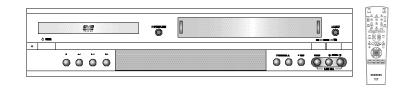


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DVD-V2000

Instruction Manual





Important Safety Instructions

WARNING:

TO PREVENT DAMAGE WHICH MAY RESULT IN FIRE OR ELECTRIC SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

WARNING:

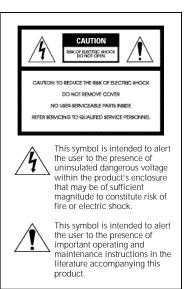
TO AVOID HAZARDOUS EXPOSURE TO INVISIBLE LASER RADIATION, DO NOT OPEN OR REMOVE/DEFEAT LASER TRANSPORT PROTECTIVE HOUSING.

USER/INSTALLER CAUTION:

Your authority to operate this FCC certified equipment could be voided if you make changes or modifications not expressly approved by the manufacturer, who is responsible for compliance with Part 15 FCC rules.

NOTE TO CATV SYSTEM INSTALLER:

This reminder is provided to call the CATV system installer's attention to Article 820-40 of the National Electronic Code 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.



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CAUTION:

To prevent fire, shock hazard, or annoying interference, use only the recommended accessories. To prevent electric shock, do not use this (polarized) plug with an extension cord, receptacle, or other outlet unless the blades can be fully inserted to prevent blade exposure. To reduce the risk of electric shock, do not remove the unit cover or back. There are no serviceable parts inside. Refer servicing to qualified personnel only.

CUIDADO:

Para prevenir incendio, riesgo de choque, o interferencia enfadosa, use solamente los accesorios recomendados. Para prevenir electrochoque, no use este enchufe (polarizado) con un cordón de extensión, toma de corriente, o cualquier otra toma a menos que los dientes puedan ser completamente insertados para prevenir exposición de los dientes. Para reducir el riesgo de descarga eléctrica, no remueva la cubierta o la parte posterior del equipo. Dentro del equipo no hay partes que requieren servicio. Diríjase solamente a personal calificado cuando requiera servicio.

ATTENTION:

Pour éviter les incendis, risque de chocs, ou interférences fâcheuses, employer seulement les accessoires recommandés. Pour éviter les chocs électriques, ne pas employer cette prise (polarisée) avec une rallonge, une prise de courant ou une autre sortie de courant à moins que les lames peuvent être insérées à fond pour l'exposition des lames. Pour réduire les risques de chocs électriques, ne pas retirer le couvercle ou l'arrière du module. Il n'y a pas de pièce utilisable à l'intérieur. Ne faire effectuer l'entretien que par un personnel qualifié.

- 1. Read these instructions.
- 2. Keep these instructions
- 3. Heed all warnings.
- 4. Follow all instructions.
- 5. Do not use this apparatus near water.
- 6. Clean only with dry cloth.
- 7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- Do not install near any heat sources such as radiators, heat registers, or other apparatus (including amplifiers) that produce heat.
- 9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- 10. Protect the power cord from being from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- 11. Only use attachments/accessories specified by the manufacturer.
- 12. Use only with cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a used, caution when moving the cart/apparatus combination to avoid injury from tip-over.
- 13. Unplug this apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
- 14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or been dropped.

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Feature Summary

Disc Type and Characteristics

System Features

- · Complete versatility to play DVD, VCDs, audio CDs, MP3 discs or VHS Tapes.
- Watch a DVD while recording a TV show to the VCR.
- · Auto Setup automatically sets clock and searches for channels.
- Remote controls both DVD and VCR decks.
- Composite, S-Video and Component video outputs for high connectivity and optimum performance.
- RF inputs and outputs for connection to all TVs-new or old.
- English/French/Spanish on-screen programming.

DVD Features

- 10-bit video digital to analog converter and 27MHz advanced digital filter.
- · Playback of 96KHz/24-bit sources.
- DTŚ digital output for DTS-enhanced DVDs.
- · Playback MP3 files from CD-ROM.
- · Continued audio during 2x speed playback.

VCR Features

• Hi-Fi Stereo VCR.

- 4 heads for superior slow motion and stop action.
- Playback of S-VHS tapes at better than standard resolution.
- VISS Index Search/Scan, Zero Return, Blank Search.
- 8-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
- · HD layer of super Audio CD
- · CDGs play audio only, not graphics.

*Ability to play back may depend on recording conditions. • DVD-R CD-RW • DVD+RW, -RW

Unpacking

As you unpack, please check that the following items are included in your DVD-VCR packing case:

- DVD-VCR
- User's Guide (AC68-01816A)
- · RCA cable for Audio/Video connection
- RF (Radio Frequency) Antenna Cable
- Remote Control
- · 1.5V "AA" Batteries 2EA



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

Disc Types (Logos)	Recording Types	Disc Size	Max. Playing Time	Characteristics
DVD	Audio	5"	Single-sided 240 min. Double-sided 480 min.	 DVD contains excellent sound and video due to Dolby Digital and MPEG-2 system. Various screen and audio
	+ Video	31/2"	Single-sided 80 min. Double-sided 160 min.	functions can be easily selected through the on- screen menu.
VIDEO-CD		5"	74 min.	Video with CD sound, VHS
	Audio + Video	31/2"	20 min.	quality & MPEG-1 compression technology.
AUDIO-CD		5"	74 min.	 CD is recorded as a Digital Signal with better audio quality, less
	Audio	31/2"	20 min.	distortion and less deterioration of audio quality over time.

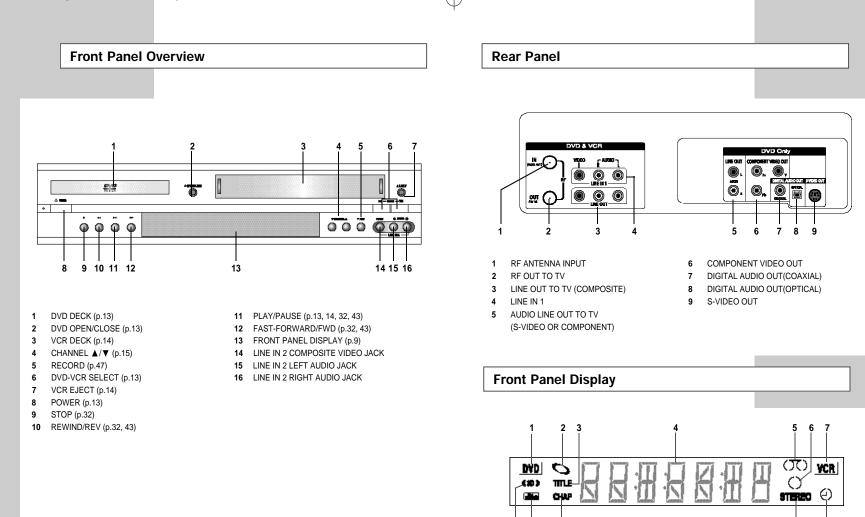


Play Region Number

Both the DVD player and the 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 described on the rear panel of the player.

