Using the Markers

(VR mode)

1 Press the **MARKER** button during playback.

2 Press the **ENTER** button when the desired scene appears.

- The number 01 is displayed and the scene is memorized.

3 Press the ◀ ▶ button to move to the next position.

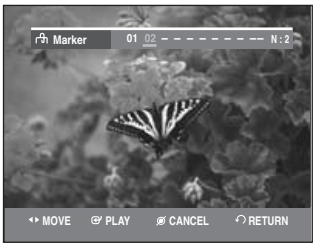
4 Press the **ENTER** button again when the desired scene appears.

- The number 02 is displayed and the scene is memorized.
- DVD-RAM or DVD-RW (VR Mode) discs have the Marker function instead of the Bookmark function. The Marker function allows you to mark up to 99 scenes. Since the scenes may be displayed as many different pages, numbering is necessary. If a disc in use is encoded with Disc Protect, Markers cannot be set or deleted. Only playback is available.

Playing back a Marker

1 Press the **MARKER** button during playback.

2 Press the ◀ ▶ buttons to select a marked scene.



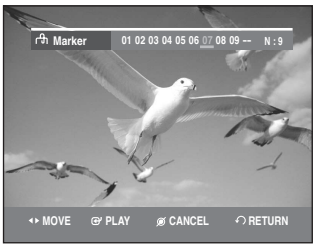
3 Press the **ENTER** or **▶II** button to start playing from the selected scene.

- If you press the **NEXT SKIP** (**▶▶I**)button or the **PREVIOUS SKIP**(**I◀◀**)button in marker mode, and the next or current marked point plays for shorter than three seconds, playback starts from the previous marked point.

Clearing a Marker

1 Press the **MARKER** button during playback.

2 Press the ◀ ▶ buttons to select a marked scene. Press the **CANCEL** button to delete the selected mark.



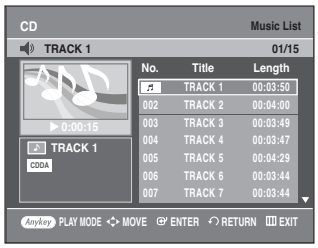
- When a marker is cleared while DVD-RAM/ DVD-RW(VR mode) is playing, marker numbers will change. For example, if the 7th marker is cleared after ten markers are registered, the marker numbers after the eighth will automatically move ahead by one and the 8th marker becomes the 7th.

Playing back an Audio CD (CD-DA)

Each disc has a variety of menu functions available.

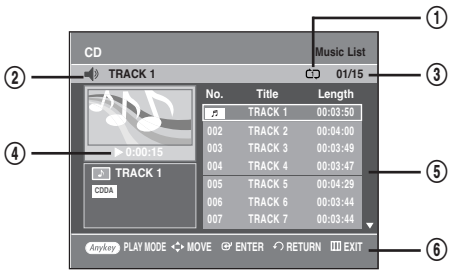
Playing an Audio CD (CD-DA)

1 Insert an Audio CD (CD-DA) into the disc tray.
- The Audio CD menu appears and the tracks (songs) are played automatically.



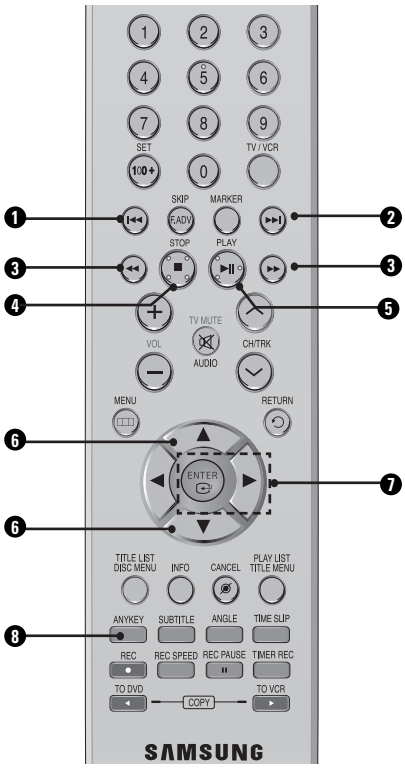
2 Press the ▲▼ buttons to select the track (song) to start playback from, and then press the **ENTER** button.

