



GO.VIDEO®
DV2130
User's Guide

Safety Instructions

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 symbol indicates high voltage is present inside. It is dangerous to make any kind of contact with any inside part of this product.



This symbol alerts you that important literature concerning operation and maintenance has been included with this product.

Note to CATV system installer: This reminder is provided to call CATV system installer's attention to Article 820-40 of the National Electrical Code (Section 54 of Canadian Electrical Code, Part I) that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building as close to the point of cable entry as practical.

Caution: FCC regulations state that any unauthorized changes or modifications to this equipment may void the user's authority to operate it.

Caution: To prevent electric shock, match wide blade of plug to wide slot, fully insert.

Attention: Pour éviter les chocs électriques, introduire la lame le plus large de la fiche dans la borne correspondante de la prise et pousser jusqu'au fond.

Important: One Federal Court has held that unauthorized recording of copyrighted TV programs is an infringement of U.S. copyright laws.

Certain Canadian programs may be copyrighted and any unauthorized recording in whole or in part may be a violation of these rights.

**To prevent damage which may result in fire or electric shock hazard,
do not expose this appliance to rain or moisture.**

Important Safety Instructions

1. **Read Instructions**-All the safety and operating instructions should be read before the product is operated.
2. **Retain Instructions**-The safety and operating instructions should be retained for future reference.
3. **Heed Warnings**-All warnings on the product and in the operating instructions should be adhered to.
4. **Follow Instructions**-All operating and using instructions should be followed.
5. **Cleaning**-Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.
6. **Attachments**-Do not use attachments not recommended by the product manufacturer as they may cause hazards.
7. **Water and Moisture**-Do not use this product near water-for example near a bath tub, wash bowl, kitchen sink, or laundry tub; in a wet basement; or near a swimming pool; and the like.
8. **Accessories**-Do not place this product on an unstable cart, stand, tripod, bracket, or table. The product may fall, causing serious injury to a child or adult, and serious damage to the product. Use only with a cart, stand, tripod, bracket, or table recommended by the manufacturer or sold with the product. Any mounting of the product should follow the manufacturer's instructions and should use a mounting accessory recommended by the manufacturer.
9. A product and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the product and cart combination to overturn.



Safety Instructions

10. **Ventilation**-Slots and openings in the cabinet are provided for ventilation and to ensure reliable operation of the product and to protect it from overheating. These openings must not be blocked or covered. The openings should never be blocked by placing the product on a bed, sofa, rug, or other similar surface. This product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to.
11. **Power Sources**-This product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supplied to your home, consult your product dealer or local power company. For products intended to operate from battery power, or other sources, refer to the operating instructions.
12. **Grounding or Polarization**-This product may be equipped with a polarized alternating-current line plug (a plug having one blade wider than the other). This plug will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug.
13. **Alternate Warnings** -This product is equipped with a three-wire grounding-type plug, a plug having a third (grounding) pin. This plug will only fit into the outlet, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the grounding-type plug.
14. **Power-Cord Protection**-Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the product.
15. **Outdoor Antenna Grounding**-If an outside antenna or cable system is connected to the product, be sure the antenna or cable system is grounded so as to provide some protection against voltage surges and built-up static charges. Section 810 of the National Electrical Code, ANSI/NFPA 70 provides information with regard to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna-discharge unit, connection to grounding electrodes, and requirements for the grounding electrode.
16. **Lightning**-For added protection for this product 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 antenna or cable system. This will prevent damage to the product due to lightning and power-line surges.
17. **Power Lines**-An outside antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits, or where it can fall into such power lines or circuits. When installing an outside antenna system, extreme care should be taken to keep from touching such power lines or circuits as contact with them might be fatal.
18. **Overloading**-Do not overload wall outlets, extension cords, or integral convenience receptacles as this can result in a risk of fire or electric shock.
19. **Object and Liquid Entry**-Never push objects of any kind into this product through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Never spill liquid of any kind on the product.
20. **Servicing**-Do not attempt to service this product yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.
21. **Damage Requiring Service**-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 objects 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 that are covered by the operating instructions as an improper adjustment of other 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.
22. **Replacement Parts**-When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or that have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, or other hazards.
23. **Safety check**-Upon completion of any service or repairs to this product, ask the service technician to perform safety checks to determine that the product is in proper operating condition.
24. **Heat**-The product should be situated away from heat sources such as radiators, heat registers, stoves, or other products (including amplifiers) that produce heat.
25. **Wall or Ceiling Mounting** The product should be mounted to a wall or ceiling only as recommended by the manufacturer.

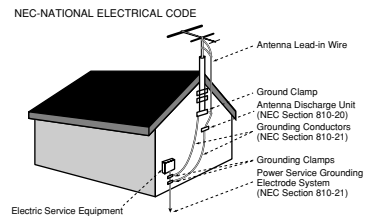


Table of Contents

◆ Safety	2
■ Important Safety Instructions	2
◆ Welcome	7
■ Feature Summary	7
■ Unpack	7
■ Disc Types and Characteristics	8
◆ 1 - System Overview	9
■ Front Panel	9
■ Rear Panel	10
■ Front Panel Display	10
■ Remote Control	11
■ Insert Batteries into Remote	11
■ Using the TV Buttons on the Remote Control	12
◆ 2 - Getting Started	13
■ Basic Connections/Auto Setup	13
◆ 3 - Basic Operation	14
■ Deck Control Buttons	14
■ Basic DVD Operation	14
■ Basic VCR Operation	15
■ Basic TV Tuner Operation	16
◆ 4 - System Setup	16
■ On-Screen Menu Navigation	16
■ Menu Language	17
■ Manual Clock Set	18
■ Tuner Band Setting	19
■ RF Output Channel	20
■ Auto Channel Memory	21
■ Channel Add/Delete	22
■ Front Panel Dimmer	23

Table of Contents

◆ 5 - DVD Setup	24
■ Disc Menu Language	24
■ Audio Language	25
■ Subtitle Language	26
■ Digital Output	27
■ DTS	28
■ Dynamic Compression	29
■ PCM Down Sampling	30
■ TV Aspect Ratio	31
■ Black Level	32
■ Alt Video Out	33
■ Reset Factory Settings	33
■ Parental	34
◆ 6 - DVD Sound Setup	35
■ A/V Receiver Connections	35
◆ 7 - DVD Operations	36
■ Special Playback Features	36
■ Disc Menu Navigation	37
■ Title/Chapter/Time Selection	38
■ Angle View	40
■ Subtitle	41
■ A-B Repeat	42
■ Repeat Chapter/Title	43
■ Audio	43
■ Bookmarks	44
■ MP3/WMA Playback	45
■ Program Play & Random Play	47
■ Picture CD Playback	48
■ 3D Sound	50
■ Function (DVD)	51
■ EZ-Play	51
■ MyDVD	51
◆ 8 - VCR Playback	52
■ Special VCR Playback Features	52
■ Tracking	52
■ Auto Play	53

Table of Contents

■ S-VHS Playback	53
■ Variable Search System	54
◆ 9 - VCR Recording	55
■ Basic Recording	55
■ Special Recording Features	56
■ One Touch Recording (OTR)	57
■ Record Speed	57
◆ 10 - Timer Recording	58
■ How to Set a Timer Recording	58
■ Function(VCR).....	59
◆ Appendix A - Advanced Connections	60
■ S-Video/Component Video Connections (for DVD).....	60
■ Stereo Connections.....	61
■ Monitor TV Connections	62
■ Connecting Other Video Equipment	63
◆ Appendix B - Help	64
■ Technical Specifications	64

Feature Summary

DVD+VCR Features

- Playback of DVDs, audio CDs, MP3 discs and VHS Tapes.
- Ability to watch a DVD movie while recording a TV show to the VCR.
- Auto Setup to instantly set the time and search for channels.
- RF inputs and outputs for connecting older TVs.
- Composite, S-Video, and Component Video outputs.
- Universal remote for DVD, VCR and TV control.
- On-Screen Programming in three languages (English/French/Spanish).

DVD Features

- 10-bit video digital to analog converter and 27MHz advanced digital filter.
- Playback of 96KHz/24-bit sources.
- DTS digital output for DTS-enhanced DVDs.
- MP3-CD playback.

VCR Features

- Hi-Fi Stereo VCR.
- Superior slow motion and stop action (with 4 heads).
- Playback of S-VHS tapes with better than standard resolution.
- Intro Scan, Zero Return, and Blank Search.
- 7-event/1 month timer recording.
- Time remaining counter, real time counter.

Note

*Discs which cannot be played with this player:


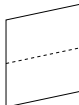



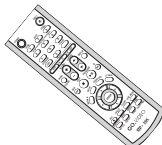

- DVD-ROM
- DVD-RAM
- CD-ROM
- CDV
- CDI
- SVCD/VCD
- HD layer of Super Audio CD
- CDGs play audio only, not graphics.

*Ability to play back may depend on recording conditions.

- DVD-R
- DVD+RW, -RW
- CD-RW



Unpack

Please make sure the following items are included in the DVD+VCR packing case:

<p>DVD+VCR</p> 	<p>Registration Card</p> 	<p>User's Guide</p> 	
<p>RCA cable for Audio/Video connections</p> 	<p>RF (Radio Frequency) Antenna Cable</p> 	<p>Remote Control</p> 	<p>1.5V "AAA" Batteries (2)</p> 

Disc Types and Characteristics

This DVD player is capable of playing the following types of discs:

Disc Types (Logos)	Recording Types	Disc Size	Max. Playing Time	Characteristics
DVD  VIDEO	Audio + Video	5"	Single-sided 240 min. Double-sided 480 min.	<ul style="list-style-type: none"> • Offers excellent sound and video due to Dolby Digital and MPEG-2 systems. • Various screen and audio features can be easily accessed through on-screen disc menus.
		3 1/2"	Single-sided 80 min. Double-sided 160 min.	
AUDIO-CD  DIGITAL AUDIO	Audio	5"	74 min.	<ul style="list-style-type: none"> • CD audio is recorded as a digital signal with better quality, less distortion and less deterioration over time.
		3 1/2"	20 min.	

Disc Markings



• Player
Region
Number

NTSC

• NTSC broadcast system in U.S.A, Canada, Korea, Japan, etc.



• Dolby
Digital discs

STEREO

• Stereo discs



• Digital
Audio discs



• DTS discs



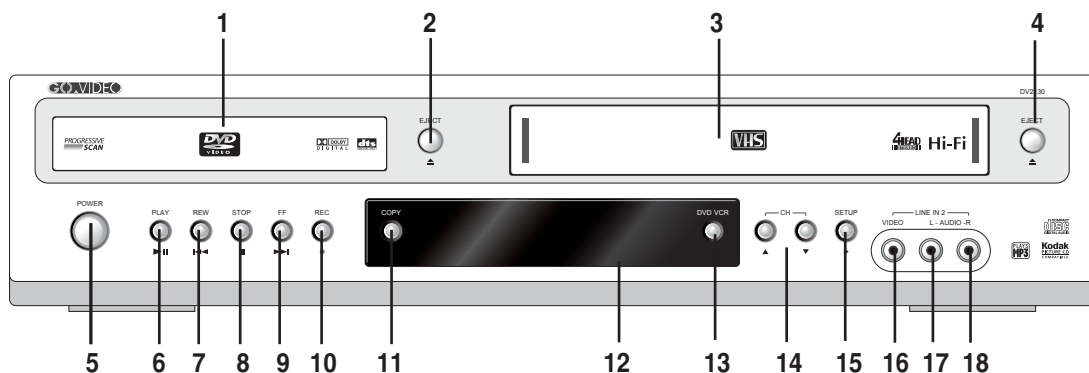
• MP3 discs

Player Region Number

Both the DVD player and DVD discs are coded by region. These regional codes must match in order for the disc to play. If the codes do not match, the disc will not play.

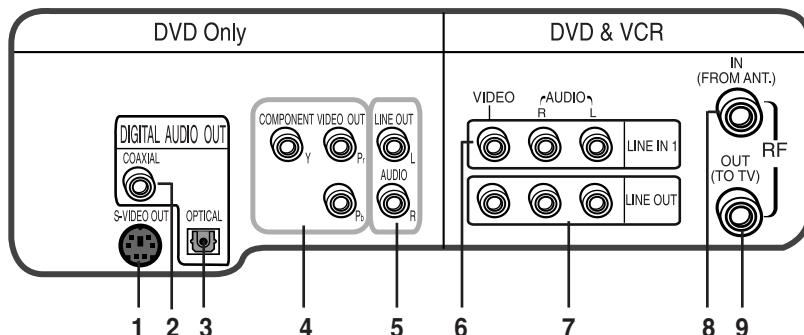
The Region Number for this player is inscribed on the rear panel of the player.

Front Panel



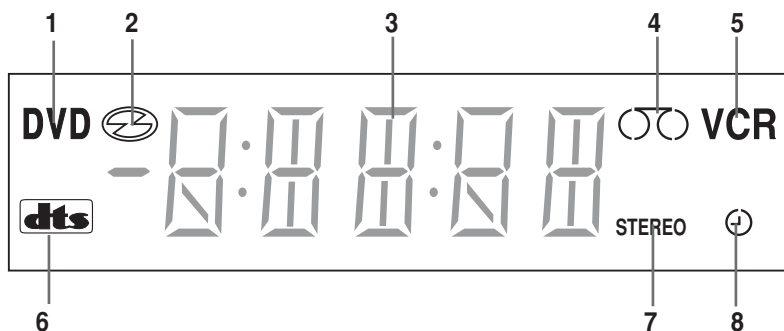
- | | | | |
|----|-------------------------------|----|--------------------------------|
| 1 | DVD DECK | 12 | FRONT PANEL DISPLAY |
| 2 | DVD EJECT BUTTON | 13 | DVD+VCR BUTTON |
| 3 | VCR DECK | 14 | CHANNEL ▲/▼ |
| 4 | VCR EJECT BUTTON | 15 | SETUP BUTTON |
| 5 | POWER BUTTON | 16 | LINE IN 2 COMPOSITE VIDEO JACK |
| 6 | PLAY/PAUSE BUTTON | 17 | LINE IN 2 LEFT AUDIO JACK |
| 7 | REWIND/SKIP BACK BUTTON | 18 | LINE IN 2 RIGHT AUDIO JACK |
| 8 | STOP BUTTON | | |
| 9 | FAST-FORWARD/SKIP NEXT BUTTON | | |
| 10 | RECORD BUTTON | | |
| 11 | COPY BUTTON | | |