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1 The DVD Deck is active

8 9

2 A DVD, CD, VCD, or SVCD is loaded

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- 3 The number to the right of the "TITLE" symbol is the current title number
- 4 The time, counter position, time remaining or current deck status is displayed
- 5 VHS tape is inserted
- 6 Recording is in progress (normal and timer)
- 7 The VCR Deck is active
- 8 3D Sound is active

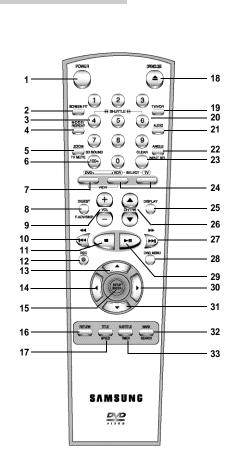
- 9 A DVD with a DTS soundtrack is loaded
- **10** The number to the right of the "CHAP" symbol is the current chapter number

11

12

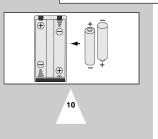
- 11 The Hi-Fi track of a VHS tape is playing (The current TV show or video is broadcast in Stereo)
- 12 A Timer Recording is programmed or in progress. If blinking there is an error. Also displays without the clock hands to indicate that a recording is in progress, and blinks when the VCR is in Pause mode.





1	POWER (p.13)
2	SCREEN FIT (p. 33)
3	SHUTTLE <>> (p.43)
4	MODE (p.40, 41)
	REPEAT (p.37, 38, 43)
5	ZOOM (p.35), TV MUTE (p.11)
6	3D SOUND (p.42), 100+ (p.15)
7	DVD (p.13)
8	DIGEST (p.36) F.ADV/SKIP (p.32, 43)
9	VOLUME +/- (p.11)
10	
	SKIP BACK (p.32, 43)
11	STOP (p.32)
12	
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16	ENTER (p.15) RETURN (p.15)
17	
	SP/SLP (p.48)
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20	
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23	INPUT SEL. (p.46) CLEAR (p.39, 40, 41)
23	
25	
26	
	TRACKING ▲/▼ (p.43)
27	
~~	SKIP NEXT (p.32, 43)
28	
29 30	
30 31	RIGHT (p.15) DOWN (p.15)
32	
	SEARCH (p.45)
33	
	TIMER (p.49)

Insert Remote Control Batteries



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- · Remove the battery cover by pushing down on the thumb tab and sliding the cover.
- · Insert two 1.5V "AA" batteries as shown, paying attention to the correct polarities (+/-).
- When finished, slide the cover until it clicks back into place.

Using the TV Buttons on the Remote Control

Your VCR remote control will work with Samsung televisions and compatible brands.

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

- Switch your television on. 1
- 2 Point the remote control towards the television
- 3 Hold down the TV button and enter the two-figure code corresponding to the brand of your television, by pressing the appropriate numeric buttons.

Codes	Brand	Codes
01, 14, 15, 23	LOEWE	28
02, 16, 22	ZENITH	17
03	LG	06, 08, 18
07, 29	MAGNAVOX	04
09	EMERSON	21
12, 24	SANYO	05, 20
11	DAEWOO	19
10	NOBLEX	25
13	TELEFUNKEN	26
27		
	01, 14, 15, 23 02, 16, 22 03 07, 29 09 12, 24 11 10 13	O1, 14, 15, 23 LOEWE 02, 16, 22 ZENITH 03 LG 07, 29 MAGNAVOX 09 EMERSON 12, 24 SANYO 11 DAEWOO 10 NOBLEX 13 TELEFUNKEN

- <u>Result</u>: If your television is compatible with the remote control, it will switch off. It is now programmed to operate with the remote control.
- ≻ If several codes are indicated for your television brand, try each one in turn 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.

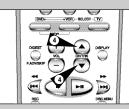
Button	Function
Button	1 diletion
POWER ①	Used to switch the television on and off.
INPUT (2)	Used to select an external source.
VOL + or - 3	Used to adjust the volume of the television.
CH (▲ or ▼) ④	Used to select the required channel.
MUTE (5)	Used to toggle the sound on and off.



 \succ The various functions will not necessarily work on all televisions. If you encounter problems, operate the television directly.





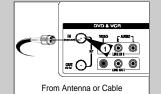


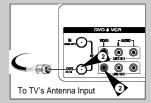




Basic Connections/Auto Setup

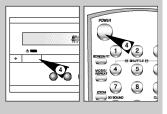
2











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In this section, you will connect the DVD-VCR to your television and run Auto Setup, which automatically searches for channels and sets the player's internal clock. NOTES:

- Advanced Connections are covered in Appendix A.
- Even if you plan to use the S-Video or Component Video Outputs, you MUST connect the DVD-VCR to your television with either the standard RF or the Line Out connection. This enables you to operate the DVD-VCR setup menus.

1 Connect Antenna/Cable to DVD-VCR

Connect the RF antenna cable from your indoor/outdoor antenna or cable wall outlet to the IN (FROM ANT.) jack on the back panel of the DVD-VCR.

Connect DVD-VCR to TV

Choose one of the following methods to connect the DVD-VCR to your TV:

RF Connection Connect the supplied RF antenna cable from the OUT (TO TV) jack on the back panel of the DVD-VCR to your television's Antenna Input

NOTE : Check the channel to connect DVD-VCR to your television's Antenna Input; See page 21.

Line Connection

Connect an RCA-type audio/video cable (red, white, yellow) from the LINE OUTjacks on the back panel of the DVD–VCR to your television's Line In jacks. Use red for right audio, white for left audio, and yellow for video.

NOTE: It is recommended that you use the Line Connection if your TV is equipped with RCA jacks.

3 Plug In DVD-VCR

Connect the DVD-VCR power cord to a standard 120V/60Hz wall outlet. Don't press any buttons on the DVD-VCR or remote during auto setup. "AUTO" blinks while the DVD-VCR runs an auto setup procedure, where it will automatically search for all active channels and set the clock. When Auto setting has been completed, the front panel displays the current time. If Auto Clock set is unable to find a channel to set the clock, you can set the clock manually; See page 18.

4 Turn On DVD-VCR

Press the POWER button on the remote control or on the DVD–VCR's front panel.

Turn On TV

5

Press the POWER button on your TV.

6 Set TV to Channel 3, 4 or Line

Be sure to use the same channel you selected in Step 2. If you used the Line Connection, set your TV to its Line Input.

Deck Control Buttons

The DVD-VCR uses one set of controls to operate both decks. The following buttons are helpful in successfully controlling each deck.

1 POWER Button

Press the POWERbutton 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 INPUT SEL. Button

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

• It is only available when VCR deck is selected.