Audio CD(CD-DA) Screen Elements



1. **Play mode icon.**
2. **Current track (song)**: Displays the number of the track currently being played.
3. Displays the current play index and total track number.
4. This shows the operating state of a disc and a playback time corresponding to a portion that is currently played.
5. Displays the track list (song list) and the playing time of each track.
6. Button display

Buttons on the Remote Control used for CD playback



1. **I◀◀ button:** Returns to the beginning of the current track when pressed during playback. If pressed again, your DVD Recorder & VCR moves to and plays the previous track.
   If you press this button within three seconds after playback starts, the previous track will be played.
   If you press this button after three seconds, the current track will be replayed from the beginning.
2. **▶▶I button:** Plays the next track.
3. **Press the (◀◀ /▶▶) button:** Fast Play (X2, X4, X8)
4. **■ :** Stops a track(song).
5. **▶II :** Plays a track(song) or pauses playback.
6. **▲▼:** Selects a track (song).
7. **▶, ENTER button:** Plays the selected track (song).
8. **ANYKEY :** To display the play mode window. (Repeat or Play Option).

Playing back an MP3 Disc

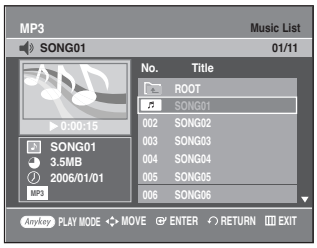
Playing an MP3 Disc

1 Insert an MP3 disc into the disc tray.

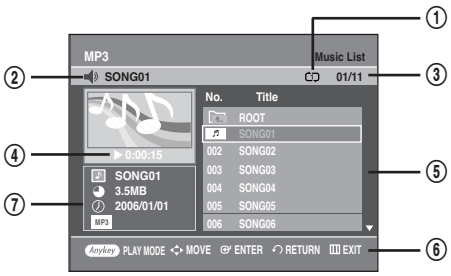
2 Press the ▲▼ buttons to select the **Disc Navigation**, and then press the **ENTER** or ▶ button.

3 Press the ▲▼ buttons to select the **Music**, and then press the **ENTER** or ▶ button.

4 Press the ▲▼ buttons to select the track (song) you want to hear, and then press the **ENTER** button.

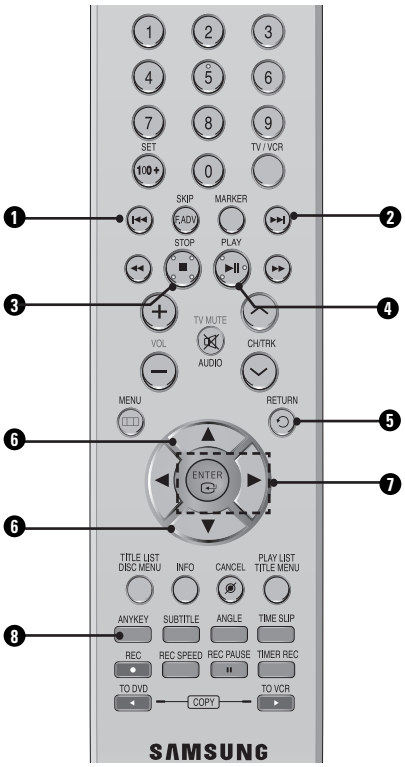


MP3 Screen Elements



1. **Play mode icon.**
2. **Current track (song):** Displays the name of the track being played.
3. Displays the current play index and total file number.
4. This shows the operating state of a disc and a playback time corresponding to a portion that is currently played.
5. Displays the mp3 file and folder list (song list).
6. Button display.
7. MP3 file information

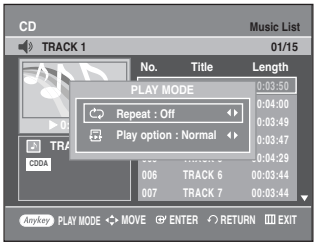
Buttons on the Remote Control used for MP3 disc playback



1. **⏮ button:** Returns to the beginning of the current track when pressed during playback. If pressed again, your DVD Recorder & VCR moves to and plays the previous track.
   If you press this button within three seconds after playback starts, the previous track will be played.
   If you press this button after three seconds, the current track will be replayed from the beginning.
2. **⏭ button:** Plays the next track.
3. **■ :** Stops a track(song).
4. **▶II :** Plays a track(song) or pauses playback.
5. **RETURN button:** Moves to the folder to which the current song belongs.
6. **▲▼ :** Selects a track (song).
7. **▶, ENTER button:** Plays the selected track (song) or displays the files in the selected folder.
8. **ANYKEY :** To display the play mode window. (Repeat or Play Option).