Rear Panel



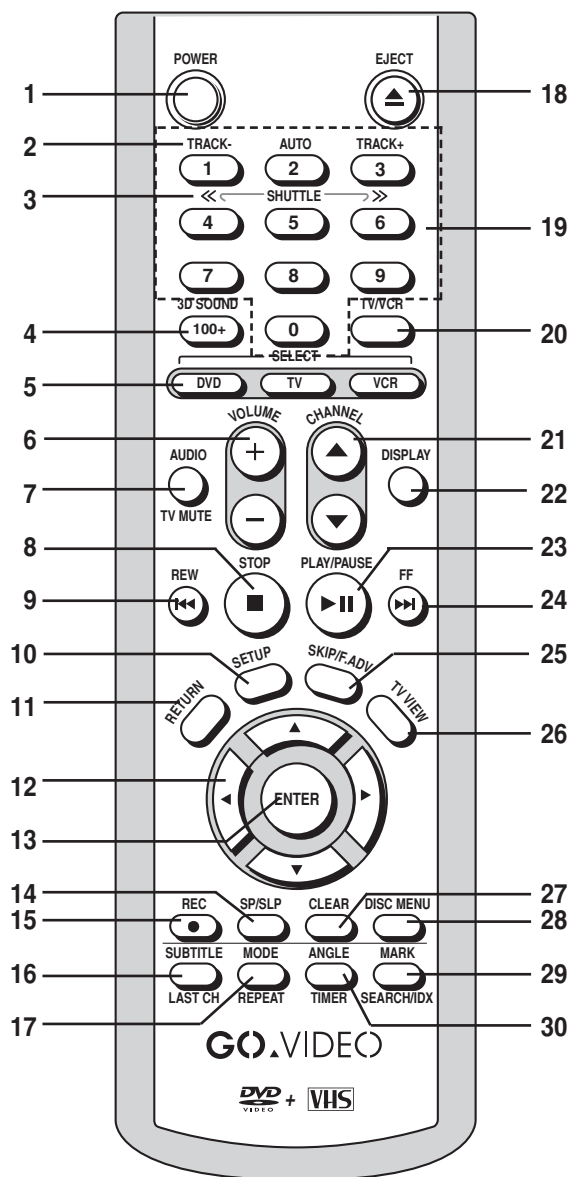
- | | | | |
|---|---|---|----------------------------|
| 1 | S-VIDEO OUT | 6 | LINE IN 1 (COMPOSITE) |
| 2 | DIGITAL AUDIO OUT(COAXIAL) | 7 | LINE OUT TO TV (COMPOSITE) |
| 3 | DIGITAL AUDIO OUT(OPTICAL) | 8 | RF ANTENNA INPUT |
| 4 | COMPONENT VIDEO OUT | 9 | RF OUT TO TV |
| 5 | AUDIO LINE OUT TO TV
(FOR USE WITH S-VIDEO OR COMPONENT) | | |

Front Panel Display



- | | | | |
|---|--|---|--|
| 1 | DVD deck is active. | 7 | The Hi-Fi track of a VHS videotape is playing
(or the current TV program or video is broadcast
in Stereo.) |
| 2 | DVD or CD is loaded. | 8 | Timer Recording is in progress (blinks when the
VCR is paused during recording). |
| 3 | Time, counter position or current deck status. | | |
| 4 | VHS videotape is loaded. | | |
| 5 | VCR deck is active. | | |
| 6 | A DVD with a DTS soundtrack is loaded. | | |

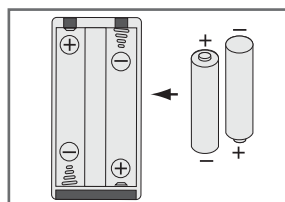
Remote Control



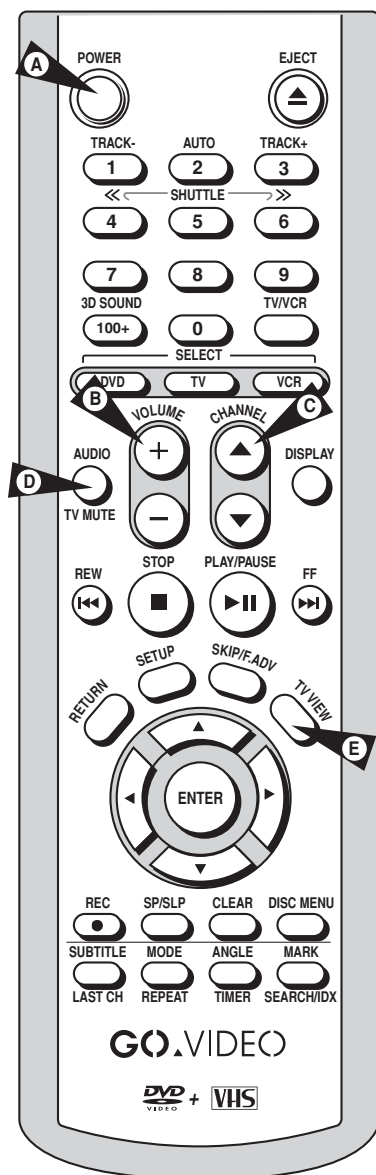
- 1 POWER
- 2 TRACK-/+, AUTO TRACKING
- 3 SHUTTLE <</>>
- 4 100+, 3D SOUND
- 5 SELECT DVD, TV and VCR
- 6 VOLUME +/-
- 7 AUDIO, TV MUTE
- 8 STOP
- 9 REWIND, SKIP BACK
- 10 SETUP
- 11 RETURN
- 12 ▲, ▼, ◀, ▶
ARROWS
- 13 ENTER
- 14 SP/SLP
- 15 RECORD
- 16 SUBTITLE, LAST CH
- 17 MODE, REPEAT
- 18 EJECT
- 19 0-9
- 20 TV/VCR
- 21 CHANNEL ▲/▼
- 22 DISPLAY
- 23 PLAY/PAUSE
- 24 FAST-FORWARD, SKIP NEXT
- 25 SKIP, FRAME ADVANCE
- 26 TV VIEW
- 27 CLEAR
- 28 DISC MENU
- 29 MARK, SEARCH, INDEX
- 30 ANGLE, TIMER RECORD

Insert Batteries into Remote

- Remove the battery cover on the remote.
- Insert two 1.5V "AAA" batteries as shown, making sure of the correct polarities (+/-).
- Slide the cover back onto the remote.



Using the TV Buttons on the Remote Control



Your VCR remote control will operate many brands of television.

To determine whether your television is compatible, follow the instructions below.

- 1 Turn on your television.
- 2 Point the remote control at the television.
- 3 Hold down the TV button and enter the two-digit code corresponding to the brand of your television, by pressing the appropriate number buttons.

Brand	Codes	Brand	Codes
SAMSUNG	01, 14, 15, 23	LOEWE	28
SHARP	02, 16, 22	ZENITH	17
SONY	03	LG	06, 08, 18
RCA	07, 29	MAGNAVOX	04
TOSHIBA	09	EMERSON	21
PANASONIC	12, 24	SANYO	05, 20
JVC	11	DAEWOO	19
HITACHI	10	NOBLEX	25
MITSUBISHI	13	TELEFUNKEN	26
NEWSAN	27		

Result: If your television is compatible with the remote control, it will turn off. The remote is now programmed to operate your television.

- If several codes are indicated for your television brand, try each one until you find one that works.



When you change the batteries in the remote control, you must reprogram the code, following the same procedure.

You can then control the television using the following buttons.

Button	Function
A. POWER	Turns the television on and off.
B. VOL + or -	Adjusts your television volume.
C. CHANNEL ▲/▼	Selects the desired channel on your television.
D. TV MUTE	Toggles the television sound on and off.
E. TV VIEW	Selects external sources connected to your television.



These functions do not work on all televisions.

Basic Connections/Auto Setup

You will need to connect the DVD+VCR to a TV and run Auto Setup. Auto Setup will automatically search for channels and then set your DVD+VCR's internal clock.

NOTES:

- See Appendix A for Advanced Connections.
- In order to view the DVD+VCR setup menu, you must use either the Standard RF or Line connection between your TV and DVD+VCR, even if you use the S-Video or Component Video Output for improved picture quality.



1 Connect the RF Antenna Cable to your DVD+VCR

Connect an indoor/outdoor antenna or wall outlet antenna cable to the IN (FROM ANT.) jack on the rear panel.

2 Connect your DVD+VCR to a TV

Choose one of the following methods:

RF Connection

Using the supplied RF antenna cable, connect the OUT (TO TV) jack on the back panel of the DVD+VCR to your TV's Antenna Input.

Line Connection

Using an RCA-type audio/video cable (red, white, yellow), connect the LINE OUT jacks on the back panel of your DVD+VCR to your TV's Line In jacks. Use the three cables as follows: red for right audio, white for left audio, and yellow for video.

NOTE: If your TV is equipped with RCA jacks, it is better to use the Line Connection method.

3 Plug In

Plug the DVD+VCR power cable into a standard 120V/60Hz wall outlet. Avoid pressing any buttons on the remote control or on the unit during Auto Setup. While your DVD+VCR is running Auto Setup, "AUTO" will blink on the front panel display. When Auto Setup is complete, the current time will be displayed on the front panel display. If Auto Clock Set fails to locate a channel to set the clock, you should set the clock manually. See page 18.

4 Turn On your DVD+VCR

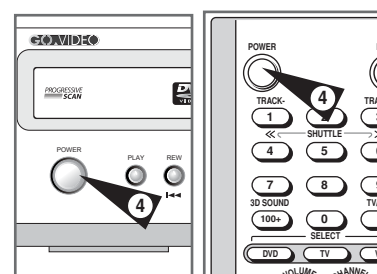
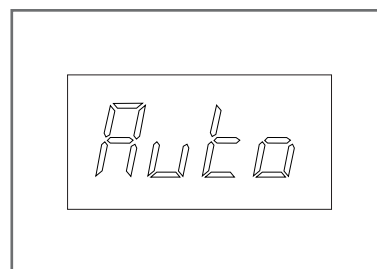
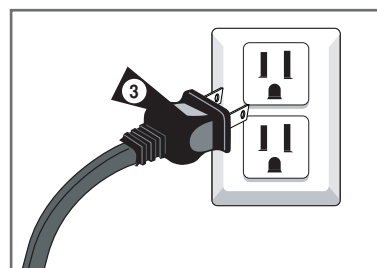
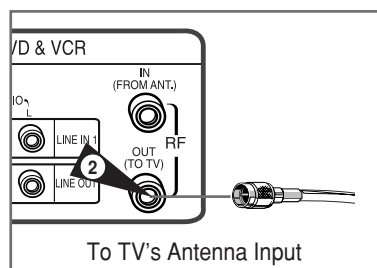
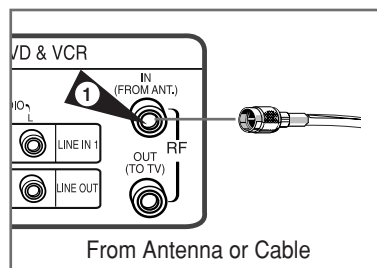
Turn on the power by pressing the POWER button on the remote control or front panel of the unit.

5 Turn On your TV

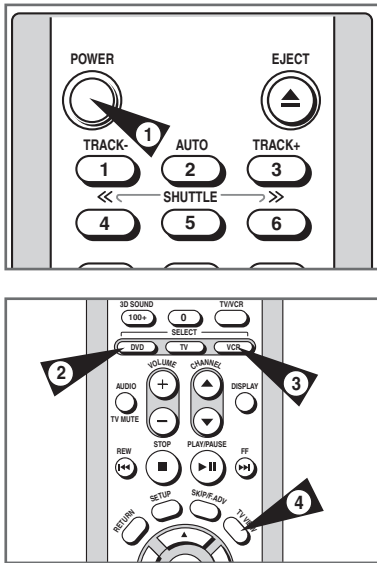
Turn on the TV by pressing the POWER button.

6 Set the TV to Channel 3, 4 or Line

Use the same channel you selected in Step 2 above. If you are using the Line Connection method, set your TV to its Line Input.



Deck Control Buttons



The DVD+VCR uses one set of controls to operate both decks.

1 POWER Button

Press the POWER button on the remote control or front panel to turn on the DVD+VCR.

2 DVD Button

Press the DVD button on the remote control or front panel when you want to control the DVD deck.

- The DVD indicator will light on the front panel display to show that the DVD deck is selected.

3 VCR Button

Press the VCR button on the remote control or front panel when you want to control the VCR deck.

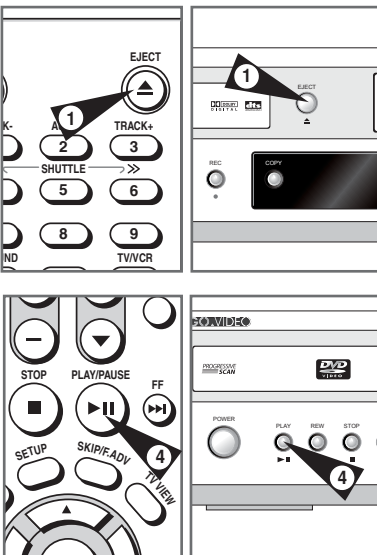
- The VCR indicator will light on the front panel display to show that the VHS deck is selected.

4 TV VIEW Button

Press the TV VIEW button repeatedly to cycle through all of your input sources, including the DVD, VCR, Tuner (Ch##), Line 1 (rear AV input), and Line 2 (front AV input).

Basic DVD Operation

Follow the instructions below to playback a DVD.



1 Open the Disc Tray

Press the EJECT button on the remote control or front panel of the unit to turn on the power and open the disc tray.

2 Insert a Disc

Put a disc in the center of the tray, with the label side facing up.

3 Close the Disc Tray

Press the EJECT button on the remote control or front panel of the unit to close the disc tray.

4 Play a DVD

Press the PLAY/PAUSE button on the remote control or front panel of the unit.

- Most discs will start playback as soon as the tray closes.
- If a DVD has a disc menu, the menu may pop up on TV screen.

5 Additional DVD Options

- See pages 24 ~ 35 for advanced DVD Setup options.
- See pages 36 ~ 51 for special DVD Playback features.

Basic VCR Operation

To play a standard VHS videotape, simply insert it into the VCR deck and press the **PLAY** button. You can also turn on **Auto Play** to have the VCR play prerecorded tapes automatically when you insert them (the **Record Safety Tab** must be removed). See page 53.

1 Insert VHS Tape

Insert a standard VHS videotape into the VCR deck.

- When a videotape is inserted, the DVD+VCR will power on automatically.

2 Play Tape

Press the **PLAY/PAUSE** ►|| button on the remote control or front panel of the unit. The videotape will begin to play automatically if it is missing the **Record Safety Tab** and **Auto Play** is turned on. See page 53.

3 Stop Playback

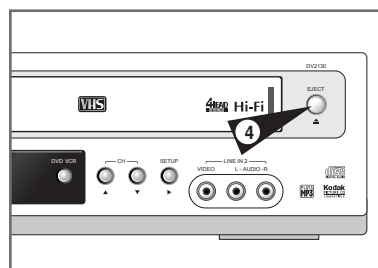
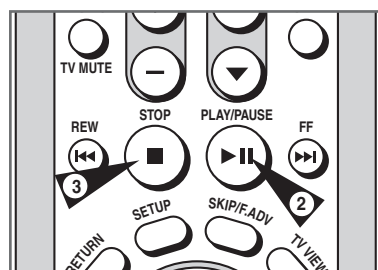
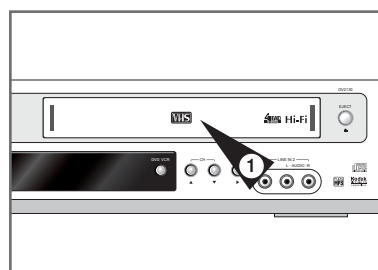
Press the **STOP** ■ button on the remote control or front panel of the unit.

4 Eject Tape

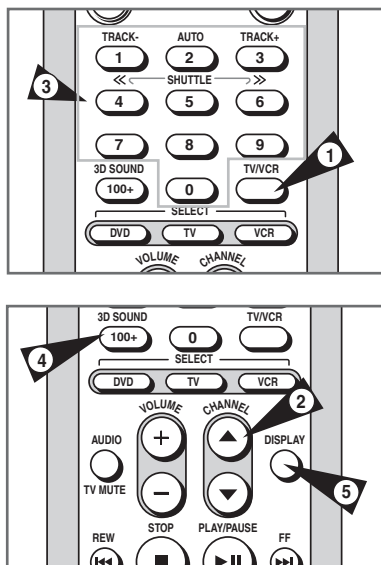
Press the **EJECT** button on the remote control or front panel of the unit.

5 Additional VCR Options

- See pages 52~54 for special VCR Playback features.
- See pages 55~57 for VCR Recording features.
- See page 58 for Timer Recording features.



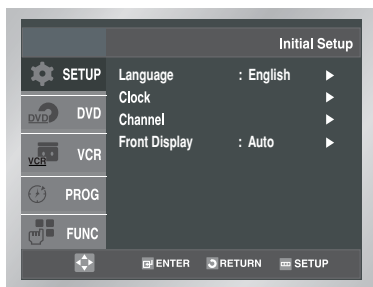
Basic TV Tuner Operation



Use the following buttons when watching TV with the DVD+VCR's built-in TV tuner.