Basic DVD Playback

Follow these instructions to playback a DVD.

1 Open Disc Drawer

Press the OPEN/CLOSE button on the remote control or front panel to automatically power on the DVD-VCR and open the disc drawer.

2 Insert Disc

Place the disc in the drawer with the label side of the disc facing up. If the disc has two sides, orient the disc with the desired label facing up.

3 Close Disc Drawer

Press the OPEN/CLOSE button on the remote control or front panel to close the disc drawer.

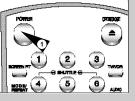
4 Play the DVD

Press the **II** (Play/Pause) button on the remote control or front panel.

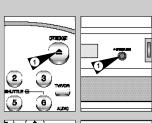
- Many discs will begin playback automatically when the disc drawer closes.
- If the DVD has a disc menu, or more than one title, the disc menu may appear.

5 Additional DVD Options

- For advanced DVD Setup options, see pages 23~30.
- For special DVD Playback features, see pages 32~42.



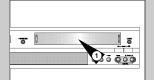




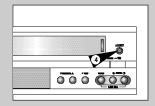


Basic VHS Playback









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To play a videotape, simply insert it in the VHS deck and press the Play button. Tapes without Record Safety Tabs can be set to play automatically when inserted; see page 44.

1 Insert VHS Tape

Insert a standard VHS videotape into the VHS Deck. • Power will turn on automatically when you insert a videotape.

2 Play Tape

Press the ►II (Play/Pause) button on the remote control or front panel. If the tape is missing the Record Safety Tab and Auto Play is turned on, the tape will begin to play automatically, see page 44.

3 Stop Playback

Press the (Stop) button on the remote control or front panel.

4 Eject Tape

Press the OPEN/CLOSE button on the remote control or the EJECT button on the front panel.

5 Additional VCR Options

- For special VCR Playback features, see pages 43~44.
- For VCR Recording features, see pages 46~48.
- For Timer Recording features, see page 49.

Basic TV Tuner Operations

The following buttons are used when watching television via the DVD-VCR's built-in TV tuner.

1 TV/VCR

Press to switch between your TV's tuner and the VCR's internal tuner.

2 Channel Up/Down

Press to change to the next or previous channel.

3 0-9 Buttons

Press to select channels directly.

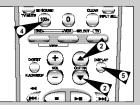
4 100+ Button

Press to select channels 100 and higher. First, press the 100+ button, then press the remaining digits using the 0-9 buttons.

5 Display

Press to display the channel you are watching. • Also works in DVD and VCR mode.





On-Screen Menu Navigation

The on-screen menu system allows you to set all functions for your DVD-VCR. The following buttons are used to open and navigate through the on-screen menu system.

1 SETUP Button

4

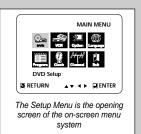
With the DVD in stop mode, press to access the DVD-VCR onscreen menu system.

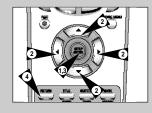
2 Up/Down and Left/Right Moves menu selection cursor up, down, left and right to cycle through menu options

3 ENTERButton

Press to confirm settings in certain menus.

RETURNButton Returns to the last menu viewed or exits the menu system.







Menu Language







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Follow these steps to change the on-screen menu language to English, French or Spanish.

1 Open "SETUP MENU" With the DVD in stop mode, press the SETUP button.

2 Set "Language" Using the Up/Down and Left/Right buttons, move the selection

arrow to "Language/Idioma/Langue," then press ENTERbutton.

3 Set menu Language

Move the selection bar to your desired Language, then press ENTER button.

Manual Clock Set

If Auto Setup was unable to find a local TV station to set the DVD-VCR's internal clock, follow these instructions to set the date/time manually.

NOTE: It is important to set the clock for accurate Timer Recording.

1 Open "SETUP MENU"

With the DVDin stop mode, press the SETUP button.

2 Select "Clock"

Using the up/down and left/right buttons, move the selection cursor to "Clock Set/Adjust," then press ENTERto select.

3 Select "MANUAL"

Move the selection arrow to "MANUAL", then press ENTER to turn this feature "Off."

• The "Set Clock Menu" will change as shown.

4 Set the Clock

Press LEFT/RIGHTto select each of the following options, then press UP/DOWNto set each option:

- Set Hour Set the hour using the up and down buttons.
- Set Minute Set the minute using the up and down buttons.
- Set Month Set the month using the up and down buttons.
- Set Day Set the day using the up and down buttons.
- Set Year Set the year using the up and down buttons.

5 Confirm Settings

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

· Press Return again to exit.





CLC	OCK SET/AD	DJUST
•	Auto Manual	
RETURN		ENTER

CL	OCK SET/	/ADJUST	
TIME 12:00 ^A M	DATE 1/01		TUE
RETURN		AV	4











Tuner Band Setting





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CHANNEL SET	UP
 Ant/Cable: Auto channel memory Channel add/delete 	[Antenna]
RETURN	AT 4>

18

This feature allows you to manually set the DVD-VCR's tuner band to Antenna or Cable, whichever you connected to the Antenna In 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 "SETUP MENU"

With the DVD in stop mode, press the SETUP button.

2 Select "Channel"

Using the up/down and left/right buttons, move the selection cursor to "Channel Setup", then press ENTER to select.

3 Select "Ant/Cable"

Move the selection arrow to "Ant/Cable" then press right 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.

Auto Channel Memory

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

1 Open "SETUP MENU"

With the DVD in stop mode, press the SETUP button.

2 Select "Channel"

Using the up/down and left/right buttons, move the selection cursor to "Channel Setup", then press ENTERto select.

3 Run "Auto channel memory"

Move the selection arrow to "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.





CHAN	CHANNEL SETUP	
Ant/Cable: Auto channel Channel add/		
RETURN	AT ENTE	



Channel Add/Delete

5







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20

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

- Open "SETUP MENU" 1 With the DVD in stop mode, press the SETUP button.
- 2 Select "Channel" Using the up/down and left/right buttons, move the selection cursor to "Channel Setup", then press ENTERto select.

3 Select "Channel add/delete" Move the selection bar to "Channel add/delete," then press ENTER to select.

- 4 Select Channel to add/delete Use the CH ▲/▼ buttons to tune in the channel number you wish to add or remove.
 - Select "CHANNEL ADD/DELETE" Press right to add or press left to remove the channel from your channel list.
 - · Repeat steps 4 and 5 to add or remove additional channels.

RF Output Channel

- 1 Open "SETUP MENU" With the DVD in stop mode, press the SETUP button.
- 2 Select "Option" Using the up/down and left/right buttons, move the selection cursor to "Option Setup," then press ENTER to select.
- 3 Select "RF Output Channel" Move the selection bar to "RF Output Channel", then press right to change.