Repeat Playback of an Audio/MP3 Disc

1 During playback, press the **ANYKEY** button.
The Repeat mode will be highlighted.



2 Press the ◄ ► buttons to select the desired repeat mode you want to play repeatedly, then press the **ENTER** button.

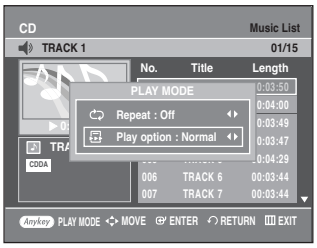
- Repeat Track (CD (CD-DA)/MP3)
- Repeat Folder (MP3)
- Repeat Disc (CD (CD-DA)/MP3)

- To return to normal playback -

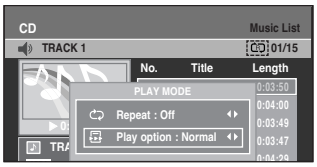
3 Press the **CANCEL** button to return to normal playback.

Play Option Mode

1 During Stop, Press the **ANYKEY** button.
The Play option will be highlighted.



2 Press the ◄ ► buttons to select a desired Play Option, then press the **ENTER** button.



- **Normal:** Tracks on a disc are played in the order in which they were recorded on the disc.
- **Playlist:** The Playlist playback option allows you to select the order in which you want tracks to play.
- **Intro**[I]**:** The first 10 seconds of each track will be played. If you want to listen to the music that you have selected, press the **ENTER** button or **►II** button. The play option will be changed to Normal Play. When Intro Play is completed, Normal Play is performed.
- **Random**[R]**:** The Random option plays a disc's tracks in random order. After a random list is generated and played completely, another random list is generated and played.
  Random Play is continued until the play option is changed.

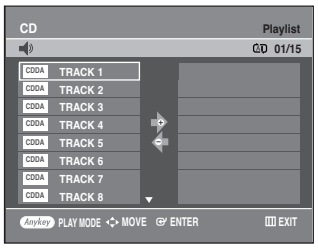
Playback

To Program Tracks

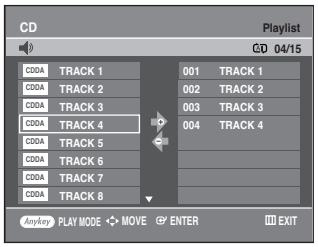
You can register a maximum 30 tracks in the playlist.

1 In still mode, press the **ANYKEY** button.
The Play option will be highlighted.

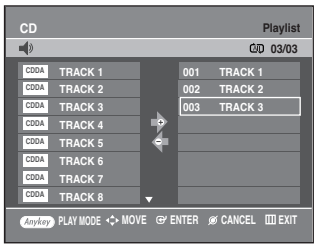
2 Press the ◄ ► buttons to select **Playlist**, then press the **ENTER** button.
Playlist screen is displayed.



3 Press the ▲▼ buttons to select tracks in the order in which you want them to play, then press the **ENTER** button.



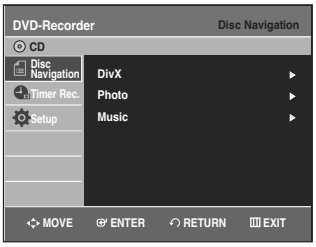
4 If you selected a wrong track, press the ► button, then press the ▲▼ buttons to select the wrong track. Press the **CANCEL** button. The wrong track will be removed.



5 Press the **PLAY** button to play the playlist.

Playing a Picture Disc

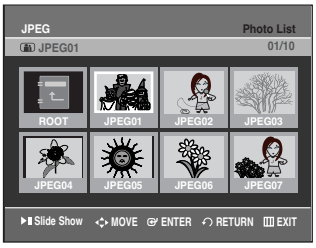
1 Insert a JPEG into the disc tray.



2 Press the ▲▼ buttons to select **Disc Navigation**, and then press the **ENTER** or ► button.

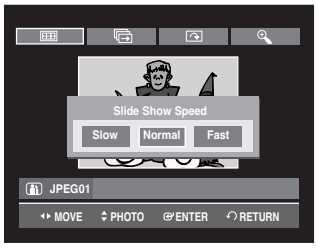
3 Press the ▲▼ buttons to select **Photo**, and then press the **ENTER** or ► button.

4 Press the ▲▼ ◄ ► buttons to select a picture.



- To see the next 8 pictures, press the ►►I button.
- To see the previous 8 pictures, press the I◄◄ button.

5-1 If you press the ▶II button, the Slide Show Speed screen will appear.
Press the ◀ ▶ buttons to set the slide show speed, then press the **ENTER** button.



5-2 Press the **ENTER** button with a picture selected in the Album screen and select a display mode (**Album screen** ( ), **Slide show** ( ), **Rotation** ( ) or **Zoom** ( )) using the ◀ ▶ buttons, then press the **ENTER** button.

: Returns to the Album screen.
: The unit enters slide show mode.
Before the slide show can begin, the picture interval (Slide show speed) must be set.
: Each time the **ENTER** button is pressed, the picture rotates 90 degrees clockwise.
: Each time the **ENTER** button is pressed, the picture is enlarged up to 4X(four times the normal size).