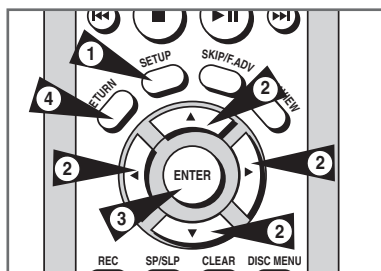
- 1 **TV/VCR**
Switches between your TV's tuner and the DVD+VCR's internal tuner.
• You don't need to press the TV/VCR button in VCR mode.
- 2 **Channel ▲/▼**
Moves to the next or previous channel.
- 3 **0-9 Buttons**
Selects the desired channel directly.
- 4 **100+ Button**
Tunes to channels 100 and above. First, press the 100+ button, then use the number buttons (0-9) to enter the remaining digits of the desired channel number.
• This button is only active in Cable TV Mode.
- 5 **DISPLAY Button**
Displays the current channel.
• Also works in DVD and VCR mode.

On-Screen Menu Navigation



The on-screen menus allow you to enable or disable various functions on your DVD+VCR. Use the following buttons to open and navigate the on-screen menus.

- 1 **SETUP Button**
Press while the DVD is in Stop or Play mode to open the on-screen Initial Setup menu.
- 2 **▲/▼ and ◀/▶**
Moves the cursor up, down, left and right to cycle through menu options.
- 3 **ENTER Button**
Confirms menu settings.
- 4 **RETURN Button**
Returns to the last menu screen or exits the on-screen menu system.



Menu Language

To change the on-screen menu language to English, French or Spanish:

1 Open “Initial Setup” menu

Press the SETUP button while the DVD is in Stop or Play mode.

2 Select “SETUP”

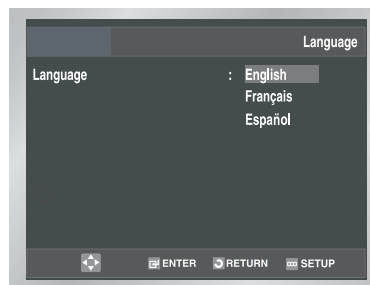
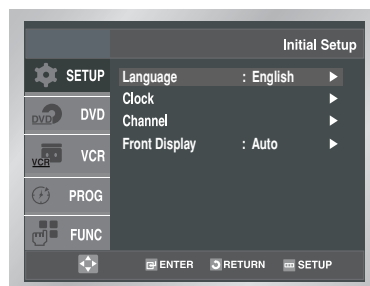
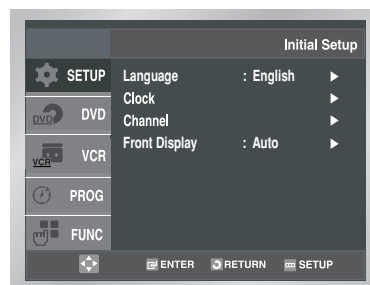
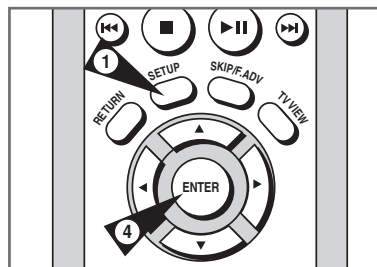
Use the ▲/▼ buttons to highlight “SETUP”, then press ENTER to select.

3 Select “Language”

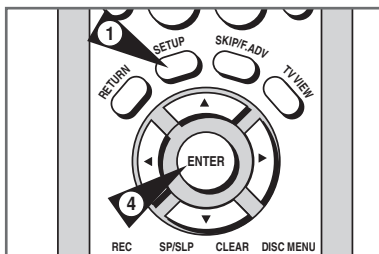
Use the ▲/▼ buttons to highlight “Language”, then press ENTER to select.

4 Set “Language”

Place the selection bar next to your desired Language, then press ENTER to select.



Manual Clock Set



If Auto Setup fails to set the DVD+VCR's internal clock by locating a local TV station, follow these steps to set the date and time manually.

NOTE: For accurate Timer Recording, your DVD+VCR's internal clock must be set correctly.

1 Open "Initial Setup" menu

Press the SETUP button while the DVD is in Stop or Play mode.

2 Select "SETUP"

Use the ▲/▼ buttons to highlight "SETUP", then press ENTER to select.

3 Select "Clock"

Use the ▲/▼ buttons to highlight "Clock", then press ENTER to select.

4 Select "Manual Clock"

Use the ▲/▼ buttons to highlight "Manual Clock", then press ENTER to select.

- The "Clock Set/Adjust" menu will change as shown.

5 Set the Clock

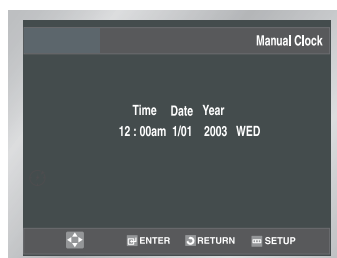
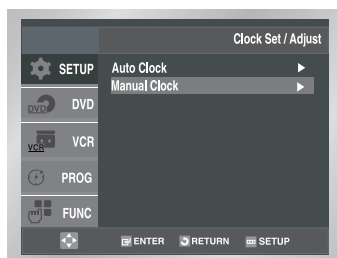
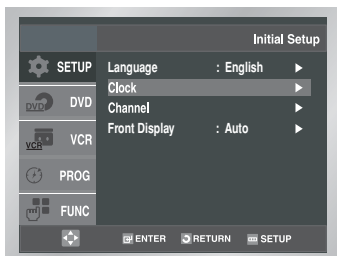
Use the ◀/▶ buttons to select each of the following options, then use the ▲/▼ buttons to set each option:

- **Hour** – Set the hour.
- **Minute** – Set the minute.
- **Month** – Set the month.
- **Day** – Set the day.
- **Year** – Set the year.

6 Confirm Settings

Press the RETURN button to confirm your clock settings and to return to the Initial Setup menu.

- Press the RETURN button again to exit.



Tuner Band Setting

This feature allows you to manually set the DVD+VCR's tuner band to Antenna or Cable, whichever you connected to the IN (FROM ANT.) jack during initial setup.

- Use this setting only if Auto Setup detected the incorrect tuner band, i.e. channels are coming in on the wrong channel numbers.

1 Open "Initial Setup" menu

With the DVD in Stop or Play mode, press the SETUP button.

2 Select "SETUP"

Use the ▲/▼ buttons to highlight "SETUP", then press ENTER to select.

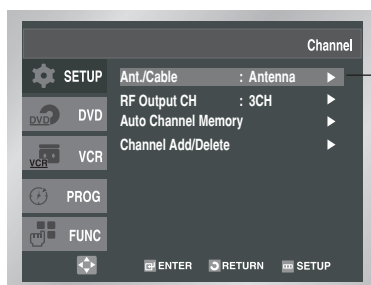
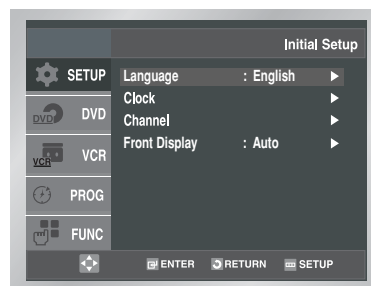
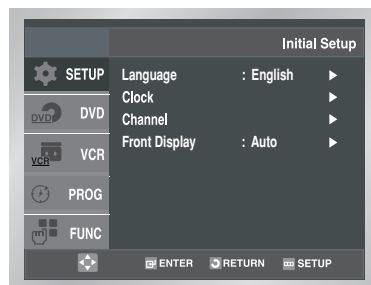
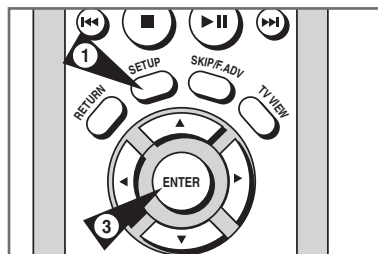
3 Select "Channel"

Use the ▲/▼ buttons to highlight "Channel", then press ENTER to select.

4 Select "Ant/Cable"

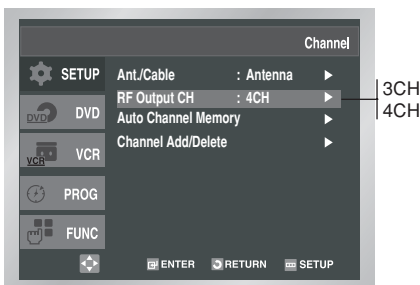
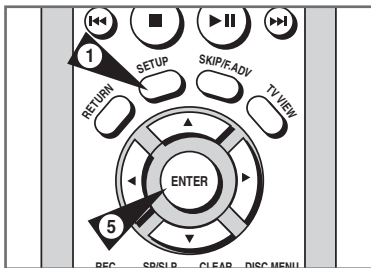
Use the ▲/▼ buttons to highlight "Ant/Cable", then press the ► button to select from the following options:

- Antenna - Indicates that the DVD+VCR is connected to an indoor or outdoor VHF/UHF antenna.
- Cable TV - Indicates that the DVD+VCR is connected to Cable TV.



Antenna
Cable TV

RF Output Channel



1 Open "Initial Setup" menu

With the DVD in Stop or Play mode, press the SETUP button.

2 Select "SETUP"

Use the ▲/▼ buttons to highlight "SETUP", then press ENTER to select.

3 Select "Channel"

Use the ▲/▼ buttons to highlight "Channel", then press ENTER to select.

4 Select "RF Output CH"

Use the ▲/▼ buttons to highlight "RF Output CH", then press ► to change.

5 Change "RF Output CH"

A message will appear on your TV. Press ENTER to change.

6 Change "TV Channel"

A message will appear on your TV. When the message disappears, change your TV to channel 3 or 4 to match the RF output channel of the player.

Auto Channel Memory

Auto Channel Memory will automatically seek and store all active channels in your area.

1 Open “Initial Setup” menu

With the DVD in Stop or Play mode, press the SETUP button.

2 Select “SETUP”

Use the ▲/▼ buttons to highlight “SETUP”, then press ENTER to select.

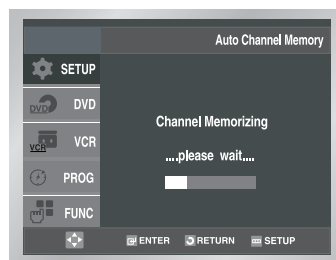
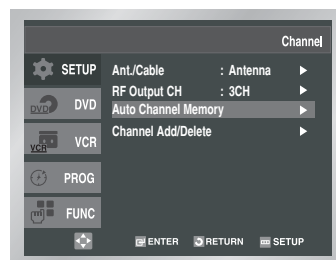
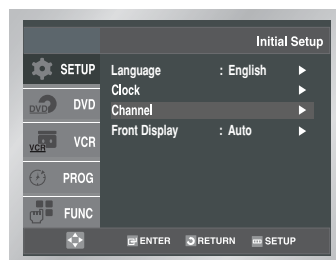
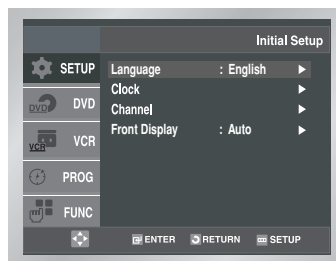
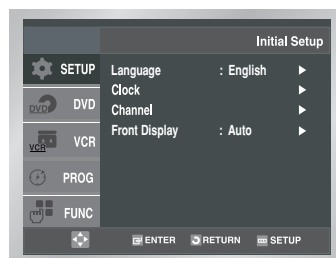
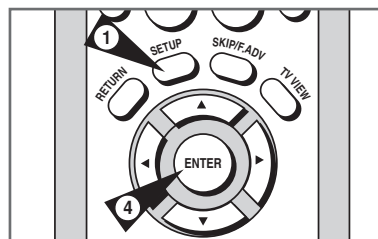
3 Select “Channel”

Use the ▲/▼ buttons to highlight “Channel”, then press ENTER to select.

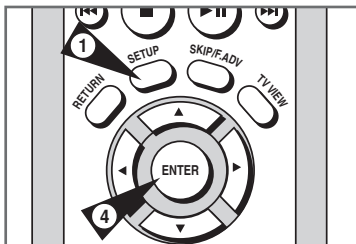
4 Run “Auto Channel Memory”

Use the ▲/▼ buttons to highlight “Auto Channel Memory”, then press ENTER to select.

- The DVD+VCR will automatically search for all available channels in the selected Tuner Band. This procedure may take a few minutes to complete.
- When finished, the lowest channel found will be displayed.



Channel Add/Delete



Use this feature if Auto Channel Search missed a channel that you would like to add, or added a channel you wish to remove.

1 Open “Initial Setup” menu

With the DVD in Stop or Play mode, press the SETUP button.

2 Select “SETUP”

Use the ▲/▼ buttons to highlight “SETUP”, then press ENTER to select.

3 Select “Channel”

Use the ▲/▼ buttons to highlight “Channel”, then press ENTER to select.

4 Select “Channel Add/Delete”

Use the ▲/▼ buttons to highlight “Channel Add/Delete”, then press ENTER to select.

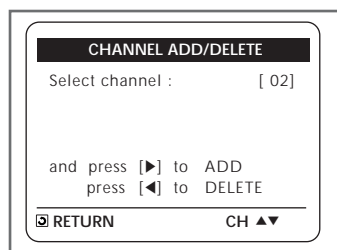
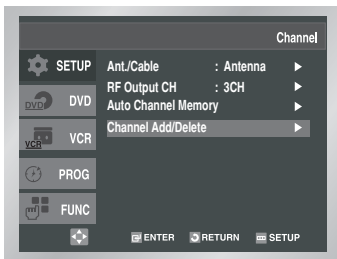
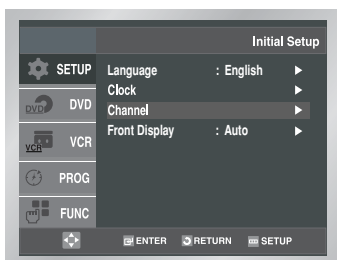
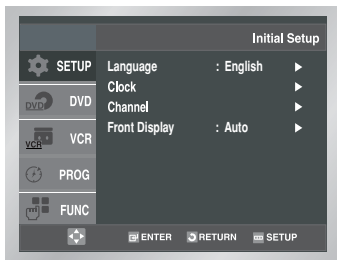
5 Select Channel to add/delete

Use the CHANNEL ▲/▼ buttons to tune in the channel number you wish to add or remove.

6 Select “Channel Add/Delete”

Press ► to add or press LEFT to remove the channel from your channel list.

- Repeat steps 4 and 5 to add or remove additional channels.



Front Panel Dimmer

You can set the Front Panel Display to be bright all the time, dim all the time, or dim when the power is off.

1 Open “Initial Setup” menu

With the DVD in Stop or Play mode, press the SETUP button.