Change "RF Output Channel" 4 Press Return to change. A message will appear on your TV. Then press ENTER to change.

5 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.





Front Panel Dimmer

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

1 Open "SETUP MENU"

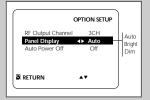
With the DVD in stop mode, press the SETUP button.

2 Select "Option"

Using the up/down and left/right buttons, move the selection cursor to "Option Setup," then press ENTER to select.

- 3 Set "Panel Display" Move the selection bar to "Panel Display," then press right to select from the following options:
 - · Auto Front Panel Display will dim automatically during power off.
 - Bright Front Panel Display will be bright all the time.
 Dim Front Panel Display will be dim all the time.







Auto Power Off



	OPTION SETUP	
RF Output Channe Panel Display Auto Power Off	Auto	Off 1Hr 2Hr
	AT	ļ

22

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Open "SETUP MENU" With the DVD in stop mode, press the SETUP button.

2 Select "Option"

1

Using the up/down and left/right buttons, move the selection cursor to "Option Setup," then press ENTERto select.

3 Select "Auto Power Off"

Move the selection bar to "Option Setup", then press right to select from following options:

- Off Auto power off is disabled.
- 1Hr DVD-VCR will auto shut off 1 hour after the last button is pressed.
- 2Hr DVD-VCR will auto shut off 2 hours after the last button is pressed.

Disc Menu Language

Follow these steps to choose your preferred language for DVD disc menus. The DVD-VCR will automatically default to the language you choose if it is available on a given DVD.

- 1 Open "SETUP MENU" With the DVD in stop mode, press the SETUP button.
- 2 Select "DVD" Using the up/down and left/right buttons, move the selection cursor to "DVD Setup," then press ENTERto select.
- 3 Select "Disc Menu" Move the selection bar to "Disc Menu," then press ENTER to select.
- 4 Set "Disc Menu Language" Preference Move the selection bar to your preferred language for DVD disc menus, then press ENTERto select.







Audio Language

Follow these steps to choose your preferred language for DVD audio soundtracks. The DVD-VCR will automatically default to the language you choose if it is available on a given DVD.

- 1 Open "SETUP MENU" With the DVD in stop mode, press the SETUP button.
- 2 Select "DVD" Using the up/down and left/right buttons, move the selection cursor to "DVD Setup," then press ENTERto select.
- 3 Select "Audio" Move the selection bar to "Audio," then press ENTERto select.
- 4 Set "Audio Language" Preference Move the selection bar to your preferred language for DVD audio soundtracks, then press ENTER to select.





Subtitle Language



	DVD SETUP
Disc Menu	English
Audio	English
Subtitle	Automatic
Parental	Unlocked 🖬
Audio Options	
Display Options	



24

Follow these steps to choose your preferred language for DVD subtitles. The DVD-VCR will automatically default to the language you choose if it is available on a given DVD.

1 Open "SETUP MENU"

With the DVD in stop mode, press the SETUP button.

2 Select "DVD"

Using the up/down and left/right buttons, move the selection cursor to "DVD Setup," then press ENTERto select.

3 Select "Subtitle"

Move the selection bar to "Subtitle," then press ENTER to select.

4 Set "Subtitle Language" Preference

Move the selection bar to your preferred language for DVD subtitles, then press ENTERto select.

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 "SETUP MENU"

With the DVD in stop mode, press the SETUP button.

2 Select "DVD"

Using the up/down and left/right buttons, move the selection cursor to "DVD Setup," then press ENTERto select.

3 Select "Parental"

Move the selection bar to "Parental," then press ENTERto select.

4 Select "Use Password"

Move the selection arrow to "Use Password," then press the right button to select from the following options:

- No Indicates that no password is required to view any DVD disc or to change Rating Control options. No additional Rating Control settings are necessary.
- Yes Indicates that a password is required to view some DVD discs and to view Rating Control options. 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.

5 Enter Password

Enter a 4-digit password using the 0–9 buttons on the remote control.

 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"

Move the selection bar to "Rating Level," then press ENTER to select.

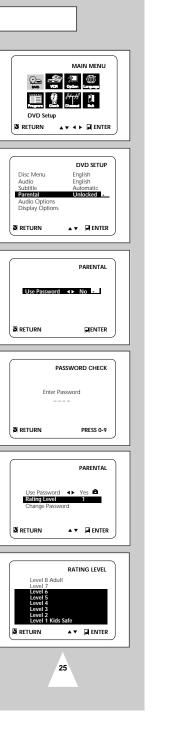
7 Change Rating Level

Use the up/down to select one of the following ratings:

- Level 8 Adult
 Level 4
- Level 7
 Level 3
- Level 6
 Level 2
- Level 5
 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 ENTERto 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 F.F 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 the "Auto Setup" mode. (See page 12)



Digital Output



 DVD SETUP

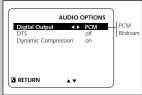
 Disc Menu
 English

 Audio
 English

 Subtille
 Automatic

 Parental
 Unlocked

 Audio Options
 Display Options



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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 "SETUP MENU"

With the DVD in stop mode, press the SETUP button.

2 Select "DVD" Using the up/down and left/right buttons, move the selection cursor to "DVD Setup," then press ENTER to select.

3 Select "Audio Options" Move the selection bar to "Audio Options," then press ENTERto select.

4 Set "Digital Output"

Move the selection bar to "Digital Output" then press the right button to select from the following options:

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

DTS

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 "SETUP MENU" With the DVD in stop mode, press the SETUP button.

2 Select "DVD"

Using the up/down and left/right buttons, move the selection cursor to "DVD Setup," then press ENTERto select.

3 Select "Audio Options"

Move the selection bar to "Audio Options," then press ENTERto select.

4 Set "DTS"

Move the selection bar to "DTS," then press right to select from the following options:

- off To use your DVD/TV with an A/V receiver NOT equipped with a DTS decoder.
- on To use your DVD/TV with an A/V receiver equipped with a DTS decoder.





Digital Output DTS	PCM Off Off
Dynamic Compressio	in on On
	.•



Dynamic Compression



DVD SETUP Disc Menu English Audio English Subitile Automatic Parental Unlocked C Audio Options Display Options Si RETURN A C ENTER

	AUDIO OPTIONS	
Digital Output DTS	PCM off	
Dynamic Comp	ression < > on	

Dynamic Compression constrains the dynamic range, i.e. the difference between the quietest and loudest passages of a DVD soundtrack. This enables you to limit loud noises, such as explosions, or raise the volume of quiet passages, such as whispering, while watching a movie. This is convenient for viewing movies late at night.

1 Open "SETUP MENU"

With the DVD in stop mode, press the SETUP button.

2 Select "DVD"

Using the up/down and left/right buttons, move the selection cursor to "DVD Setup," then press ENTERto select.