→ normal size → 2X → 4X → 2X

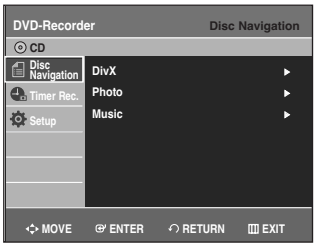
- Press the **ANYKEY** button to display menu bar.
- Press the **RETURN** button to clear the menu bar.

Playing an MPEG4 Disc

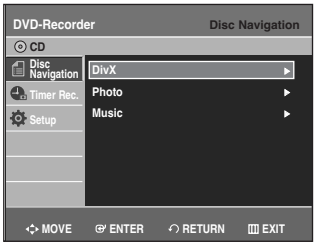
MPEG4

MPEG4 File is used to contain the audio and video data.
MPEG4 File with following extensions can be played.
- .AVI, .DIVX, .avi, .divx

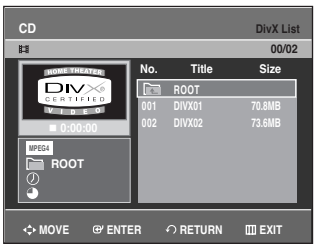
1 Insert a MPEG4 Disc into the disc tray.



2 Press the ▲▼ buttons to select the **Disc Navigation**, and then press the **ENTER** or ▶ button.



3 Press the ▲▼ buttons to select the **DivX**, and then press the **ENTER** or ▶ button.



4 Press the ▲▼ buttons to select the avi file (DivX), then press the **ENTER**, ▶ or **PLAY** button.

5 When MPEG4 file is played, you can use following functions (see next page).
Pressing the **STOP** button once during playback will display the file list, pressing the button again will exit the menu screen.

Playback

MPEG4 Function Description

Function	Description
Skip (⏮ or ⏭)	During playback, press the **SKIP** (⏮ or ⏭) button, it moves forward or backward 5 minutes.
Search (⏩ or ⏪)	During playback, press the **SEARCH** (⏩ or ⏪) button and press again to search at a faster speed. (Fact 1 → Fact 2 → Fact 3)
Slow Motion Play	In pause or step mode, press the **SEARCH** (⏩) button on the remote control. (Slow 1 → Slow 2 →Slow 3)
Step Motion Play	In the still or play mode, press the **F.ADV/SKIP** button on the remote control.

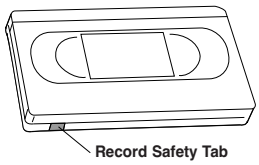
NOTE

- This DVD Recorder can play the following video compression formats.
  - MPEG4 Codec format : DivX 3.11 DivX 4.x DivX 5.x
  - Audio format : .MP3, .MPEG, .PCM, .AC3, .DTS.
- Supported subtitle file formats: .smi, .srt, .sub, .psb, .txt (The subtitle file should have exactly the same name to corresponding MPEG4 file name)
- Some MPEG4 files created on a personal computer may not be play back. That is why Codec Type, Version and Higher resolution over specification is not supported.

Playing the VCR

1 Insert a standard VHS tape into the VCR deck.
- When a tape is inserted, power will turn on automatically.

2 Press the ►II(**PLAY/PAUSE**) button on the remote control or on the front panel of the unit. The videotape will begin to play automatically if the Record Safety Tab is removed and Auto Play is turned on.



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

Tracking

The Tracking adjustment removes the white lines that sometimes appear during playback because of slight differences in recording decks. The **CH/TRK** (∧/∨) 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 **CH/TRK** (∧/∨) buttons to remove white lines from the picture.

Special VCR Playback Features

While a videotape is playing, you can enjoy a variety of special playback features, including Still, Frame Advance, Skip, Slow motion, and more.

Pause

In Play mode, press ►II(**PLAY/PAUSE**)button to still a single frame.

Frame Advance

In Pause mode, press **F.ADV/SKIP** button to advance to the next frame.

Fps/Review

In Play mode, press Forward (►►)button or Rewind (◄◄)button to Fps/review at two speeds:

- Picture Search - Press and release repeatedly to advance the tape forward or backward at 2,3,5,7 times normal speed.
- Jet Search - Press and hold to advance the tape forward or backward at 7 times normal speed.

Skip

In Play mode, press **F.ADV/SKIP** button to cue ahead exactly 30 seconds. Press **F.ADV/SKIP** button repeatedly up to 4 times to cue ahead 2 minutes.

Slow motion

In Pause mode, press ►► button for slow motion. Press the ►► button repeatedly to vary slow motion speed from 1/5 to 1/30 of normal playback. Press the **PLAY** button twice to resume normal viewing.