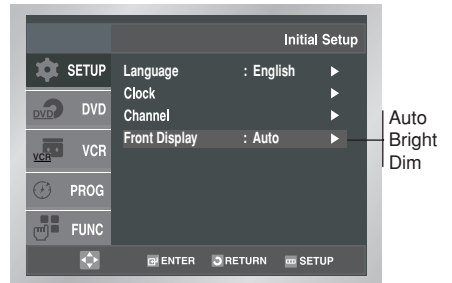
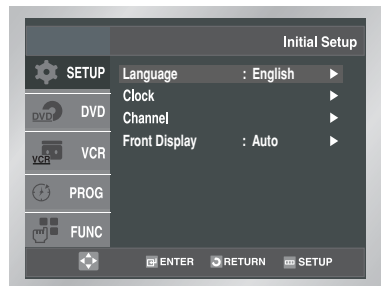
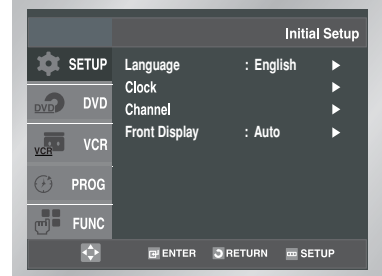
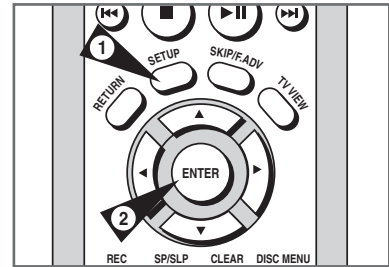
2 Select “SETUP”

Use the ▲/▼ buttons to highlight “SETUP”, then press ENTER to select.

3 Set “Front Display”

Use the ▲/▼ buttons to highlight “Front Display”, then press the ► arrow to select from the following options:

- Auto – The front panel display will dim automatically during power off.
- Bright – The front panel display will be bright all the time.
- Dim – The front panel display will be dim all the time.



Disc Menu Language

To set your preferred language (if available) for disc menus:

1 Open “Initial Setup” menu

Press the SETUP button while the DVD is in Stop mode.

2 Select “DVD”

Use the ▲/▼ buttons to highlight “DVD”, then press ENTER to select.

3 Select “Language”

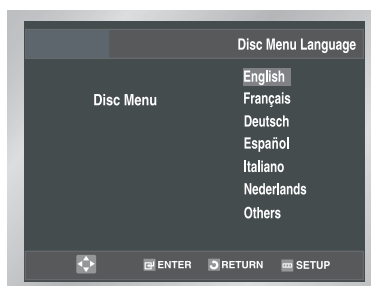
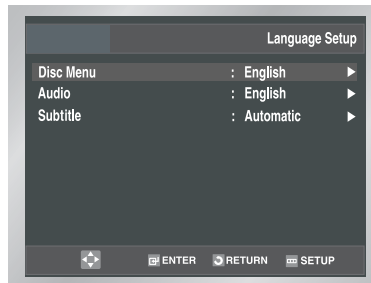
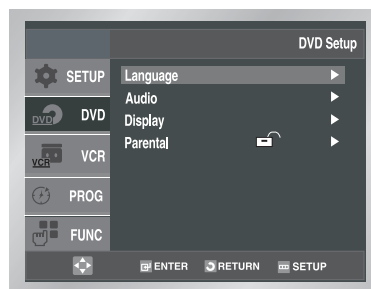
Use the ▲/▼ buttons to highlight “Language”, then press ENTER to select.

4 Select “Disc Menu”

Highlight “Disc Menu”, then press ENTER to select.

5 Set “Disc Menu Language” Preference

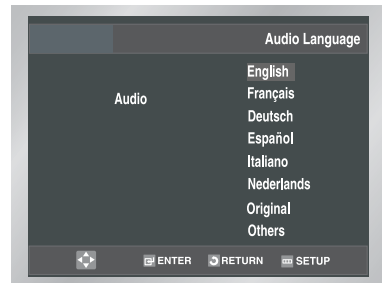
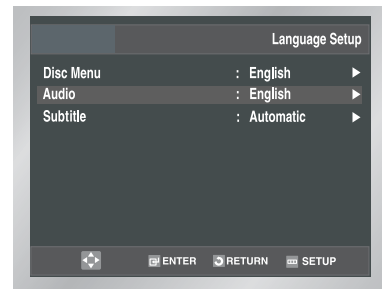
Highlight your preferred language for disc menus, then press the ENTER button.



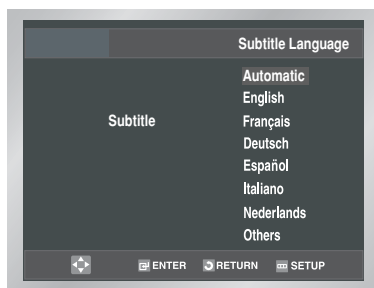
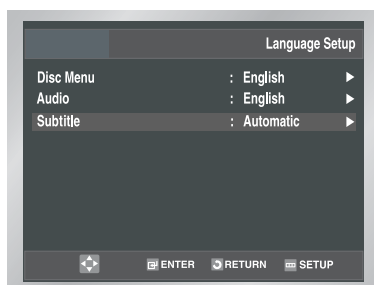
Audio Language

To set your preferred language (if available) for DVD audio tracks:

- 1 Open “Initial Setup” menu**
Press the SETUP button while the DVD is in Stop mode.
- 2 Select “DVD”**
Use the ▲/▼ buttons to highlight “DVD”, then press the ENTER button.
- 3 Select “Language”**
Use the ▲/▼ buttons to highlight “Language”, then press ENTER to select.
- 4 Select “Audio”**
Highlight “Audio”, then press ENTER to select.
- 5 Set “Audio Language” Preference**
Highlight your preferred language for audio soundtracks, then press ENTER to select.



Subtitle Language



To set your preferred language (if available) for Subtitles:

- 1 Open “Initial Setup” menu**
Press the SETUP button while the DVD is in Stop mode.
- 2 Select “DVD”**
Use the ▲/▼ buttons to highlight “DVD”, then press ENTER to select.
- 3 Select “Language”**
Use the ▲/▼ buttons to highlight “Language”, then press ENTER to select.
- 4 Select “Subtitle”**
Highlight “Subtitle”, then press ENTER to select.
- 5 Set “Subtitle Language” Preference**
Highlight your preferred language for subtitles, then press the ENTER button.

Digital Output

If your A/V receiver is equipped with a Dolby Digital decoder, your DVD+VCR can output Dolby Digital 5.1 sound, but you **MUST** enable this feature in the menu system to prevent damage to your speakers.

NOTE: Select "Bitstream" **ONLY** if you have connected a Dolby Digital-equipped A/V receiver to the Digital Output (optical or coaxial) on the DVD+VCR back panel.

1 Open "Initial Setup" menu

Press the SETUP button while the DVD is in Stop mode.

2 Select "DVD"

Use the ▲/▼ buttons to highlight "DVD", then press ENTER to select.

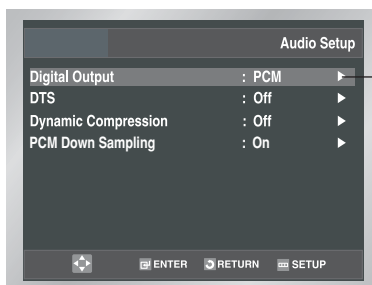
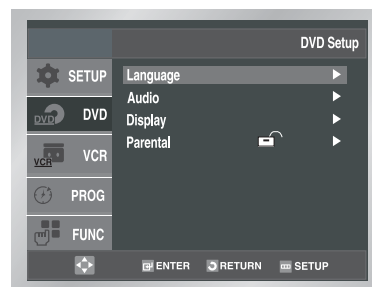
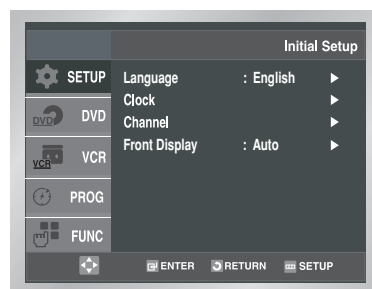
3 Select "Audio"

Use the ▲/▼ buttons to highlight "Audio", then press ENTER to select.

4 Set "Digital Output"

Use the ▲/▼ buttons to highlight "Digital Output", then press the ► button to select one of the following options:

- PCM - To use your DVD+VCR with an A/V receiver NOT equipped with a Dolby Digital decoder.
- Bitstream – To use your DVD+VCR with an A/V receiver equipped with a Dolby Digital decoder.



PCM
Bitstream



If your A/V receiver is equipped with a DTS decoder, your DVD+VCR can output DTS digital sound, but you MUST enable this feature in the menu system.

NOTE: Select "On" ONLY if you have connected a DTS-equipped A/V receiver to the DIGITAL AUDIO OUT (optical or coaxial) on the DVD+VCR back panel.

1 Open "Initial Setup" menu

Press the SETUP button while the DVD is in Stop mode.

2 Select "DVD"

Use the ▲/▼ buttons to highlight "DVD", then press ENTER to select.

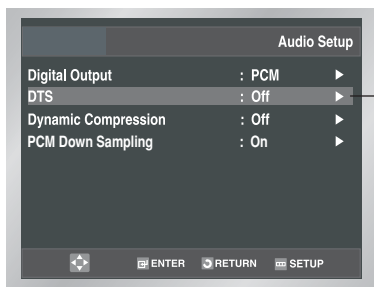
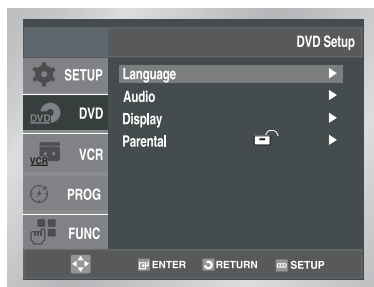
3 Select "Audio"

Use the ▲/▼ buttons to highlight "Audio", then press ENTER to select.

4 Set "DTS"

Use the ▲/▼ buttons to highlight "DTS" then press the ► button to select one of the following options:

- Off - To use your DVD+VCR with an A/V receiver NOT equipped with a DTS decoder.
- On – To use your DVD+VCR with an A/V receiver equipped with a DTS decoder.



Off
On

Dynamic Compression

Dynamic Compression restrains the dynamic range of sound, i.e. the difference between the loudest and quietest passages of a DVD audio track.

1 Open “Initial Setup” menu

Press the SETUP button while the DVD is in Stop mode.

2 Select “DVD”

Use the ▲/▼ buttons to highlight “DVD”, then press ENTER to select.

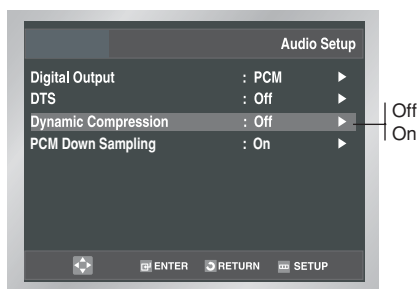
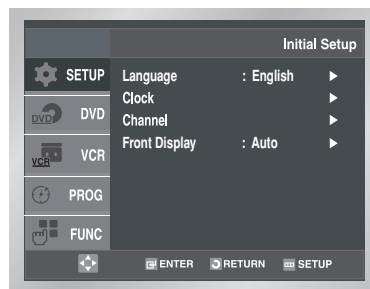
3 Select “Audio”

Use the ▲/▼ buttons to highlight “Audio”, then press ENTER to select.

4 Set “Dynamic Compression”

Use the ▲/▼ buttons to highlight “Dynamic Compression”, then press the ► button to select one of the following options:

- On - Compresses the total dynamic range of the DVD audio, making quiet passages in the audio signal louder and loud passages softer.
- Off – Preserves the original dynamic range.



PCM Down Sampling



If your amplifier is not capable of reproducing a 96kHz signal, PCM downsampling should be set to On.

1 Open "Initial Setup" menu

Press the SETUP button while the DVD is in Stop mode.

2 Select "DVD"

Use the ▲/▼ buttons to highlight "DVD", then press ENTER to select.

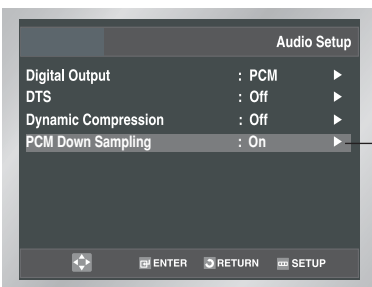
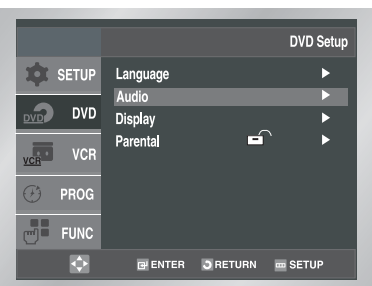
3 Select "Audio"

Use the ▲/▼ buttons to highlight "Audio", then press ENTER to select.

4 Set "PCM Down Sampling"

Use the ▲/▼ buttons to highlight "PCM Down Sampling", then press the ► button to select one of the following options:

- On - When a 96kHz audio disc is played, it will be downsampled and output at 48kHz.
- Off – When a 96kHz disc is played, it will be output at 96kHz.



On
Off

TV Aspect Ratio

Set the aspect ratio (length x width) of your TV screen so the DVD player will display movies at the appropriate size for your television. Choose from standard, letterbox, or widescreen format.

1 Open “Initial Setup” menu

Press the SETUP button while the DVD is in Stop mode.

2 Select “DVD”

Use the ▲/▼ buttons to highlight “DVD”, then press ENTER to select.

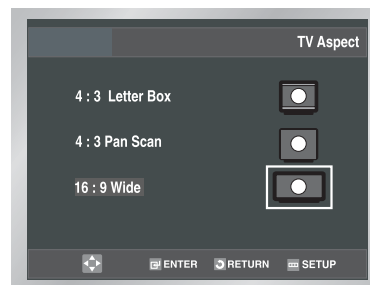
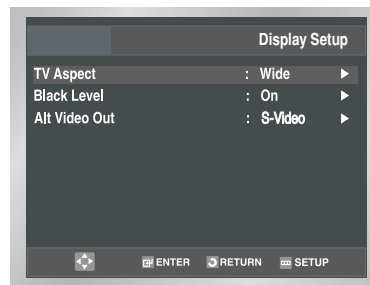
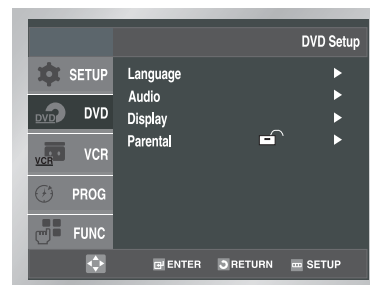
3 Select “Display”

Use the ▲/▼ buttons to highlight “Display”, then press ENTER to select.

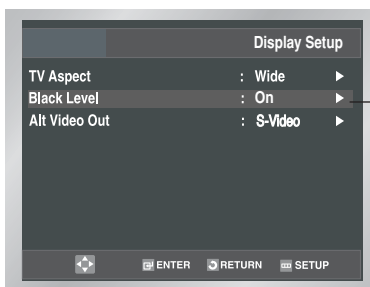
4 Set “TV Aspect”

Use the ▲/▼ buttons to highlight “TV Aspect”, then press the ► button to select one of the following options:

- Widescreen - Allows you to view the full 16:9 picture on a widescreen television.
- Letterbox - Displays the full width of widescreen movies on a standard 4:3 television. As a result, black bars will appear at the top and bottom of the screen.
- Pan-Scan - The familiar way of watching DVD and VHS movies, this method selectively crops (by panning and scanning to keep the most important part of the picture visible) widescreen movies to fit a standard 4:3 television screen.



Black Level



On
Off

The Black Level feature adjusts the reference level of black in the video signal to one of two choices:

- **Off** - Standard NTSC black level. Yields consistent contrast through all sources.
- **On** - Enhanced black level, for increased contrast during DVD playback.

1 Open “Initial Setup” menu

Press the SETUP button while the DVD is in Stop mode.

2 Select “DVD”

Use the ▲/▼ buttons to highlight “DVD”, then press ENTER to select.

3 Select “Display”

Use the ▲/▼ buttons to highlight “Display”, then press ENTER to select.

4 Set “Black Level”

Use the ▲/▼ buttons to highlight “Black Level”, then press the ► button to select one of the following options:

- **On** - Enhances the Black Level for increased brightness/contrast when viewing DVDs.
- **Off** - Standard NTSC reference Black Level for consistent brightness/contrast across all sources.