3 Select "Audio Options"

Move the selection bar to "Audio Options," then press ENTERto select.

4 Set "Dynamic Compression"

Move the selection bar to "Dynamic Compression," then press right to select from the following options:

- On The total dynamic range of the DVD soundtrack will be compressed, so quiet passages will be louder and loud passages will be softer.
- Off The original dynamic range will be preserved.

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 "SETUP MENU"

With the DVD in stop mode, press the SETUP button.

2 Select "DVD"

Using the up/down and left/right buttons, move the selection cursor to "DVD Setup." then press ENTERto select.

3 Set "Display Options"

Move the selection bar to "Display Options", then press ENTERto select.

4 Set "TV Aspect"

Move the selection arrow to "TV Aspect", then press ENTERto select from the following options:

- 4:3 Letterbox This method displays the full width of the widescreen movie on a standard 4:3 television. As a result, black bars will appear at the top and bottom of the screen.
- 4:3 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) wide screen movies to fit a standard 4:3 television screen.
- 16:9 Widescreen This method allows you to view the full 16:9 picture on a widescreen television.













Display Optio

A V ENTER

S-Video

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DISPLAY OPTION

Wide

Alt Video Out

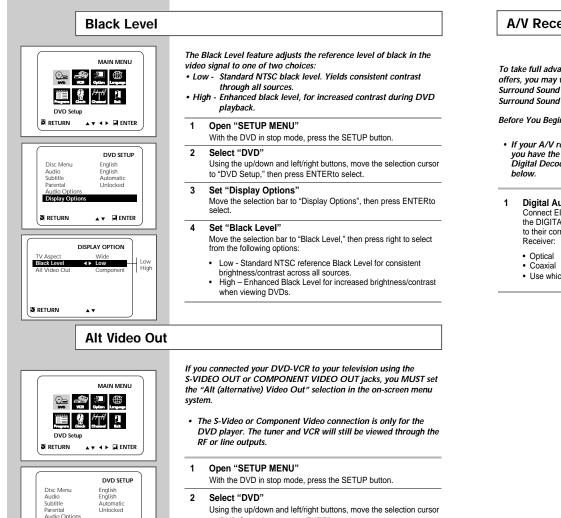
A 7

30

RETURN

TV Aspect

RETURN



to "DVD Setup," then press ENTERto select.

3 Set "Display Options" Move the selection bar to "Display Options", then press ENTERto select.

4 Select "Alt Video Out"

Move the selection bar to "Alt Video Out," then press right to select from the following options:

- · S-Video Indicates that you are using the S-VIDEO OUTjack on the rear panel to connect to your TV.
- · Component Indicates that you are using the COMPONENT VIDEO OUTjacks on the rear panel to connect to your TV.

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.

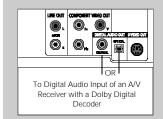
Before You Begin ...

• 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

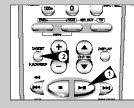
Digital Audio Out

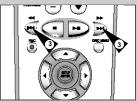
Connect EITHER an optical cable OR a digital coaxial cable from the DIGITAL AUDIO OUTjacks on the back panel of the DVD-VCR to their corresponding Digital Audio Input jacks on your A/V

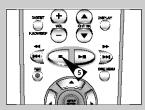
- · Use whichever connection is available on your A/V Receiver.



Special Playback Features







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During DVD/CD playback you can select from the following special playback options. To resume normal playback, press the ►II (Play/Pause) button.

Still

1

Press the ►II (Play/Pause) button on the remote control during playback.

- The picture will pause and the audio will mute.
- To resume playback, press the ►II (Play/Pause) 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 >II (Play/Pause) 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 Skip Forward/Back (▶/ ◄) buttons on the remote control or front panel to jump forward and backward through disc chapters/tracks.

- Skip Forward will jump to the next chapter/track.
- Skip Back will jump to the beginning of the current chapter/track.
 Press Skip Back 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 Forward/Back $(\blacktriangleright/ \triangleleft)$ buttons on the remote control or front panel to visually search forward/backward at 2X - 4X - 8X - 16X - 32X - 128X speed. Press $\blacktriangleright II$ (Play/Pause) button to resume normal speed.

4 Slow Motion

During playback, press the ►II (Play/Pause) button to Still the image. Then use the Search Forward (►) to play in slow motion at variable speeds.

- Each press increases the slow motion speed playback to 1/8, 1/4 or 1/2 normal speed.
- Audio is muted during slow motion playback.
- Front Panel Slow Motion Buttons Press and hold the Forward buttons on the front panel to activate slow motion playback.
 Press the ►II (Play/Pause) button to resume normal playback.

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 ►II (Play/Pause) button.

Disc Menu Navigation

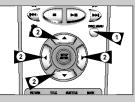
Many DVDs feature their own menu systems, where you can select Titles, Chapters, Audio Tracks, Subtitles, and special disc features, such as movie trailers, and information on the cast. Use these buttons to make selections in the Disc menus.

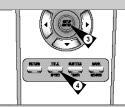
1 DISC MENUButton Press to access the DVD's Disc menu, if applicable.

Press ▲, ▼ or ◀, ▶ to navigate through DVD's Disc menu options.
Press up, down, left and right to highlight menu choices.

3 ENTERButton Press to make your selections in the Disc menu.

4 **TITLEButton** Press to access the DVD's Title menu, if applicable.





Screen Fit Playback

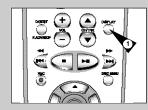
1 SCREEN FITButton

- During play, press SCREEN FIT button on the remote control.
 Allows you to eliminate the black bars in the top and bottom of the screen when a movie is playing in the Widescreen format (16:9).
- Screen Fit will not work when the Zoom mode is active. (you can not remove the black bars on the screen) However, Zoom mode will work when Screen Fit is active.
- Various aspect ratios are available only in multiple screen format discs.
 - This function does not work when a DVD has been recorded in a multi-camera angle format.
 - On some DVDs, the black bars cannot be eliminated due to their aspect ratio.





Title/Chapter/Time Selection



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G T: et

- C:@2 ◆

e:01:00

() ING 5.1CH

ОМО Ст. 61 () C:02

() e:01:00

🕞 👔 1940 S.1CH

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If you press the DISPLAY button during DVD playback, you can view the current Title, Chapter/Track, and counter position. You can also use this screen as shortcut to select any Title, Chapter/Track, or counter position on the disc.

View DVD/CD Display

Press the DISPLAY button on the remote control during DVD/CD playback.

2 Select Title

1

Press the up/down and left/right buttons to select Title, then press ENTERto change among all available titles on the disc.

• The "TITLE" icon will light on the Front Panel Display, followed by the current title number, hours, minutes, and seconds.

Select Chapter or Track 3

Press the up/down and left/right buttons to select Chapter or Track, then press ENTERto change among all available Chapters/Tracks on the disc.