S-VHS Playback

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

1 Insert an S-VHS tape into the VCR deck.

2 Press ►II (**PLAY/PAUSE**) button on the remote control or on the front panel to play an S-VHS tape.

Variable Search System

Each time you record a cassette on this DVD Recorder & VCR, an “index” is automatically marked on the tape when recording is started. The Search function allows you to fast-forward or rewind to a specific index and start playback from that point. Depending on the direction selected, the indexes are numbered as follows

- This DVD Recorder & VCR uses a standard indexing system (VISS). As a result, it will recognize any indexes marked by other VCRs using the same system and vice versa.

Go To Zero

Use this feature when you want to search for the 0:00:00 counter position on a cassette.

1 Press the **CANCEL** button at the point on the tape where you want to set the counter to 0:00:00.

2 While a cassette is stopped, press the **ANYKEY** button.

3 Press the ▲▼ buttons to select **Go To Zero**, then press the **ENTER** button.
The VCR will rewind or fast forward, searching for the 0:00:00 counter position, and then automatically stop at that position.

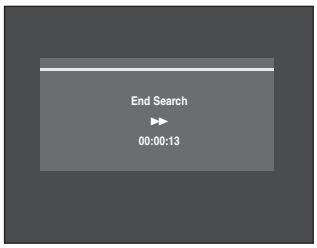
Playback

End Search

Use this feature when you want to search for a blank position to record a program on a cassette.

1 While a cassette is stopped, press the **ANYKEY** button.

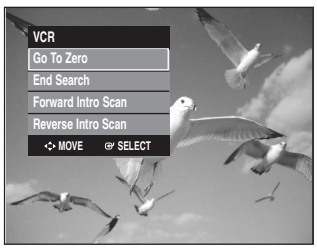
2 Press the ▲▼ buttons to select **End Search**, then press the **ENTER** button.
The VCR will fast forward, searching for a blank position, and then automatically stop at that position. If the VCR reaches the end of the tape during end search, the tape will be ejected.



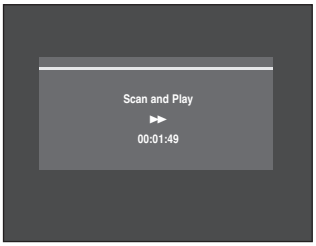
Forward / Reverse Intro Scan

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

1 While a cassette is stopped, press the **ANYKEY** button.



2 Press the ▲▼ buttons to select **Forward Intro Scan** or **Reverse Intro Scan**, then press the **ENTER** button. When an Index mark is found, the DVD Recorder & VCR will playback the tape for 5 seconds, after which it will continue searching for the next Index mark.



Recording

This section explains various DVD recording methods.

◆ DVD Recording

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◆ VCR Recording

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Before Recording

This unit can record on various types of discs. Before recording, read the following instructions and select the disc type according to your preference.

Recordable discs

This recorder can record on the following discs.

DVD-RAM	DVD-RW	DVD-R	DVD+RW	DVD+R
DVD RAM	DVD RW	DVD R	RW DVD+ReWritable	RW DVD+R

- DVD±RWs and DVD-RAMs are rewritable.
- DVD±Rs are non-rewritable.

Compatibility between Samsung and other manufacturer's Recorders.

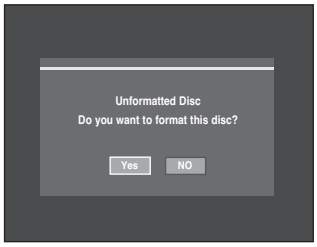
Disc Types	Recording format	Recording Device	Finalizing	Additional Recording in Samsung Recorder
DVD-RAM	VR Mode	Samsung	X	Recordable
		Other Company	X	Recordable
DVD-RW	VR Mode	Samsung	finalized	Not recordable
			not finalized	Recordable
		Other Company	finalized	Not recordable
			not finalized	Recordable
	V Mode	Samsung	finalized	Not recordable
			not finalized	Recordable
		Other Company	finalized	Not recordable
			not finalized	Not recordable
DVD-R	V Mode	Samsung	finalized	Not recordable
			not finalized	Recordable
		Other Company	finalized	Not recordable
			not finalized	Not recordable
DVD+RW	-	Samsung	X	Recordable
		Other Company	X	Not recordable in some cases
DVD+R	-	Samsung	finalized	Not recordable
			not finalized	Recordable
		Other Company	finalized	Not recordable
			not finalized	Not recordable in some cases

Note

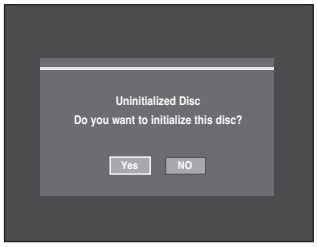
- Finalize
  - This closes the DVD-RW/±R so no additional recording can be done.
- Unfinalize
  - This allows additional recording on a DVD-RW disc originally recorded on the DVD-VR345.
  - A DVD-RW disc that has been recorded by DAO(Disc At Once) in a PC cannot be unfinalized.
  - A DVD-RW disc that has been recorded in Video Mode of a different maker's recorder cannot be unfinalized.
  - A DVD±R disc cannot be unfinalized.