Alt Video Out

The “Alt Video Out” option must be set in the on-screen menu system if you have connected your DVD+VCR to a TV using the S-VIDEO OUT or COMPONENT VIDEO OUT jacks.

- Use the S-Video or Component Video connection method for the DVD player ONLY. The TV tuner and VCR can still be viewed through the RF or line outputs.

1 Open “Initial Setup” menu

Press the SETUP button while the DVD is in Stop mode.

2 Select “DVD”

Use the ▲/▼ buttons to highlight “DVD”, then press ENTER to select.

3 Select “Display”

Use the ▲/▼ buttons to highlight “Display”, then press ENTER to select.

4 Set “Alt Video Out”

Use the ▲/▼ buttons to highlight “Alt Video Out”, then press the ► button to select one of the following options:

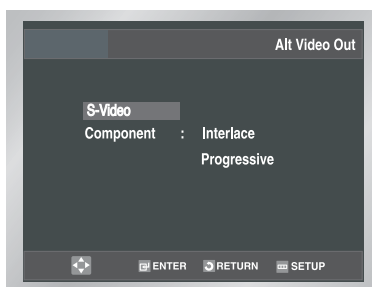
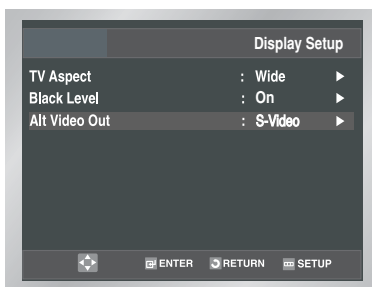
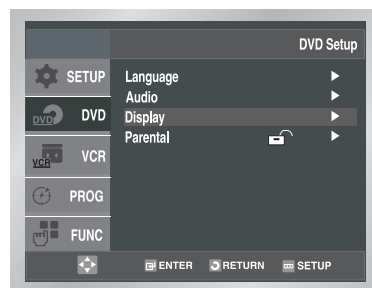
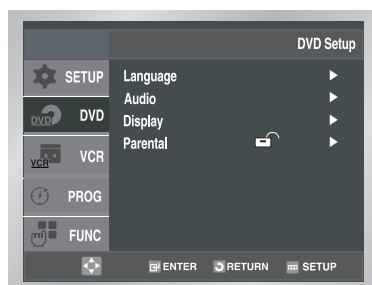
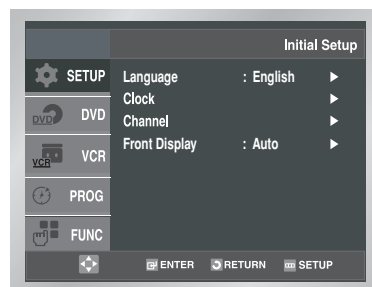
- S-Video - Select if you are using the S-VIDEO OUT jack on the rear panel to connect to your TV.
- Component - Select if you are using the COMPONENT VIDEO OUT jacks on the rear panel to connect to a Progressive (480p) or Interlaced (480i) TV.
- See your TV owner’s manual to determine what type of TV you have.
 - Interlace : Interlaced Scan mode will work.
 - Progressive : Progressive Scan mode will work, and Video and S-Video will not work. You will be prompted to press ENTER to confirm Progressive Scan mode or RETURN to cancel.

Reset Factory Settings

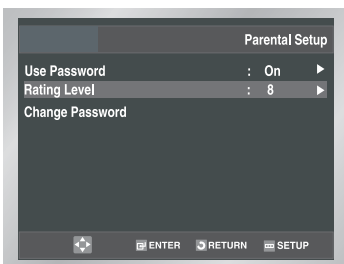
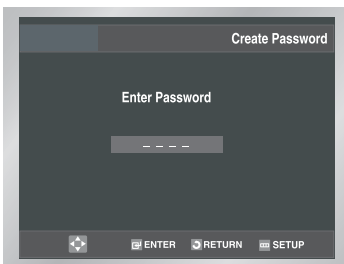
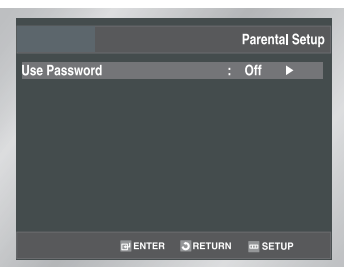
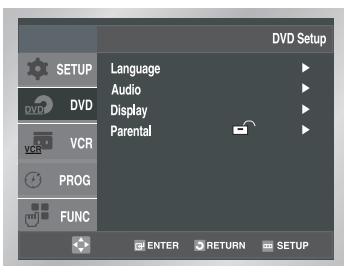
If you do not have a Progressive Scan television, the picture will be distorted in Progressive Scan mode. To reset the unit to its normal factory settings:



1. Eject any disc from the DVD disc tray.
2. Power the unit off and back on.
3. Press and hold the FF and REW keys on the front panel for five seconds.
4. Power the unit off and back on to return to normal operation.



Parental



Rating Control is a password-protected system that allows you to block playback of DVDs based on their content. The system uses an eight level rating system.

- If you try to play a DVD that exceeds the selected rating, an error message will appear.
- Not all discs are rated.

1 Open “Initial Setup” menu

Press the SETUP button while the DVD is in Stop mode.

2 Select “DVD”

Use the ▲/▼ buttons to highlight “DVD”, then press ENTER to select.

3 Select “Parental”

Use the ▲/▼ buttons to highlight “Parental”, then press ENTER to select.

4 Select “Use Password”

Use the ▲/▼ buttons to highlight “Use Password”, then press the ► button to select one of the following options:

- Off - No password is necessary to view a DVD or to change the Rating Level. No additional settings are necessary.
- On - A password is necessary to view a DVD and to view the Rating Level. The menu will change as shown.

NOTES:

- The first time “Require Password” is set to “Yes,” you will be prompted to enter a new password.
- If the “Enter Password” screen appears, then “Require Password” has already been set to “Yes.” Please skip to Step 5.
- There is no Default Password.

5 Enter Password

Use the number buttons (0-9) on the remote control to enter the 4-digit password.

- Write your password down, and keep it in a safe place in case you need it to change your settings later.

6 Select “Rating Level”

Use the ▲/▼ buttons to highlight “Rating Level”, then press ENTER to select.

7 Change Rating Level

Use the ▲/▼ buttons to select one of the following ratings:

- Level 8 Adult
- Level 7
- Level 6
- Level 5
- Level 4
- Level 3
- Level 2
- Level 1 Kids Safe

All ratings above the level you select will also be blocked, e.g., if you block Level 6, then Levels 7 and 8 will also be blocked. Press ENTER to confirm your selection.

- If you forgot your password, press power on from a cold start with no disc in the unit. Press the REW and FF buttons simultaneously on the front panel for 5 seconds. The “Reset OK” message will appear. Press the POWER button and the DVD+VCR will go to “Auto Setup” mode. (See page 13)

A/V Receiver Connections

To take full advantage of the movie theater experience that DVD offers, you may want to connect your DVD+VCR to a complete Surround Sound system, including an A/V Receiver and six Surround Sound speakers.

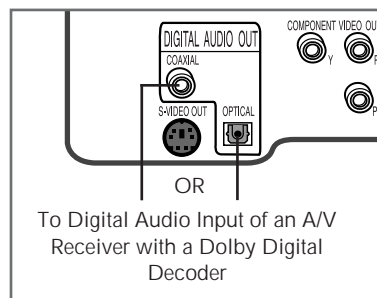
Before You Begin...

- If your A/V receiver is equipped with a Dolby Digital Decoder, you have the option to bypass the DVD+VCR's built-in Dolby Digital Decoder. Use the **DIGITAL AUDIO OUT** connection below.

1 Digital Audio Out

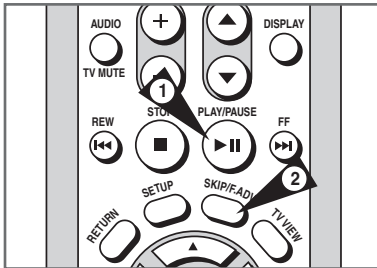
Connect EITHER an optical cable OR a digital coaxial cable from the DIGITAL AUDIO OUT jacks on the back panel of the DVD+VCR to the corresponding Digital Audio Input jacks on your A/V Receiver:

- Optical
- Coaxial
- Use whichever connection is available on your A/V Receiver.



Special Playback Features

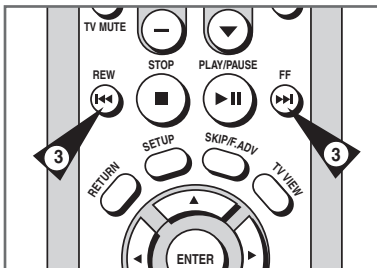
During DVD/CD playback you can select from the following special playback options. To resume normal playback, press the **PLAY/PAUSE ►II** button.



1 Still

Press the **PLAY/PAUSE ►II** button on the remote control during playback.

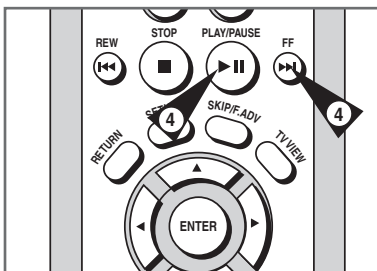
- The picture will pause and the audio will mute.
- To resume playback, press the **PLAY/PAUSE ►II** button.
- If the player is left in Pause mode for 5 minutes, it will stop automatically.



2 Frame Advance (Step)

While in Still mode, press the **F.ADV/SKIP** button on the remote control to advance one frame at a time.

- Audio is muted during Frame Advance mode.
 - Press **PLAY/PAUSE ►II** to resume normal playback.
- NOTE: Frame Advance operates only in the forward direction.



3 Skip Forward/Back

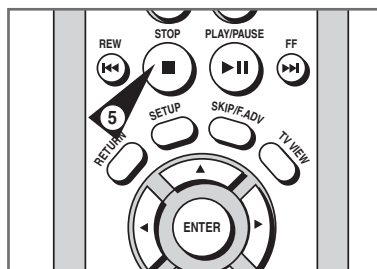
While a CD or DVD disc is in Play mode, press the **FF ►►** / **REW ◀◀** buttons on the remote control or front panel to jump forward and backward through disc chapters/tracks.

- **FF ►►** will jump to the next chapter/track.
- **REW ◀◀** will jump to the beginning of the current chapter/track.
- Press **REW ◀◀** again to jump to the beginning of the previous chapter/track.

Search Forward/Back

While a disc is in Play mode, press and hold the **FF ►►** / **REW ◀◀** buttons on the remote control or front panel to visually search forward/backward at 2X - 4X - 8X - 16X - 32X - 128X speed. Press **PLAY/PAUSE ►II** to resume normal speed.

NOTE: CD search speeds are 2X, 4X and 8X.



4 Slow Motion

During playback, press the **PLAY/PAUSE ►II** button to Still the image. Press and hold **FF ►►** to play in slow motion at variable speeds.

- Press and hold **FF ►►** on the remote and front panel to increase or decrease the speed from normal playback to 1/8, 1/4 or 1/2 speed.
- Audio is muted during slow motion playback.
- Press the **PLAY/PAUSE ►II** button to resume normal playback.

NOTE: Slow function is not available for CD.

5 Stop/Resume

- Press the **STOP ■** button once to stop playback. To resume the DVD/CD from the point where the disc stopped, press the **PLAY/PAUSE ►II** button.
- Press the **STOP ■** button twice to completely stop playback. The next time you press **PLAY/PAUSE ►II**, the disc will start over from the beginning.

Disc Menu Navigation

Many DVDs feature their own menu systems, where you can select titles, chapters, audio tracks, subtitles, and special disc features, such as movie trailers, and information about the cast. Use these buttons to make selections in the disc menus:

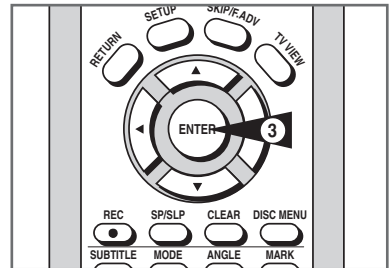
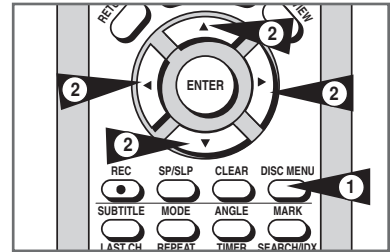
1 DISC MENU

Press to access the DVD's disc menu, if available.

-
- 2 Press ▲/▼ or ◀/▶ to navigate DVD disc menu options.
- Press UP, DOWN, LEFT, and RIGHT to highlight menu choices.

3 ENTER Button

Press to make your selections in the disc menu.



Title/Chapter/Time Selection

To view the current title, chapter/track, and counter position, press the **DISPLAY** button during DVD playback. The **DISPLAY** screen can also be used to quickly choose a title, chapter/track, or playing time.

1 View the Display

During DVD/CD playback, press the **DISPLAY** button on the remote control.

2 Select Title

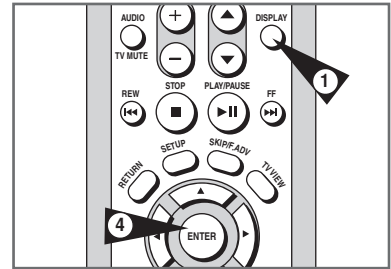
Use the **▲/▼** and **◀/▶** buttons to select Title, then press the **ENTER** button to select among all available titles on the disc.

3 Select Chapter or Track







Use the **▲/▼** and **◀/▶** buttons to select Chapter or Track, then press the **ENTER** button to select among all available Chapters/Tracks on the disc.

4 Select Counter Position

Use the **▲/▼** and **◀/▶** buttons to select the counter position indicator, then use the number buttons (0-9) to enter the desired counter position in the format H:MM:SS (H = Hours, M = Minutes, S = Seconds). Then press the **ENTER** button to enter the desired counter position.

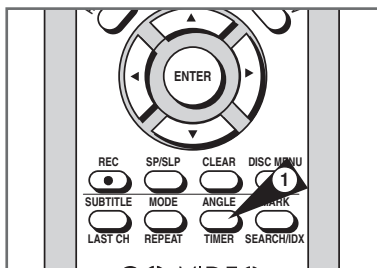


➤ To make the screen disappear, press the **DISPLAY** button again.

-  **Title** To access the desired title when there is more than one on the disc. For example, if there is more than one movie on a DVD, each movie will have its own title.
-  **Chapter** Most DVD discs are recorded in chapters so you can quickly find a specific passage.
-  **Time** Allows playback of the film from a desired time. You must enter the starting time as a reference.
-  **Audio** Refers to the language and audio format of the film soundtrack; e.g., "English 5.1CH". A DVD disc can have up to eight different soundtracks.
-  **Subtitle** Refers to the subtitle languages available on the disc. You will be able to choose the desired subtitle language or, if you prefer, turn them off. A DVD disc can have up to 32 different subtitle languages.
-  **3D Sound** A simulated 3-dimensional surround sound effect is generated using only two front speakers.



Angle View



*Some DVD movies offer multiple camera angles during playback. To activate this feature press the **ANGLE** Button.*

1 Check for the Angle Icon

The Angle Icon (shown above) will appear on screen when a DVD contains multiple angles.

2 View Angle Menu Options

When the Angle Icon appears, press the **ANGLE** button to display the Angle menu.

3 Select an Angle option

Press the ◀ / ▶ buttons to select the camera angle you wish to see.

Subtitle

Some DVDs provide subtitles in one or more languages. You can use the SUBTITLE button to quickly view and change settings.

1 Open Subtitle Menu

During playback, press the SUBTITLE button.