• The "CHAP" icon will light on the Front Panel Display, followed by the current title number, hours, minutes, and seconds.

4 Select Counter Position

Press the up/down and left/right buttons to select the counter position indicator, then use the number buttons (0-9) to enter the desired counter position in the format HH:MM:SS (H = Hours, M = Minutes, S = Seconds).

Then press ENTERto enter the desired counter position.

Zoom

You can zoom in at 2 or 4 times the normal magnification while watching a DVD.

Open Zoom Magnifying Glass 1 During Playback or STILL mode, press the ZOOM button to display the "Magnifying Glass icon" on the screen.

2 Position Magnifying Glass Use the \blacktriangle , \blacktriangledown , \blacklozenge , \blacklozenge buttons to move the magnifying glass to any position on the screen you want to zoom.

3 Zoom In

Press the ENTER button repeatedly to zoom in at 2X - 4X - 2X and normal magnification.

Angle



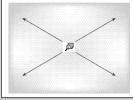
Some DVDs allow you to view the same scene from different perspectives, or angles, while watching a movie. Press the ANGLE button to activate this feature.

- 1 Check for Angle Marker If multiple Angles are available on the DVD, the Angle mark will appear on the screen during playback.
- 2 View Angle Options If the Angle mark is present, press the ANGLE button to view the Angle Selection menu.
- Select Screen Angle 3 Press the up/down buttons to select one of the available screen angles.

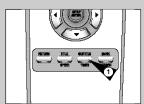


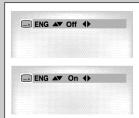






Subtitle





Many DVDs provide subtitles in one or more languages. The SUBTITLE button provides a shortcut to view and select these options.

- 1 Open Subtitle Menu During playback, press the SUBTITLE button.
- 2 Set Subtitle Language Press the up/down buttons to select among all available subtitle languages.
 - Subtitle languages are often represented by abbreviations.

3 Activate Subtitles

- Press the left/right buttons to turn subtitles On or Off.
- The default subtitle setting is Off.
 Press the ENTER button to confirm your selection.

Digest Playback



03

06

09

12

DIGEST

01

07

DIGEST

10

13

08

11

36

Skip button

¢

1 DIGEST Button

- During playback, press the DIGEST button.
 - You'll see the 9 individual windows representing each of the chapters on the TV screen.
 - When each window is displayed, the first 3 seconds of the chapter will be played.

2 Set DIGEST

>

Press the up/down buttons and left/right buttons or NUMBER button to select the window you'd like to see, and press ENTER.

- - You can start playback of the DVD player from the desired chapter.
 - 'DIGEST' may not operate depending on the disc in use.

A-B Repeat

The A-B Repeat function allows you to repeat any segment of a DVD or CD. Simply mark the beginning point (A) and the ending point (B) of the segment you want to review.

- Select A-B Repeat Function In Play mode, press the REPEAT button, then press left/right to select A-B Repeat.
 - "A-" will highlight when A-B Repeat is selected.

NOTE: If you are playing a CD, the menu will display "Track" in place of "Chapter"

2 Mark the Starting Point

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

• "B" will highlight after Point A is selected. NOTE: The minimum AB Repeat time is 5 seconds.

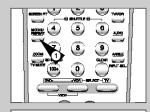
3 Mark the Ending Point

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

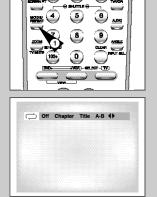
Press the REPEAT button to open the Repeat Menu, press left/right to highlight "Off," then press the ENTER button.







Repeat Chapter/Title



You can repeat a single chapter, or repeat a complete title.

- 1 Open Repeat Menu In Play mode, press the REPEAT button to open the Repeat menu.
 - The current Repeat Mode will highlighted.
- Select "Chapter" Press the left/right buttons to select "Chapter".
 "Chapter" will highlight when Chapter Repeat is selected.
- 3 Repeat Chapter Press the ENTER button to repeat the current chapter/track.
- 4 Select "Title" Press the left/right buttons to select "Title".
 - "Title" will highlight when Title Repeat is selected.
- 5 Repeat Title Press the ENTER button to repeat the title.

Audio



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Many DVDs provide multiple language and audio setup options, such as Dolby Digital 5.1, Dolby Pro Logic, or LPCM 2 Channel audio. The AUDIO button provides a shortcut to view and select among all available options for a given disc.

1 Open the Audio Menu During playback, press the AUDIO button on the remote control.

Select DVD Audio Track Press the up/down buttons to select the desired language/audio setup on the DVD.

 Languages are represented by abbreviations; i.e. "ESP" for "español."

Bookmarks

You can insert up to three Bookmarks on your DVDs, so you can jump quickly to your favorite scene or song.

- 1 Open Bookmark Menu During playback, press the MARK button on the remote control. The "Mark" header will appear on the screen.
- 2 Select Bookmark Placeholder Press the left/right buttons to move to one of the three bookmark placeholders (- - -).

• The selected placeholder will highlight.

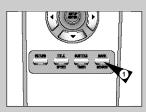
3 Set the Bookmark

Play the DVD to the scene you want to bookmark, then press the ENTER button. The placeholder will change to a number (1, 2 or 3).

- · You can continue setting up to three bookmarks.
- When finished, press the MARK button to exit.
- Depending on the disc, the bookmark function may not work.

4 Play Bookmark

- During playback, press the MARK button on the remote control.
- Press the left/right 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.







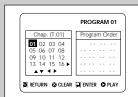


Programmed Playback

1

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	PROGRAM 01
Chap. (T:01)	Program Orde
01 02 03 04	01
05 06 07 08	
09 10 11 12	
13 14 15 16 ►	
AV 4 >	

Programmed Playback lets you set a custom order for playback of chapters/tracks on a DVD or CD.

Open Playback Mode Menu While in Stop mode, press the MODE button.

Select "PROGRAM" Using the left/right buttons, move the selection bar to "PROGRAM" then press ENTERto select.

Select Chapter/Track 3

Press the up/down and left/right buttons to select the first chapter/track in your revised playback list, then press the ENTER button.

4 Program Playback Order

Use the up/down and left/right buttons to select the remaining chapters/tracks, pressing Enter after each.

· Press the CLEAR button to change selections.

5 Play Revised Order

Press the **II** (Play/Pause) button. The disc will play back in the custom programmed order.

· While in playback mode, press the CLEAR button on the remote control to cancel Programmed Play.

Random Playback

DVD Random Playback lets the DVD-VCR set a random order for playback of chapters/tracks on a DVD or CD.

Open Playback Mode Menu 1

In Stop mode, press the MODE button.

2 Select "RANDOM"

Using the left/right buttons, move the selection arrow to "Random Play," then press ENTER to select.

· The disc will playback automatically in random order.