Recording Formats

When you insert an unused disc, the following message appears. Since available functions differ depending on the disc type, select a disc that best fits your preferences.
DVD-RAM: Use after formatting the disc.



DVD±RW/+R: When an unused DVD±RW/+R disc is first inserted, the message “Uninitialized Disc Do you want to initialize this disc?” will be displayed. If you select **Yes**, initializing will be start.



When using a DVD-RW disc, you can change the mode. Refer to Formatting a Disc on page 93.

DVD-R: Initializing disc is unnecessary.

DVD-RW(Video mode)/-R

- Chapters will be created automatically when you finalize recording on DVD-R/DVD-RW discs in Video mode.
- Simple editing (erasing titles/changing title name).

DVD-RAM/-RW(VR mode)

- This mode involves multiple editing functions (such as deletion of the whole title, partial deletion of a title, etc.).
- Various editing options using a created Playlist.

DVD+RW/+R

- You can also make your own chapters on DVD+RWs and edit them using the Chapter Edit menu. (see pages 82 to 83)

Recording Mode

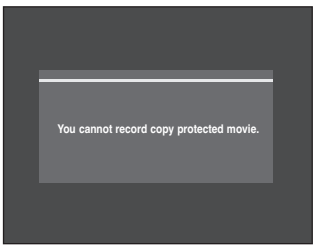
With the unit in Stop mode, select one of four recording modes by pressing the **REC SPEED** button repeatedly for the desired recording time and picture quality.
In general, picture quality improves as the recording time decreases.
In AUTO mode, the most suitable record mode is adjusted automatically, according to remaining time on the disc and length of the timer recording.
You can select only one mode from XP, SP, LP and EP for timer recording.

Mode	Characteristic	Recording Times Data Rates
XP (high quality mode)	Select when the video quality is important.	Approx. 1 hour about 8 Mbps
SP (standard quality mode)	Select to record in standard quality.	Approx. 2 hours about 4 Mbps
LP (long recording mode)	Select when a long recording time is required.	Approx. 4 hours about 2 Mbps
EP (extended mode)	Select when a long recording time is required.	Approx. 6 hours/ about 1.2 Mbps Approx. 8 hours/ about 0.8 Mbps
AUTO	for timer recording only see pages 69~70.	Approx 60 to 480 Min approx 0.8 to 8 Mbps

- The dual layer DVD±Rs have approximately double the capacity of single layer DVD±Rs. (See page 47.)

Unrecordable video

Pictures with copy protection cannot be recorded on this DVD Recorder & VCR.
When the DVD Recorder & VCR receives a copy guard signal while recording, recording stops and the following message appears on the screen.



Concerning Copy Control Signals

TV broadcasts that contain copy control signals may have one of the following three signal types, Copy-Free, Copy-Once and Copy-Never. If you want to record a copy-once type program, use DVD-RW with CPRM in VR Mode or DVD-RAM discs.

	Copy-Free	Copy-Once	Copy-Never
DVD-RW(Ver.1.1)	O	-	-
DVD-RW(Ver.1.1) with CPRM VR mode	O	O*	-
DVD-R	O	-	-
DVD-RAM(Ver.2.0)	O	O*	-
DVD+R	O	-	-
DVD+RW	O	-	-

Once "Copy Once" has been recorded, additional recording cannot be performed.
* compatible with CPRM.

- Content Protection for Recordable Media (CPRM)

CPRM is a mechanism that ties a recording to the media on which it is recorded. It is supported by some DVD recorders, but not by many DVD players. Each blank recordable DVD has a unique 64-bit media ID etched in the BCA(Burst Cutting Area). When protected content is recorded onto the disc, it can be encrypted with a 56-bit C2 (Cryptomeria) cipher derived from the media ID. During playback, the ID is read from the BCA and used to generate a key to decrypt the contents of the disc. If the contents of the disc are copied to other media, the ID will be absent or wrong and the data will not be decryptable.

Recording the Current Channel you are watching

1. Check to make sure the antenna cable is connected.
2. Check the remaining time on the disc.

DVD-RAM/DVD±RW/+R discs should be formatted or initialized in advance before beginning recording.
(See page 65.)