2 Set Subtitle Language

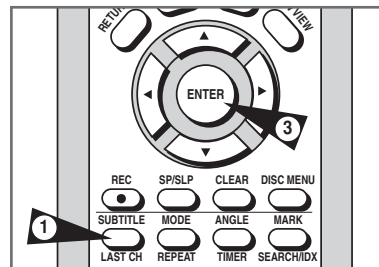
Use the ◀ / ▶ buttons to select from the available subtitle languages.

- Subtitle languages are represented by abbreviations.

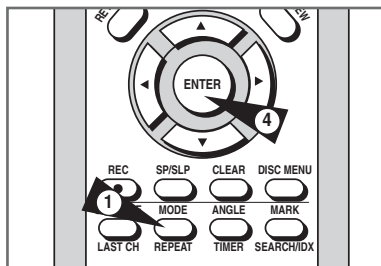
3 Activate Subtitles

Use the ▲ / ▼ buttons to turn subtitles On or Off.

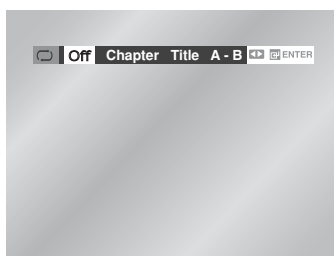
- The default setting is "On".
- Press the ENTER button to confirm your selection.



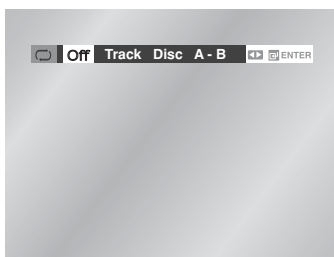
A-B Repeat



DVD



CD



The A-B Repeat feature enables you to repeat a segment of a DVD or CD. Simply mark the starting point (A) and ending point (B) of the segment you want to watch.

1 Select A-B Repeat Function

Press the REPEAT button while in Play mode, then use the ◀ / ▶ buttons to select A-B Repeat.

- When you select A-B Repeat, "A-" will be highlighted.

NOTE: The menu will display "Track" in place of "Chapter" if you are playing a CD.

2 Mark the Starting Point

Press the ENTER button at the beginning of the segment you want to repeat (Point A).

- Once you select Point "A", "B" will be highlighted.

NOTE: The minimum A-B Repeat time is 5 seconds.

3 Mark the Ending Point

Press the ENTER button again at the end of the segment you want to repeat (Point B).

- The segment will begin repeating in a continuous loop.

4 Cancel A-B Repeat

Press the REPEAT button to open the Repeat Menu, use the ◀ / ▶ buttons to highlight "Off," then press the ENTER button.

Repeat Chapter/Title

To repeat a single chapter or a complete title:

1 Open Repeat Menu

Press the REPEAT button while in Play mode to open the Repeat menu.

- The current Repeat mode will be highlighted.

2 Select “Chapter”

Use the ◀ / ▶ buttons to select “Chapter”.

- When you select Chapter Repeat, “Chapter” will be highlighted.

3 Repeat Chapter

Press the ENTER button to repeat the current chapter or track.

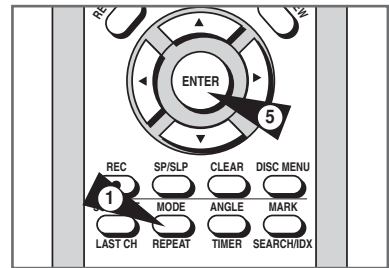
4 Select “Title”

Use the ◀ / ▶ buttons to select “Title”.

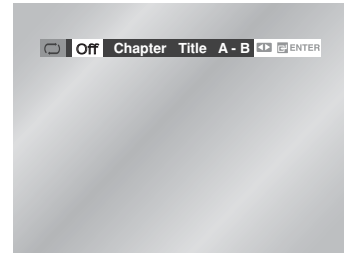
- When you select Title Repeat, “Title” will be highlighted.

5 Repeat Title

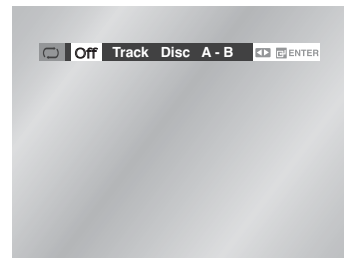
Press the ENTER button to repeat the title.



DVD



CD



Audio

Many DVDs include multiple language/audio setup options, such as Dolby Digital 5.1, Dolby Pro Logic, or LPCM 2 Channel audio. You can use the AUDIO button to quickly view and select the options available on a disc.

1 Open the Audio Menu

During playback, press the AUDIO button on the remote control.

2 Select DVD Audio Track

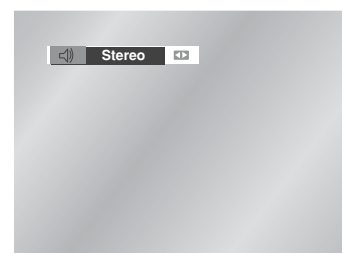
Use the ◀ / ▶ buttons to select the desired language/audio setup on the DVD.

- Languages are represented by abbreviations, e.g. “ENG” for “English.”

DVD

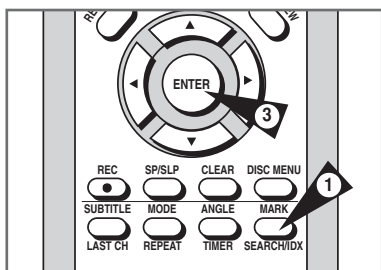


CD



Bookmarks

Up to three Bookmarks can be inserted for a given DVD, allowing you to quickly jump to your favorite scene or song.



1 Open Bookmark Menu

During playback, press the MARK button on the remote control. The "MARK" header will be displayed on the screen.

2 Select Bookmark Placeholder

Use the ◀ / ▶ buttons to move to one of the three bookmark placeholders (- - -).

- The selected placeholder will be highlighted.

3 Set the Bookmark

Continue playing the DVD until it reaches the scene you want to bookmark, then press the ENTER button. The placeholder (-) will change to a number (1, 2 or 3).

- You may continue to set up to three bookmarks.
- Press the MARK button when complete.
- Depending on the disc, the bookmark function may not work.

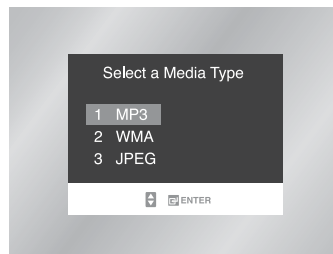
4 Play Bookmark

- During playback, press the MARK button on the remote control.
- Use the ◀ / ▶ buttons to move to a previously set bookmark.
- Press the PLAY/PAUSE button to play the bookmark.
- Press the CLEAR button to cancel the bookmark.
- Press the MARK button again to exit the Bookmark menu.

MP3/WMA Playback

When an MP3/WMA Disc is inserted into the DVD player, the first song file in the first folder begins playing automatically.

- If more than two file extensions are present, select the media of your choice.
- To change the currently playing media, press the STOP ■ button twice and then press the DISC MENU button.
- If no button on the remote control is pressed for 60 seconds, the menu will disappear and the selected item will be played.



MP3/WMA Playback Function

1. When the first song file is playing, the music folder menu will appear on the right side of the screen. Up to 8 music folders can be displayed at a time. If you have more than 8 folders on a disc, press the ◀/▶ buttons to bring them up on the screen.
2. Use the ▲/▼ buttons to select the desired music folder, then press ENTER. Use the ▲/▼ buttons again to select a song file. Press ENTER to begin playback of the song file.



Program/Random playback

1. With the MP3 in Stop mode, press the MODE button to switch between the RANDOM and PROGRAM modes. See page 47 for more information on these modes.



- Press the REPEAT button to hear music continuously and press it once again to release.
- PROGRAM/RANDOM playback cannot be used if the disc contains more than two types of file extensions.



CD-R MP3/WMA discs

When playing CD-R MP3 or WMA discs, please follow these recommendations :

- **Your MP3 or WMA files should be ISO 9660 or JOLIET format.**

ISO 9660 format and Joliet MP3 or WMA files are compatible with Microsoft DOS and Windows, and with Apple Mac. These two formats are the most widely used.

- **When naming your MP3 or WMA files, do not exceed 8 characters, and use “.mp3” and “.wma” as the file extensions.**

Use the general name format of “Title.mp3” or “Title.wma”. When composing your title, make sure you use 8 characters or less, have no spaces in the name, and avoid the use of special characters (.,/, \, =, +).

- **Use a decompression transfer rate of at least 128 Kbps when recording MP3 files.**

The sound quality of MP3 files depends on the rate of compression/decompression. To approximate CD quality audio, you will need an analog/digital sampling rate of at least 128 Kbps and up to 160 Kbps. Higher rates (192 Kbps or more) only occasionally yield better sound quality. Conversely, rates below 128 Kbps will yield inadequate results.

- **Use a decompression transfer rate of at least 64Kbps when recording WMA files.**

The sound quality of WMA files depends on the rate of compression/decompression. To approximate CD quality audio, you will need an analog/digital sampling rate of at least 64 Kbps and up to 192 Kbps. Rates below 64Kbps or above 192 Kbps will yield inadequate results.

- **Do not try recording copyright-protected MP3 files.**

Certain "securized" files are encrypted and code-protected to prevent illegal copying, including Windows Media™ (registered trademark of Microsoft, Inc.) and SDMI™ (registered trademark of The SDMI Foundation). You cannot copy such files.

- **Important:** The above recommendations cannot be taken as a guarantee that the DVD player will play all MP3 recordings, or as an assurance of sound quality.

You should note that certain technologies and methods for MP3 file recording on CD-Rs prevent optimal playback of these files on your DVD player (degraded sound quality and in some cases, inability of the player to read the files).

- This unit can play a maximum of 500 files and 300 folders per disc.

Program Play & Random Play

Program Play (CD/MP3/WMA)

1. With the MP3 in Stop mode, press the MODE button.
2. Use the ◀/▶ buttons to select PROGRAM.
Press the ENTER button.
3. Use the ▲/▼ or ◀/▶ buttons to select the first track to add to the program.
Press the ENTER button. The selection numbers appear in the Program Order box.
4. Press the PLAY/PAUSE ▶/|| button.
The disc will be played in the programmed order.



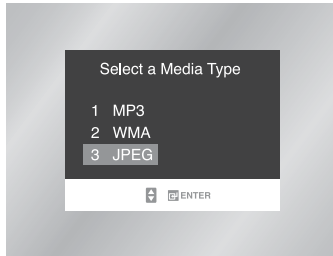
Random Play (CD/MP3/WMA)

1. With the MP3 in Stop mode, press the MODE button.
2. Use the ◀/▶ buttons to select RANDOM.
Press the ENTER button.
The disc will be played in random order.

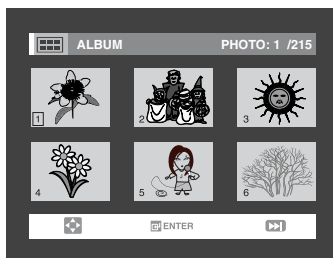


- Depending on the disc, the Program and Random Play functions may not work.
- To resume normal play, press the CLEAR button.
- PROGRAM/RANDOM playback cannot be used if the disc contains more than two types of file extensions.
- This unit can support playback of a maximum of 99 programmed files.

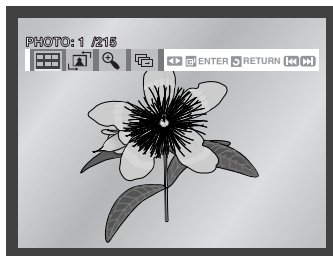
Picture CD Playback



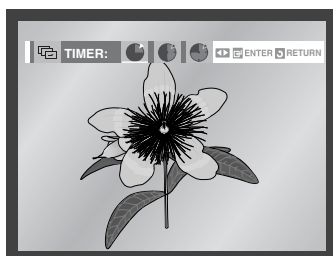
- Select "JPEG" in the "Select a Media Type" menu to view a Photo CD.
- To change the currently playing media, press the STOP ■ button twice and then press the DISC MENU button.
- If no button on the remote control is pressed for 60 seconds, the menu will disappear and the selected item will be played.



1. Open the disc tray.
2. Load the disc on the tray.
- Load the disc with the label side up.
3. Close the tray.
- The tray closes and you will see a screen like the one below.



- Use the ▲/▼ or ◀/▶ buttons on the remote control to select the picture you wish to view and then press the ENTER button. (or press the PLAY/PAUSE ►/II button to play in Slide Show mode.)
- To see the next 6 pictures, press the ► button.
- To see the previous 6 pictures, press the ◀ button.



- [Grid Icon] : Return to the Album Screen.
- [Rotate Icon] : Each time the ENTER button is pressed, the picture rotates 90 degrees clockwise.
- [Magnifying Glass Icon] : Each time the ENTER button is pressed, the picture is enlarged up to 4X. (Normal → 2X → 4X → 2X → Normal)
- [Slide Show Icon] : The unit enters Slide Show mode.
- *Press the RETURN button to return to the Album Screen.
- *Before the Slide Show can begin, the picture interval must be set.

- [6s Interval Icon] : When this icon is selected and ENTER is pressed, the pictures change automatically with ~6 second interval.
- [12s Interval Icon] : The pictures change automatically with ~12 second interval.
- [18s Interval Icon] : The pictures change automatically with ~18 second interval.

*Depending on the file size, the interval between images may take longer or shorter than the manual suggests.

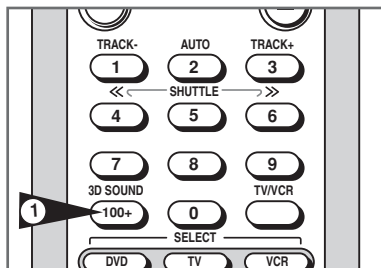


- Press the RETURN button to return to the Album Screen.
- Press the RETURN button to return to the slide show.
- If no button on the remote control is pressed for 10 seconds, the menu will disappear. Press the ▲/▼ or ◀/▶ buttons on the remote control to display the menu again.

About CD-R JPEG Discs

- Only files with the ".jpg" and ".JPG" extensions can be played.
 - If the disc is not closed, it will take longer to start playing and not all of the recorded files may be played.
 - Only CD-R discs with JPEG files in ISO 9660 or Joliet format can be played.
 - The name of the JPEG file may not be longer than 8 characters and should contain no blank spaces or special characters (. / = +).
 - Only a consecutively written multisession disc can be played. If there is a blank segment in the multisession disc, the disc can be played only up to the blank segment.
 - A maximum of 500 images can be stored on a single CD.
 - When playing a Kodak Picture CD, only the JPEG files in the pictures folder can be played.
 - Picture discs other than Kodak Picture CD may take longer to start playing or may not play at all.
 - If the number of files on a Disc is over 500, only 500 JPEG files can be played.
 - If the number of folders in a Disc is over 300, only JPEG files in 300 folders can be played.
-

3D Sound



The 3D Sound function is a sound enhancement mode that lets you enjoy virtual surround sound with only two speakers.

1 Press the “3D SOUND” button

During playback, press the “3D SOUND” button on the remote control.

2 Set 3D Sound

You can also press the DISPLAY button, and then use the ▲/▼ buttons to select “3D Sound”.

3 Use the ◀/▶ buttons to confirm your selection.

-ON : A simulated surround sound effect is generated using only the two front speakers.

-Off : 3D sound is disabled.

4 To make the screen disappear, press the “DISPLAY” button again.

Function (DVD)

Use the Function menu as a shortcut to a variety of DVD functions.

1 Open “Initial Setup” menu

With the DVD in Stop or Play mode, press the SETUP button.

2 Select “FUNC”

Use the ▲/▼ buttons to highlight “FUNCTION” then press the ENTER button.

3 Select “DVD Function”

Using the ▲/▼ buttons to highlight “DVD Function” then press ENTER to select.

4 Select “Title Menu”

Highlight “Title Menu”, then press the ENTER button.

- Disc Menu

Highlight “Disc Menu”, then press the ENTER button.