3 Cancel Random Play Press the CLEAR button on the remote control to cancel Random Play.

MP3 Playback

MP3 is a popular music format which allows you to compress music files up to 1/12 of their original size while retaining near CD quality sound. Your DVD-VCR can playback MP3 files burned onto a CD-R disc.

1 Insert Disc

Insert a CD-R with MP3 files into the DVD deck.

• The MP3 main menu will appear after a few seconds and the first song on the disc will begin playing.

2 Select Folder

Press the up/down buttons to select the folder on the CD-R which contains the MP3 files you want to hear, then press Enter to select.

- · If there are more than 8 folders on the disc, press RETURN to view additional folders.
- If there are no folders on the CD-R, skip to Step 3.

3 Select MP3 File

Press the up/down buttons to select the desired MP3 file.

- · If there are more than 8 MP3 files in the selected folder, press the left/right buttons to view additional MP3 files.
- File names are truncated to eight characters: the first six characters of the song, plus an asterisk (*), then a number.
- · Press the Return button to back up and select another folder.

Play MP3 File 4

Press the ENTER button on the remote control to play the selected song.

· While the song is playing, you can use the up/down buttons to browse through other folders.

5 Stop MP3 Selection

Press the ■ (Stop) button on the remote control to stop playback.

- * To ensure proper playback of discs burned from MP3 files, make sure
- the files have been recorded at a bit rate of at least 128 kbps. * If there are any gaps (blank data) on multi-session discs, you may
- experience playback problems.
- On discs that are recorded with a Variable Bit Rate(VBR), e.g. from 32 to 320 kbps, the sound may cut in and out.



PROGRAM

🔺 🔻 📮 ENTER

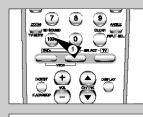
RETURN







3D Sound



42

🚳 Off 🖛

3D Audio is an enhanced audio mode that creates the illusion of Surround Sound with only two speakers.

Open 3D Sound Menu

During playback of a DVD, press the 3D SOUND button on the remote control.

2 Set 3D Sound

1

Press the up/down buttons to set "3D Sound" On or Off, then press the 3D SOUND button to confirm your selection.

Special VCR Playback Features

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 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 SKIP/F.ADV to advance to the next frame.

3 Cue/Review

- From Play mode, press F.Forward () or Rewind (↔) 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 Skip/F.ADV to cue ahead exactly 30 seconds. Press Skip repeatedly up to 4 times to cue ahead 2 minutes.

5 Repeat

From Play mode, press Repeat to review the last 5 seconds of tape (SP mode).

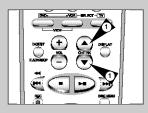
6 Shuttle

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 TRK button will automatically align the recorded tracks with the playback heads to solve this problem. You may also set tracking manually.

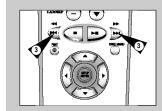
 Adjust Tracking Manually During playback, press the TRK ▲ or TRK ▼ buttons to move the white lines out of the picture.



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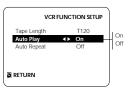
Press the DISPLAY button to see the current status of the VCR deck, as well as the tape counter position and record speed.



Auto Play







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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 the "SETUP MENU" With the DVD in stop mode, press the SETUP button.

2 Select "VCR"

Using the up/down and left/right buttons, move the selection arrow to "VCR Function Setup," then press ENTER to select.

3 Select "Auto Play"

Move the selection arrow to "Auto Play," then press right to select from the following options:

 On - The VCR will automatically begin playing a video tape when it is inserted, as long as the safety tab of the cassette has been removed.

Off - Auto play is disabled.

Tape Length

4

Press the left button to select the video cassette length. This information is usually printed on the tape box. The menu cycles through: T120, T160 or T180. Once the type of cassette is set, the VCR can display the amount of time remaining on the tape when you press the DISPLAY button.

5 Auto Repeat

In the VCR FUNCTION SET UP " Auto Repeat" sets the VCR to play a tape repeatedly [unless a tape control is activated (stop, fast forward or rewind)].

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

Press the SEARCH button to display the search screen in the stop mode. When a program is recorded, the starting point is given an Index mark for easy location. However, the VHS Index Search System (VISS) cannot 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, then start recording each program. Pause has no effect on index marks.

1 Scan and play

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

- Press right arrow for forward scan or left arrow for reverse scan.
- The display will show "Scan and Play".
- When an index mark is found, the VCR plays for about five seconds.
- Press the PLAY button to view that program.
 If you don't press PLAY, the VCR automatically searches for the next index, or until the end of the tape is reached.

2 Go to 0:00:00 stop

Use this feature when you want to search for the 0:00:00 counter position on a cassette. Press the CLEAR button at the point on the tape where you want to set the counter to 0:00:00. Later, while a cassette is stopped, press up arrow button. The VCR will rewind or fast forward, searching for the 0:00:00 counter position, and then automatically stop at that position.

3 End search

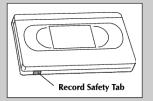
Use this feature when you want to search for a blank position to record a program on a cassette. While a cassette is stopped, press down arrow button. The VCR will fast forward, searching for a blank position, and then automatically stop at that position. If the VCR reaches the end of the tape during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



Basic Recording

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46



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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 4 hours by pressing the REC button repeatedly; see page 48.

NOTE: Be sure you 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 or 4.

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 49.

2 Select a Channel to Record

Use the 0-9 buttons or the Channel Up/Down arrow buttons to select the desired channel, or press the INPUT SEL 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.

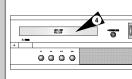
 \succ Recording from the DVD player to the VCR is not possible.

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

- Pause/Resume Recording 1 Press the **II** (Play/Pause) button. Press REC again to resume.
- 2 Stop Recording Press the STOP button.
- Watch a Different Channel 3 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 Play. The output will automatically change to the DVD.
- 5 Add Recording Time See One-Touch Recording (OTR) on the next page.





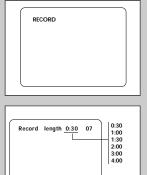


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Special Recording Features

One-Touch Recording (OTR)



One-Touch Recording (OTR) allows you to add recording time in 30-minute increments up to 4 hours at the touch of a button.

1 Start Recording Follow the instructions on page 46 to begin recording.

2 Activate OTR

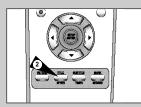
While in Record mode, press the REC button again to activate One-Touch Recording (OTR).

 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 time has elapsed.

Record Speed



48

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 46.

2 Set Record Speed

Press the SPEED 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

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

How to Set a Timer Recording

Insert a blank tape with a Record Safety Tab into the VCR deck. The Timer Recording Feature allows you to program up to 8 events at a time to record up to a month in advance. Set the TV to channel 3 or 4.

Before You Begin ...

- Power on the DVD-VCR
- Power on the TV

1 Open "SETUP MENU"

With the DVD in stop mode, press the SETUP button or press the TIMER button.