1 Press the **OPEN/CLOSE** button and place a recordable disc on the disc tray.

2 Press the **OPEN/CLOSE** button to close the disc tray.
Wait until "LOAD" disappears from the front panel display.

3 Press the **CH/TRK** (∧/∨) buttons or number buttons to select the channel you want to record.

4 Press the **REC SPEED** button repeatedly, to select the recording speed (quality).
- XP(High, approx. 1 hour) → SP(Standard, approx. 2 hours) → LP(Low, approx. 4 hours) → EP(Extended Play, approx. 6 hours/8hours)

5 Press the **REC** button.
- " ● " is displayed on the screen and recording begins.

6 Press the **STOP** button to stop or finish a recording in progress.
- The message "Updating the information of disc. Please wait for a moment" is displayed.

Pausing / Resuming

- Press the **REC PAUSE** button to pause a recording in progress.
- Press the **REC PAUSE** button again during pause to resume recording.
- You can switch channels by pressing the **CH/TRK** (∧/∨) buttons while recording pauses.

Note

- Recording will stop automatically if there is no free space left for recording.
- Up to 99 titles can be recorded onto a DVD-RAM/-RW/-R disc, and up to 48 titles onto a DVD+RW/+R disc.
- If the power is interrupted due to power failure or other reasons, the title being recorded will not be saved onto the disc.
- Recording will stop automatically if a copy protected image is selected.
- Do not use DVD-R authoring discs with this unit.

Watching the Images Being Recorded (Time Slip)

This function allows you to watch the recently recorded 10-second images while a recording is in progress.

1 Press the **TIME SLIP** button on the remote control.

- The recently recorded 10-second images are played back.
- This function starts to operate 10 seconds from the time you press the **REC** button.
- On the TIME SLIP screen, you can playback, scan, or perform other operations for the recorded program using the playback related buttons.

  Press the (⊖) button to scan the recording in the reverse order, from the end to the start.

  Press the (⊕) button to scan to the recently recorded 10- second images.

2 Press the **STOP** button once to clear the TIME SLIP function.

- To stop a recording while a TIME SLIP function is in progress, press the **STOP** button twice.

NOTE

- The Time Slip feature only works with DVD-RAM discs.

Recording from External Devices

Follow these directions to record onto a disc or a tape from External Devices such as a Camcorder.

1 Connect the AV out jack of your External Device to the AV IN jack on the front or rear of your DVD Recorder & VCR using the Audio/Video Cable.

2 Power on your DVD Recorder & VCR and switch to AV In mode by pressing the **INPUT SEL.** button on the remote control.
The front panel display changes in the following sequence depending on the Video input setting in the menu.

AV1: → Channel Number → AV 1 → AV 2 → DV

S-Video: → Channel Number → SUPER → AV 2 → DV

3 Press the DVD or VCR button on the remote, or DVD/VCR on the front panel to select the DVD or VCR mode.

4 Press the **REC SPEED** button repeatedly to select the recording speed(quality).

DVD: → SP → LP → EP → XP

VCR: → SP → SLP

5 When your DVD Recorder & VCR is in the Stop mode, start playback on your external device.

6 Press the **REC** button on your DVD Recorder & VCR to start recording when the desired video is displayed from the external device.

7 Press the **STOP** button on your DVD Recorder & VCR when the recording is finished.

Note

- Also refer to the user manual for your External Devices when recording through AV In jacks on the DVD/VCR using Audio/Video cable.
- You can also record an external source through S-Video cable. (see page 26).
- For more information on changing the Video Input from AV1 to S-Video, see page 44(Video Input).

Recording through the DV Input jack

You may control your Camcorder using the IEEE1394 (DV) interface.
Follow these directions to record onto a disc or tape from a camcorder that has a DV output jack.

1 Connect the DV output jack of your camcorder to the DV input jack on the front of your DVD Recorder & VCR using a DV cable.

2 Power on your DVD Recorder & VCR and switch to DV mode by pressing the **INPUT SEL.** on the remote control.

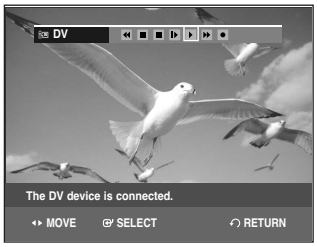
3 Press the DVD or VCR button on the remote, or DVD/VCR on the front panel to select the DVD or VCR mode.