- Information

Highlight “Information”, then press the ENTER button.

- Zoom

Highlight “Zoom”, then press the ENTER button.

- Bookmark

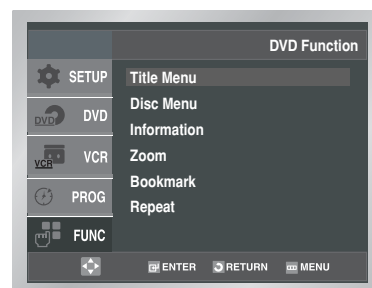
Highlight “Bookmark”, then press the ENTER button.

- Repeat

Highlight “Repeat”, then press the ENTER button.

- Special DVD Features

Highlight “Special DVD Features”, then press the ENTER button.



Special DVD Features

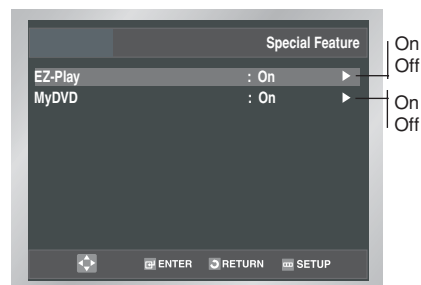
The DV2130 incorporates two innovative features that will enhance your DVD playback experience:

EZ-Play

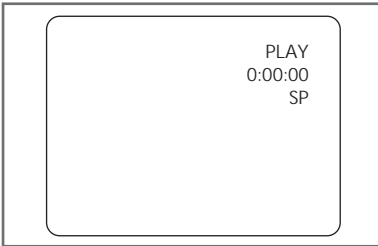
Tired of wading through confusing and inconsistent menus upon loading rented DVD discs? When the EZ Play feature is active, the DVD+VCR will find the beginning of the movie on most discs and begin playing the movie automatically. To enable this feature, turn EZ Play “On”.

MyDVD

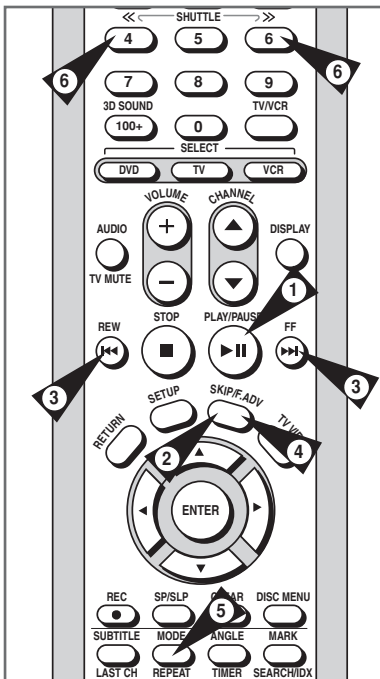
The MyDVD feature automatically searches for your preferences every time you load a DVD disc. It then finds and selects your preferred language and audio settings (if available) without having to access the disc menu. A special MyDVD screen appears on your TV when a disc is loaded informing you if your playback preferences were found on the disc, including Audio language, Subtitle language, and Surround mode. To enable this feature, first set all your preferences and then turn MyDVD “On”.



Special VCR Playback Features



Press the DISPLAY button to see the current status of the VCR deck, as well as the tape counter position and record speed.



While a videotape is playing, you can enjoy a variety of special playback features, including Still, Frame Advance, Skip, Repeat, and more. Press the PLAY/PAUSE button again to resume normal playback.

1 Still

From Play mode, press PLAY/PAUSE to still a single frame.

2 Frame Advance

From Still mode, press F.ADV/SKIP to advance to the next frame.

3 Cue/Review

From Play mode, press FF ►► or REW ◀◀ to cue/review at two speeds:

- Picture Search — Press and release to advance the tape forward or backward at 5 times normal speed.
- Jet Search — Press and hold to advance the tape forward or backward at 7 times normal speed.

4 Skip

From Play mode, press F.ADV/SKIP to cue ahead exactly 60 seconds. Press SKIP up to five times to cue ahead up to five minutes.

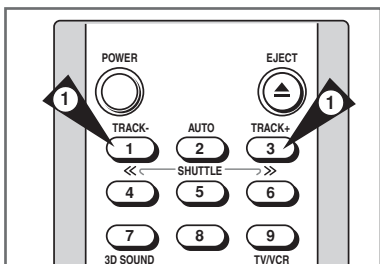
5 Repeat

- From Play mode, press REPEAT to review the last 30 seconds of tape.

6 Shuttle

From Play mode, Shuttle ►► gradually increases the cue speed from double-speed playback to picture search to jet search. Shuttle ◀◀ gradually slows down the tape, then goes into Slow mode, Still mode, reverse picture search and reverse jet search.

Tracking



The Tracking adjustment removes the white lines that sometimes appear during playback because of slight differences in recording decks. The AUTO button will automatically align the recorded tracks with the playback heads to solve this problem. You may also set tracking manually.

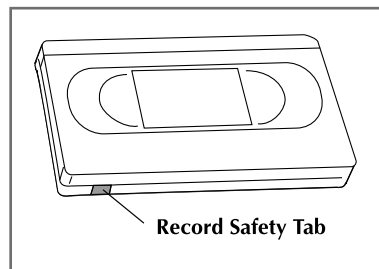
1 Adjust Tracking Manually

During playback, press the TRACK+/- buttons to remove white lines from the picture.

Auto Play

If you want your videotapes to play automatically when you insert them, turn on Auto Play.

NOTE: Only tapes that are missing the Record Safety Tab will play automatically when inserted.

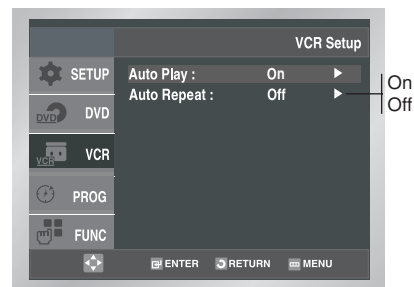


1 Open "Initial Setup" menu

With the DVD in Stop or Play mode, press the SETUP button.

2 Select "VCR"

Use the ▲/▼ buttons to highlight "VCR", then press ENTER to select.



3 Select "Auto Play"

Use the ▲/▼ buttons to highlight "Auto Play", then press the ► button to select from the following options:

- On - The VCR will automatically begin playing a videotape when it is inserted, as long as the record safety tab has been removed.
- Off - Auto Play is disabled.

4 Select "Auto Repeat"

Use the ▲/▼ buttons to highlight "Auto Repeat", then press the ► button to select. Choose "On" if you want the VCR to play tapes repeatedly (unless a playback control button is pressed, such as STOP, FF or REW).



S-VHS Playback

The DVD+VCR allows you to playback high quality S-VHS tapes.

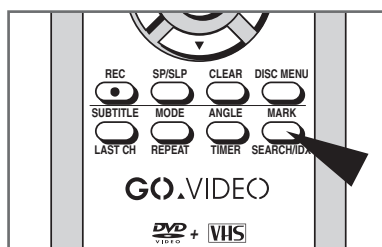
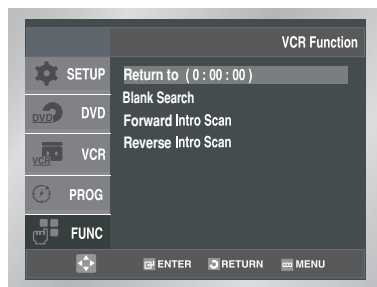
1 Insert a S-VHS Tape

Insert an S-VHS tape into the VCR deck.

2 Start Playback

Press PLAY/PAUSE on the remote control to begin playback of the S-VHS tape.

Variable Search System



When VHS playback is stopped, press the **SEARCH/IDX** button to display a list of search options. The DVD+VCR uses the VISS (VHS Index Search System) standard to locate index marks placed at the start of all video recordings. This system may not recognize index marks made by old VCRs. If the VCR has trouble finding a mark, it is probably because the cassette was recorded on a VCR without VISS. If you want to index two programs in a row, set your VCR to Stop mode, then start recording the next program. PAUSE has no effect on index marks.

1 Return to (0:00:00)

Use this feature when you want to search for counter position 0:00:00 on your videotape. To set the counter to 0:00:00, press the CLEAR button at the desired point on the tape. While the tape is stopped, simply press the ENTER button. The VCR will automatically rewind or fast forward to 0:00:00 and then stop at that position.

2 Blank Search

Use this feature when you want to search for a blank position to record a program on a videotape. While the tape is stopped, press the ENTER button. The VCR will fast forward, searching for a blank position, and then automatically stop at that position. If the VCR reaches the end of the tape during a Blank Search, the tape will be ejected.

3 Scan and Play

Use scan and play when you don't know exactly where a program is located on a cassette tape.

- Forward Intro Scan

Highlight "Forward Intro Scan", then press the ENTER button.

- Reverse Intro Scan

Highlight "Reverse Intro Scan", then press the ENTER button.

Basic Recording

You can record a TV show in progress by inserting a blank tape and pressing the REC button. You can even add time in 30-minute increments up to 9 hours and 30 minutes by pressing the REC button repeatedly; see page 57.

NOTE: Be sure your videotape has a Record Safety Tab. If the tab is missing, you can cover the opening with a small piece of tape. Warning: Do not cover this opening unless you are sure you want to record over the tape.

Before You Begin...

- Power on the DVD+VCR
- Power on the TV
- Set the TV to channel 3, 4 or Line .

1 Insert Tape

Insert a blank VHS tape into the VCR deck.

- Make sure the tape is long enough to record the entire program.
To change the Recording Speed, see page 57.

2 Select a Channel to Record

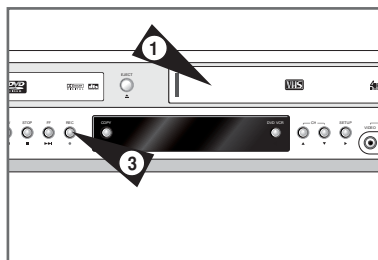
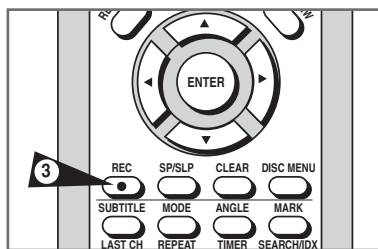
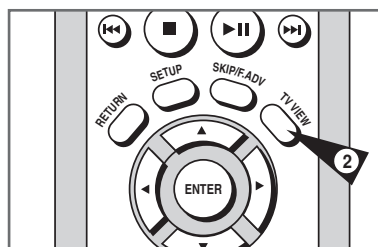
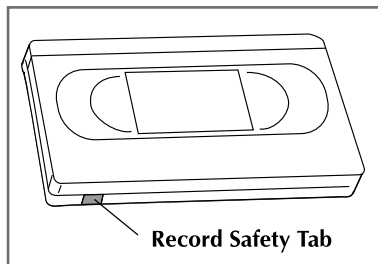
Use the 0–9 buttons or the CHANNEL ▲/▼ buttons to select the desired channel, or press the TV VIEW button to select Line 1 or 2 if recording from an external device connected to the front or rear Line inputs, respectively.

3 Start Recording

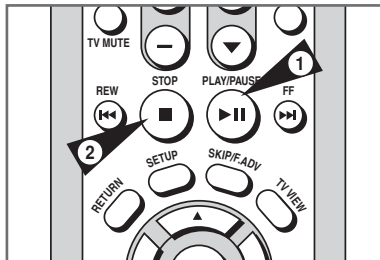
Press the REC button on the remote control or front panel. For options while recording is in progress, see “Special Recording Features” on the next page.



To record from the DVD player to the VCR use the COPY button. It is not permissible to copy Macrovision-encoded DVDs.



Special Recording Features



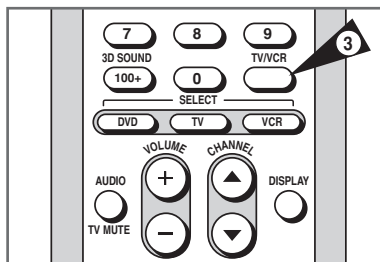
While a recording is in progress, you can watch a different channel, watch a DVD, or add recording time in 30-minute increments.

1 Pause/Resume Recording

Press the PLAY/PAUSE ►|| button.
Press REC again to resume recording.

2 Stop Recording

Press the STOP ■ button.

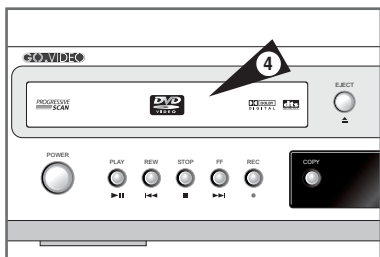


3 Watch a Different Channel

Press the TV/VCR button on the remote to switch to your TV tuner, then select a different channel on your television.

4 To Watch a DVD

Insert a DVD in the DVD deck and press the PLAY/PAUSE ►|| button. The output will automatically change to the DVD.



5 Add Recording Time

See One-Touch Recording (OTR) on the next page.

One-Touch Recording (OTR)

One-Touch Recording (OTR) allows you to add recording time in 30-minute increments up to 9 hours and 30 minutes at the touch of a button.

1 Start Recording

Follow the instructions on page 55 to begin recording.

2 Activate OTR

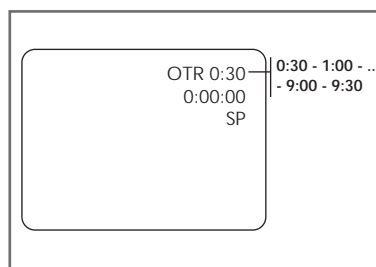
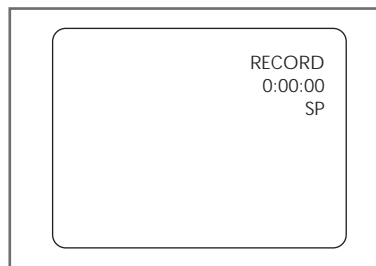
While in Record mode, press the REC button again to activate One-Touch Recording (OTR).

- Record length 0:30 appears on the On-Screen Display and the DVD+VCR will record for exactly 30 minutes.

3 Add Recording Time

Continue pressing REC to add recording time in 30 minute increments up to 4 hours.

- The DVD+VCR stops recording automatically when the recording time has elapsed. If you press POWER during OTR recording, the DVD+VCR will power off automatically when the recording time has elapsed.



Record Speed

You can slow down the recording speed from SP to SLP in order to fit six hours of programming on a T-120 tape.

1 Start Recording

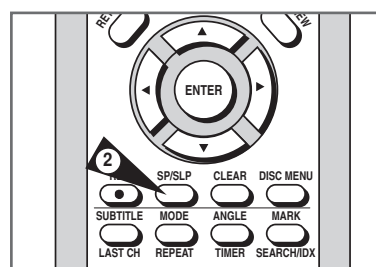
Follow the Basic Recording instructions on page 55.

2 Set Record Speed

Press the SP/SLP button on the remote control to set the Record Speed to one of the following options:

- SP – Standard Play, for best quality.
- SLP – Super Long Play, for maximum recording time (3 times SP).

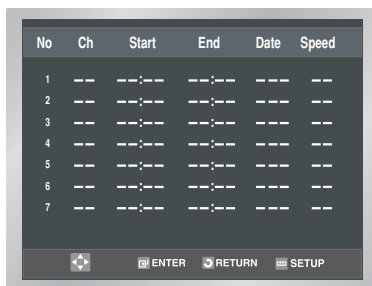
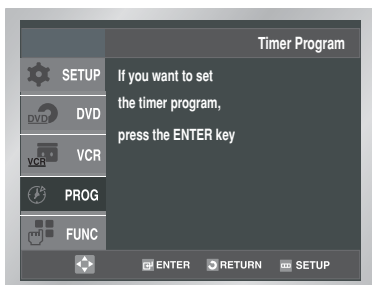
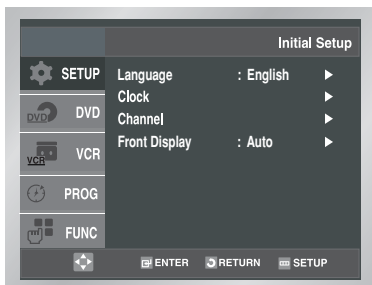
NOTE: The selected Record Speed will appear on the front panel display and on-screen display.



