle

Subtitle is the language of script attached with theater Screen. A DVD can contain with 32 types of script for subtitle. Take the subtitle menu to select the subtitle language in need.

### ☞ MPEG

MPEG is the compression of a moving video signal. So far, there are 4 kinds of MPEG: MPEG-1 is mainly Used for VCD, MP3; MPEG-2 is mainly used for DVD And digital TV (MPEG-2 includes with MPEG-3 MPEG-4 is mainly used for internet multimedia Integration.

### ☞ JPEG

JPEG is still video compression format, compression Ratio can be reached to 65:1

### ☞ NTSC and PAL

NTSC indicates an institution in meaning. And PAL is the working way of a TV system. Usually, we call NTSC as US type and PAL as European type. In US, Taiwan, Japan, Canada, Korea, Southeast Asia and Some countries in Middle East are using NTSC system. China, Western Europe, Australia, Brazil are using PAL system.

### ☞ Progressive

Progressive (Y/Pb/Pr) is a kind of complex video signal. The scan starts from first line to the last line, but Not scanning the odd after the even. Progressive Scan erases the screen glittering from interlace scan.

### ☞ Interlace Scan

Interface Scan (Y/Cb/CR), it is a kind of complex video signal also. Scanning line will be started from the odd and then the even. Picture quality is better than S-Video.

### ☞ Dolby® License

This recorder has the license from Dolby Laboratories, Inc. "Dolby®" and double D is the trademark of Dolby Laboratories.

### ☞ DTS® License

"DTS®" and "DTS® Digital Out" is the company trademark of Digital Theater System.

## ● Regional management code

This DVD recorder is designed and manufactured to respond to the Region Management Information recorded on a DVD disc. If the region number described on the DVD disc does not correspond to the region number of this DVD recorder (The region number can be found on the rear panel of the DVD recorder), this DVD recorder will not play the disc. The OSD message "WRONG REGION" will show on the TV screen. This recorder will play DVD discs made for "ALL" regions. The illustration below shows the regions and corresponding region numbers.

Region 1	USA & Canada
Region 2	Europe, Japan, South Africa, Middle East
Region 3	Southeast Asia
Region 4	Central & South America, Australia, New Zealand
Region 5	Former Soviet Union, India, Pakistan, Africa
Region 6	China

### ☞ Warning

Any change of specification and design on this recorder will not be noticed.

Before requesting service for this unit, please check the following chart for possible causes and remedies. If the remedies indicated in the chart below do not solve the problem, please consult your dealer for instructions.

Common Symptom	Possible Cause	Remedy
No power	✓ Power cord is not properly connected to the power outlet	✓ Make sure there is a connection between the power cord and the outlet.
Power turn off	✓ Auto power off function	✓ The power is automatically turned off after 20 minutes have elapsed in the stop mode (auto power off function). Turn the power back on.
Disc tray can't close	✓ Disc is not properly placed	✓ Replace the disc properly.
No playback	✓ Power is OFF ✓ No disc is inserted ("no disc" will be shown on screen). ✓ Disc is upside down. ("No disc" is shown on screen). ✓ Dirty disc ✓ Deformed disc ✓ Condensation in unit	✓ Turn the power ON. ✓ Insert a disc. ✓ Reload disc. The label side should face upward. ✓ Clean disc surface. ✓ Replace disc. ✓ Turn power on for 1-2 hours before using the unit.
Unwanted mosaic-like garbage display during playback	✓ Poor disc ✓ Video CD (MPEG1)	✓ Replace disc ✓ Playback with DVD format
No audio	✓ Slow or fast playback ✓ Audio terminals are not connected. ✓ TV volume is too low ✓ Wrong AUDIO OUTPUT setting	✓ Press [PLAY] to resume normal playback ✓ Check audio connections ✓ Adjust TV volume ✓ Check AUDIO OUTPUT setting
No Video	✓ Disconnection of video equipment ✓ Wrong output setting of VIDEO OUTPUT	✓ Check video connections ✓ Check video output setting of VIDEO OUTPUT in GENERAL SETUP
Remote control unit does not work	✓ No batteries in remote control ✓ Dead batteries ✓ Remote control not being pointed at the remote sensor	✓ Put in new batteries ✓ Replace batteries ✓ Point the remote control at the remote sensor

DVD Symptom	Possible Cause	Remedy
Does not play, even when a title is selected	✓ Prohibited by the parental rating	✓ Confirm the PARENTAL setting.
Audio or subtitle language is not the one selected	✓ The selected language does not exist in the disc	✓ Select another language using [AUDIO] or [SUBTITLE]

during the initial setting.		
Setting language is not what you want	✓ Wrong OSD language setting	✓ Check the OSD language setting
Audio or Subtitle can not be changed	✓ The disc contains only one language ✓ Some disc should be changed in DVD MENU.	✓ Check the disc contents.
The video image brightness fluctuates during playback	✓ The DVD recorder is connected to the television via a video tape recorder	✓ Connect the DVD recorder directly to the TV, bypassing the VCR.
Cannot fast scan during playback of DVD movie.	✓ Some discs may have sections, which prohibit skip or scan operations by users.	✓ No operation can be done during this problem.

■ **Technical Specification**

Power Supply:	AC100-240 V, 50/60 Hz
Power Consumption:	30W
Weight:	4.2Kg
Dimensions: (W x D x H)	430x340x98(mm)
Operating temperature range:	+5 °C to +40 °C / 41°F ~ 104 °F
Operating humidity range:	5 % to 90 % (not dewing)

Video System		
Composite Video Terminal	Y output level	1 Vp-p (75 Ω)
	CB output level	0.525 Vp-p (75 Ω) (75% Color)
	CR output level	0.525 Vp-p (75 Ω) (75% Color)
S-Video Terminal	Y output level	1 Vp-p (75 Ω)
	C output level	0.286 Vp-p (75 Ω) NTSC
Video Terminal		1 Vp-p (75 Ω)
Horizontal Resolution		More than 500 lines
S/N Ratio		More than 60 dB

Audio Parameters	Frequency Response	20Hz ~ 20kHz
	Dynamic Range	Over than 90 dB
	S/N Ratio	Over than 90 dB
	Output level	2 Vrms

1. First Class Laser Product

2. Danger: when the internal functions are out of order or damaged opening the cover may cause unseen radioactivity. It should be kept away from direct light.

3. Caution: Do not open the top cover. No internal part should be maintained or serviced by the user. Qualified person should carry out all such work.

Rating label on the back of the machine.

**CLASS 1**

**LASER PRODUCT**