2 Select "Program"

Using the up/down and left/right buttons, move the selection cursor to "Set Timer Recording," then press ENTERto select.

3 Select Channel Number

Press rightand up/down buttonsto set the channel. Press the right button to move to the next setting.

4 Set "Time/Date/Speed"

Repeat step 3 to set start time, end time, date and record speed. Date can be set for one time, daily or weekly recording. See below.

5 Save "Timer Recording"

Press the RETURN button to complete programming of the timer recording. Stop the VCR or turn the power off. The timer indicator comes on the VCR. The VCR will automatically turn on and begin recording at the time you set. To stop a timer recording, press the POWERbutton or STOP button on the VCR.

6 Auto Speed Select

If you are not sure the tape is long enough for timer program recording in the SP tape speed, set the recording tape speed to "AUTO". Recording starts in the SP tape speed. If the tape length is not long enough, the tape speed automatically changes from SP to SLP.

7 Daily/Weekly Date Programming

Weekly [SUN'S-SAT'S]: You can record TV programs on the same channel at the same time every week. Daily [MO \blacktriangleright FR] : You can record TV programs on the same channel at the same time every day Monday through Friday.



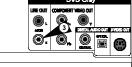
СН	START	END	DATE	SPD
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S-Video/Component Video Connections (for DVD)





on Your TV



To Left/Right Audio Inputs on Your TV

50

The S-Video or Component Video connection is only for the DVD player. The tuner and VCR will still be viewed through the RF or line inputs.

You must follow the "Alt Video Out" instructions on page 31 to activate your alternative (S-Video, Component) video selection. You can choose EITHER S-Video OR Component, but NOT both. If your television is equipped with S-Video or Component Video inputs, you can enjoy superior video quality when watching DVDs with your DVD-VCR.

1 Connect S-VIDEO OUTto TV

Connect an S-Video cable from the S-VIDEO OUTon the back panel of the DVD-VCR to the S-Video Input on your television.

2 Connect Component Video Out to TV

Connect a component video cable from the COMPONENT VIDEO OUT(Y, Pb, Pr) on the back panel of the DVD-VCR to the Component Video Input on your television.

3 Connect Audio Out (DVD only)

Connect RCA audio cables from the Left/Right Line Out jacks on the back panel of the DVD/VCR to the Left/Right Audio Line In jacks on your television.

 You must use these Line Out jacks when connecting the DVD-VCR to your TV with the S-Video or Component Video Output.
 Please refer to "Alt Video Out" on page 31 to activate your connection.

Stereo Connections

You can enjoy stereo sound when watching movies and TV shows by connecting your DVD-VCR to your home stereo system or stereo TV.

1 Connect DVD-VCR to Stereo

Connect RCA cables from the Line Out Left & Right Audio jacks on the back panel of the DVD-VCR to the Auxiliary Inputs on your stereo receiver. If you are using a stereo television, connect the Video Output as well.

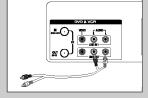
2 Set Stereo to Auxiliary Mode

Set your stereo receiver or television to "Aux" or "Tape," whichever selects the line input for your particular device.

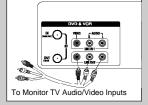
3 Play a Tape

Insert a DVD or Hi-Fi stereo videotape in your system and adjust the volume on your stereo receiver or television. You should hear the audio through your stereo speakers.

 If you still do not hear stereo sound after inserting Hi-Fi stereo video tape, press the Audio button until "Hi-Fi" appears on the on-screen display.



Monitor TV Connections





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Monitor-style televisions offer improved sound and picture 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 monitor television 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
- Laser Disc Player
- DVD 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

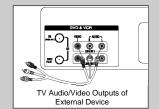
Play your external device, then press the Input Sel. button until the playback from LINE1 (rear panel inputs) or LINE2 (front panel inputs) appears on your TV screen.

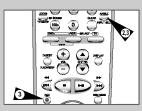
3 Record Device

First, play your external device. Next, press the Input Sel. 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.





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Technical Specifications

	AUDIO	2 Stereo audio inputs, RCA Connector, -8dbm, 47K , front and rear		
Inputs	VIDEO	2 Composite video inputs, RCA Connector, 75 , 1Vp-p		
	RF	Antenna or CATV Input, F-Connector, 75		
	AUDIO	1 Stereo audio outputs, RCA Connector, -8dbm, 1.5K		
	AUDIO (DVD only)	2 Digital audio outputs (1 optical, 1 coaxial) 1 Stereo audio outputs		
	VIDEO	1 Composite video output, RCA Connector, 75 , 1Vp-p		
Outputs	VIDEO (DVD only)	1 S-Video output, S-Connector, 75 , Y=1.0Vp-p, C=0.286Vp-p		
		1 Component video output, 75 , Y=1.0Vp-p, Pb=0.7Vp-p, Pr=0.7Vp-p		
	RF	Channel 3 or 4		
VCR	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"), CD-Video, MP 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 %		
	POWER REQUIREMENT	120V AC, 60 Hz, 25 watts		
SYSTEM	ENVIRONMENT	41-104 F (5-40 C); 10%-75% humidity		
	WEIGHT	13.8 lbs.		



Samsung Limited Warranty

Samsung Electronics Canada Inc. (SECA), warrants that this product is free from defective material and workmanship.

SECA further warrants that if this product fails to operate properly within the specified warranty period and the failure is due to improper workmanship or defective material SECA will repair or replace the product at its option.

All warranty repairs must be performed by a SECA authorized service centre. (The name and address of the location nearest you can be obtained by calling toll free **1-800-268-1620** or visiting our web site at **www.samsung.ca**)

Labour	Parts
one (1) year (carry-in)	one (1) year

On carry-in models, transportation to and from the service centre is the customer's responsibility.

The original dated sales receipt must be retained by the customer and is the only acceptable proof of purchase. It must be presented to the authorized service centre at the time service is requested.

Exclusions

This warranty does not cover damage due to accident, fire flood and/or other acts of God; misuse, incorrect line voltage, improper installation, improper or unauthorized repairs, commercial use, or damage that occurs in shipping. Exterior and interior finish, lamps and glass are not covered under this warranty. Customer adjustments which are explained in the instruction manual are not covered under the terms of this warranty. This warranty will automatically be voided for any unit found with a missing or altered serial number. This warranty is valid only on products purchased and used in Canada. ¢

SAMSUNG ELECTRONICS CANADA, INC.

HEADQUARTERS

SAMSUNG ELECTRONICS CANADA, INC. 7037 FINANCIAL DRIVE MISSISSAUGA, ONTARIO L5N 6R3 CANADA MADE IN KOREA TEL: 1-905-542-3535 www.samsung.ca

CUSTOMER SERVICE 7037 Financial Drive Mississauga, Ontario L5N 6R3 Canada 1-800-SAMSUNG (1-800-726-7864)



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