Maximum Recording Time - SP vs. SLP

Tape Length	SP (Standard Play)	SLP (Super Long Play)
T-120	2 hrs	6 hrs
T-160	2hrs 40 mins	8 hrs
T-180	3 hrs	9 hrs

How to Set a Timer Recording



Insert a blank videotape into the VCR deck. Be sure to leave the Record Safety Tab intact. With the Timer Recording function, you can program up to 7 events at a time to record up to a month in advance.

To Begin Setting the Timer Recording,

- Turn on your DVD+VCR, and
- Turn on your TV.
- Set the TV to channel 3, 4 or Line.

1 Open "Initial Setup" menu

Press the SETUP button or the TIMER button while the DVD is in Stop or Play mode.

2 Select "PROG"

Use the ▲/▼ buttons to highlight "PROG" then press the ENTER button.

3 Select Channel Number

Use the ► and ▲/▼ buttons to set the desired channel. Press the ► button to move to the next setting.

4 Set "Time/Date/Speed"

Repeat Step 3 above to set the start time, end time, date and record speed. The date can be set for One Time, Daily or Weekly recording. See Step 7 below.

5 Save "Timer Recording"

Press the RETURN button to finish setting the timer recording. Stop the DVD+VCR or turn the power off. The timer indicator will light on the front panel display. The DVD+VCR will automatically turn on and begin recording at the time you set. To stop the timer recording, press STOP ■ twice.

6 Auto Speed Select

If the videotape is not long enough for a timer recording in the SP mode, set the recording tape speed to "AUTO". Recording will start in the SP mode. If the tape is not long enough, the record speed will automatically change from SP mode to SLP mode.

7 Daily/Weekly Date Programming

Weekly [SUN'S~SAT'S]: Records the TV program on the same channel at the same time every week.

Daily [MO - FR] : Records the TV program on the same channel at the same time every day Monday through Friday.

Function (VCR)

Use the Function menu as a shortcut to a variety of VCR functions.

1 Open “Initial Setup” menu

With the DVD in Stop or Play mode, press the SETUP button.

2 Select “FUNCTION”

Use the ▲/▼ buttons to highlight “FUNC” then press ENTER to select.

3 Select “VCR Function”

Use the ▲/▼ buttons to highlight “VCR Function” then press ENTER to select.

4 Select “Return to (0: 00: 00)”

Highlight “Return to (0:00:00)”, then press the ENTER button.

- Blank Search

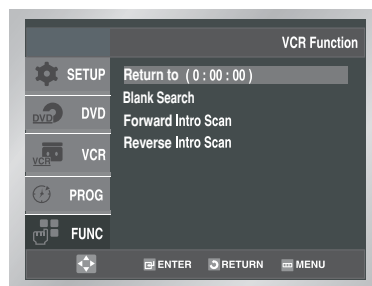
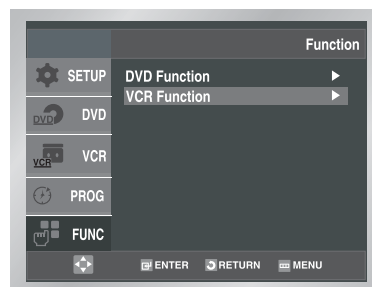
Highlight “Blank Search”, then press the ENTER button.

- Forward Intro Scan

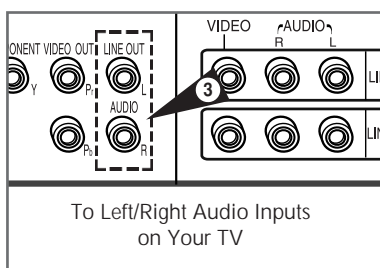
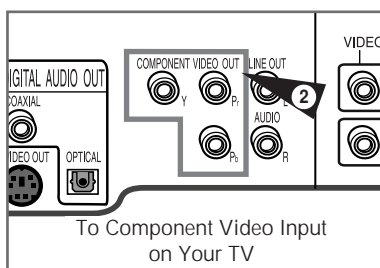
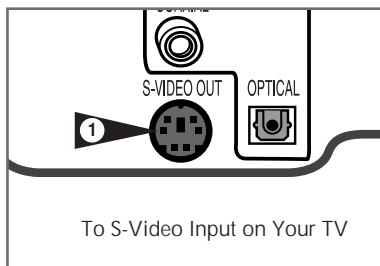
Highlight “Forward Intro Scan”, then press the ENTER button.

- Reverse Intro Scan

Highlight “Reverse Intro Scan”, then press the ENTER button.



S-Video/Component Video Connections (for DVD)



If your TV is equipped with S-Video or Component Video inputs, you can enjoy superior video quality when watching DVDs on your DVD+VCR. The S-Video and Component Video connection methods are for DVD playback ONLY. The TV tuner and VCR can still be viewed through the RF or line inputs. To activate your alternative (S-Video or Component) video selection, follow the “Alt Video Out” instructions on page 33. Keep in mind that you can choose either S-Video or Component, but not both.

1 Connect S-VIDEO OUT to TV

Using an S-Video cable, connect the S-VIDEO OUT on the back panel of your DVD+VCR to the S-Video Input on your TV.

2 Connect COMPONENT VIDEO OUT to TV

Using a component video cable, connect the COMPONENT VIDEO OUT (Y, Pb, Pr) on the back panel of your DVD+VCR to the Component Video Input on your TV.

3 Connect Audio Out (DVD only)

Using RCA audio cables, connect the Left/Right Line Out jacks on the back panel of your DVD/VCR to the Left/Right Audio Line In jacks on your TV.

- When connecting your DVD+VCR to a TV with the S-Video or Component Video Output, make sure that you use these Line Out jacks.
- To activate your connection, see “Alt Video Out” on page 33.

Stereo Connections

You can connect your DVD+VCR to your home stereo system or stereo TV and enjoy stereo sound when watching a movie or TV.

1 Connect DVD+VCR to Stereo

Using RCA cables, connect the Line Out Left and Right Audio jacks on the back panel of the DVD+VCR to the Auxiliary Inputs on your stereo receiver. Connect the Video Output also if you are connecting to a stereo TV.

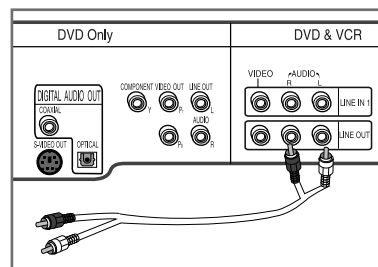
2 Set Stereo to Auxiliary Mode

Set your stereo receiver or TV to its auxiliary input. It may be labeled "Aux", "Line", "Video" or "Tape". Check the your owner's manual for details.

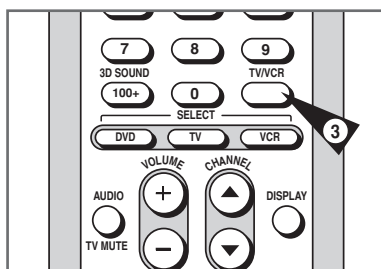
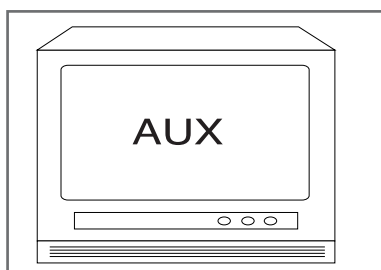
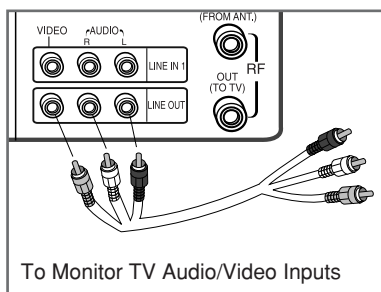
3 Play a Disc or Tape

Insert a DVD, CD or Hi-Fi stereo videotape into your system. Be sure to adjust the volume on your stereo receiver or TV. Audio will be heard through your stereo speakers.

- If there is no stereo sound even after you have inserted a Hi-Fi stereo videotape, press the AUDIO button until "Hi-Fi" appears on the on-screen display.



Monitor TV Connections



Monitor-style televisions offer improved sound and picture quality over regular televisions because they receive the audio and video signals directly from the DVD+VCR through the line inputs.

NOTE: A monitor television is not the same as a computer monitor.

1 Connect VCR to Monitor TV

Connect RCA cables from the Audio/Video Line Out jacks on the back panel of the DVD+VCR to the Audio/Video Line Inputs of your monitor TV.

2 Set TV to Auxiliary Mode

Set your monitor TV to "Aux," "Video," or "Line." Refer to your owner's manual for the correct setting.

3 Connection is Complete

NOTE: With this connection, the TV/VCR button has no effect. It is as if the TV/VCR button were always set to VCR.

Connecting Other Video Equipment

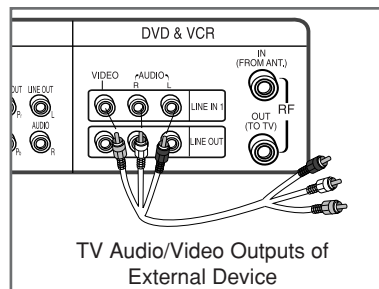
You can connect a wide variety of audio/video equipment to your DVD+VCR, including:

- An additional VCR or DVD Player
- Laser Disc Player
- Camcorder
- Satellite Receiver
- Video Game

Since all of these devices use essentially the same connections, they will be described together.

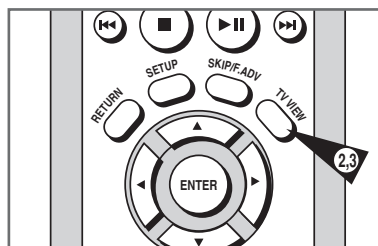
1 Connect Device to DVD+VCR

Connect RCA cables from the Audio and Video Line Outputs of your external device to the Audio and Video Line Inputs on the front or back panel of the DVD+VCR.



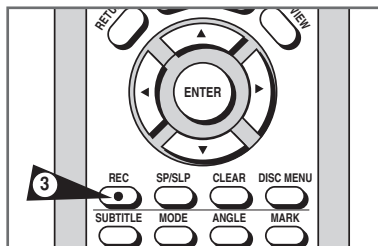
2 Watch Device

Play your external device, then press the TV VIEW button until the playback from LINE1 (rear panel inputs) or LINE2 (front panel inputs) appears on your TV screen.



3 Record Device

First, play your external device. Next, press the TV VIEW button until the playback from LINE1 (rear panel inputs) or LINE2 (front panel inputs) appears on your TV screen. Then press RECORD on the VCR deck.



4 Timer Record From Device

Select LINE1 (L1) or LINE2 (L2) as your record source in the Timer Record menu. All other Timer Record settings should be set in the usual manner.

Technical Specifications

Inputs	AUDIO	2 Stereo audio inputs, RCA Connector, -8dbm, 47K Ω , front and rear
	VIDEO	2 Composite video inputs, RCA Connector, 75 Ω , 1Vp-p
	RF	Antenna or CATV Input, F-Connector, 75 Ω
Outputs	AUDIO	1 Stereo audio outputs, RCA Connector, -8dbm, 1.5K Ω
	AUDIO (DVD only)	2 Digital audio outputs (1 optical, 1 coaxial) 1 Stereo audio outputs
	VIDEO	1 Composite video output, RCA Connector, 75 Ω , 1Vp-p
	VIDEO (DVD only)	1 S-Video output, S-Connector, 75 Ω , Y=1.0Vp-p, C=0.286Vp-p
		1 Component video output, 75 Ω , Y=1.0Vp-p, Pb=0.7Vp-p, Pr=0.7Vp-p
VCR	RF	Channel 3 or 4
	VIDEO SYSTEM	1/2-inch VHS system, 4 rotary head helical scanning; FM azimuth luminance;chrominance: converted sub system phase shift
	AUDIO TRACK	Normal: 1 track; Hi-Fi: 2 track
	PLAY/RECORD TIME	T-180 tape: SP 3 hours, SLP 9 hours
	FF/REW TIME	T-120 tape: <2 minutes
	HEADS	Video: DA 4 rotary
		Audio: 2 rotary heads (Hi-Fi); 1 stationary head (Linear)
		Control:1 stationary head
		Erase: 1 full track, 1 audio track
	WOW & FLUTTER	Less than 0.005% (Hi-Fi)
	FREQ. RESPONSE	20-20,000 Hz (Hi-Fi)
DVD	DISC COMPATIBILITY	CD, CD-R, CD-R/W DVD-Video, CD-Digital Audio (5" and 3.5"), MP3 files on CD-ROM
	FREQ. RESPONSE	96/48 kHz Sampling: 4 Hz-22kHz
	S/N RATIO	110 dB
	DYNAMIC RANGE	96 dB
	THD	0.003 %
SYSTEM	POWER REQUIREMENT	120V AC, 60 Hz, 25 watts
	ENVIRONMENT	41-104 F (5-40 C); 10%-75% humidity
	WEIGHT	13.8 lbs.

LIMITED WARRANTY

GOVIDEO DVD+VCR LIMITED WARRANTY

Who Provides the Limited Warranty

During the warranty period, the GoVideo Warranty Administrator will honor DVD+VCR service for 90 days labor, 1 year parts from the original date of consumer purchase. See below for Commercial, Industrial or Educational use coverage. The DVD+VCR remote control is warranted for 90 days from the date of purchase.



Who is Protected

This warranty protects the original consumer owner of this GoVideo product.

What is Covered and How Long

This warranty covers internal operating parts and service/labor to repair or replace covered parts in this GoVideo product for 90 days labor, 1 year parts, from the date of purchase, defined as follows: (1) Original Consumer Retail Purchase; (2) First Rental Purchase Agreement; or (3) First Lease Purchase Agreement (the "Warranty Period"). Labor and replacement parts supplied during the Warranty Period are covered only for the remaining portion of the original Warranty Period. The GoVideo Warranty Administrator shall have no liability for service under this warranty if non-OEM (Original Equipment Manufacturer) replacement parts are used in the repair of your GoVideo product.

What the Owner Must Do If Service is Required

If service under this warranty is required, log onto "www.govideo.com" to determine the nearest authorized GoVideo service center.

Other Warranty Coverage

Commercial, Industrial or Educational use has the same warranty coverage as stated in this warranty.

What are the Exceptions

This warranty does not cover: (1) Normal maintenance service, such as video head cleaning. (2) Damage from misuse, abuse, neglect or accident, natural disasters or Acts of God. (3) Cabinetry, decorative parts, A/C adapters, knobs or buttons. (4) The foreign country use of this product. (5) GoVideo product which has been electronically or mechanically modified in any way or incorporated into other products. (6) Installation and setup service adjustments. (7) Owner instruction. Your Owner's Guide provides information regarding operating instructions and user controls. For additional information, contact your authorized GoVideo dealer.

Go Video is not responsible for any shipping, handling or insurance charges.

This Exclusive Limited Warranty excludes all incidental and consequential damages. Some states do not allow the exclusion of incidental and consequential damages, so the above exclusion may not apply to you.

ALL IMPLIED WARRANTIES, INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE LIMITED IN DURATION TO THE DURATION OF THIS WARRANTY PERIOD. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

This Exclusive Limited Warranty gives you specific legal rights and you may also have other rights which vary from state to state.

GoVideo WARRANTY ADMINISTRATOR

7835 East McClain Drive • Scottsdale, Arizona 85260-1732

GO.VIDEO®