4 Press the **REC SPEED** button repeatedly to select the recording speed(quality).

DVD: SP → LP → EP → XP

VCR: SP → SLP

5 If the input is set to DV, a playback/record menu that enables camcorder control appears on the top of the screen.



6 Select the Play icon on the upper part of the screen to playback the camcorder and find the starting position to copy.

7 To start recording, Press the ◄► button to select rec(●) icon in the top side of the screen, then press the **ENTER** button.
You can press the **REC** button on the remote control to start recording. To display playback related icons on the screen, press either direction button on the remote control.

8 Press the **STOP** button on your DVD Recorder & VCR when the recording is finished.

Note
- Some camcorders may not work with your DVD Recorder & VCR even if they have a DV output jack.
- Also refer to the user manual for your camcorder when recording through the DV jack.

Making a One Touch Recording (OTR)

DVD-RAM DVD-RW DVD-R DVD+RW DVD+R

One-Touch Recording (OTR) allows you to add recording time in preset increments up to 4 hours by pressing the **REC** button repeatedly.

1 Press the **CH/TRK** (∧/∨) buttons or number buttons to select the channel to record.
If you want to record through a connected external component, press the **INPUT SEL.** button to select an appropriate external input(AV1, AV2 or DV).
- CATV channel: 1 to 125
- TV channel: 2 to 69

2 Press the DVD or VCR button on the remote, or DVD/VCR on the front panel to select the DVD or VCR mode.

3 Press the **REC** button to start recording.

4 While in Record mode, press the **REC** button again to activate the One-Touch Recording (OTR).
- Record length 0:30 appears on the On-Screen Display and the DVD Recorder & VCR will record for exactly 30 minutes.

5 Continue pressing **REC** button to add recording time in preset increments up to 4hours.

0:30 → 1:00 → 1:30 → 2:00 → 3:00 → 4:00 → Off

- The DVD Recorder & VCR stops recording automatically when the time has elapsed.

To stop recording

Press the **STOP** (■) button.
The message “Press STOP button once more to cancel Timer Record.” is displayed.
Press the **STOP** (■) button again.
The message “Updating the Information of disc. Please wait for a moment.” is displayed.

Note
- The timer counter decreases by the minute from 4:00 to 0:00, then the DVD Recorder & VCR stops recording.

Recording

Making a Timer Recording

The clock (Setup – Clock Set) must be set before proceeding with a timer recording. (See pages 32~33)

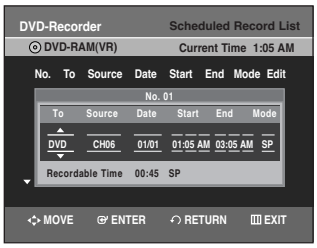
1 Press the **OPEN/CLOSE** button, and place a recordable disc on the disc tray(or load a tape into the VCR).

2 Press the **OPEN/CLOSE** button to close the disc tray.
Wait until “LOAD” disappears from the front panel display.

3 With the unit in Stop mode, press the **MENU** button.

4 Press the ▲▼ buttons to select **Timer Rec.**, then press the **ENTER** or ► button.

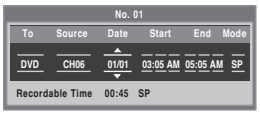
5 Press the ▲▼ buttons to select **Timer Record**, then press the **ENTER** or ► button.
You can go to the Timer recording screen directly by pressing the **TIMER REC** button.
The Timer Recording screen is displayed.



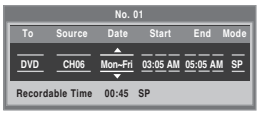
6 Fill in the items using the ▲▼◄ ► buttons.
◄ ► : Moves to the previous/next item,
▲▼ or 0~9 : To set or change items in the Scheduled Record List Menu.

- **To** : Select the media to record (DVD or VCR).
- **Source** : The video input source (AV 1, AV 2), or the broadcasting channel you want to make a timer recording from.
- **Date:** Date that the timer recording starts
  - There are three options when setting the date. see below:

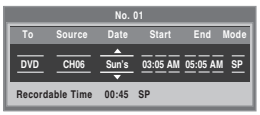
① To make a recording on a specific date, press the ▲▼ or number buttons until the date you want appears.



② To make a recording at the same time every day (Mon-Fri), press the ▲▼ buttons until Mon-Fri appears:



③ To make a recording on a specific day of the week(Sun’s-Sat’s), press the ▲▼ buttons until Sun’s….Sat’s appears:



- **Start/End Time** : Start and end time of the timer recording.

• Recording mode (DVD)

AUTO : Select when you want to set video quality automatically. In AUTO mode, the most suitable record mode is adjusted automatically, according to remaining time on the disc and length of the timer recording.
You can selected only one mode from XP, SP, LP and EP for timer recording.

XP (high quality) : Select when audio and video qualities are important. (Approx. 1 hour)

SP (standard quality) : Select to record in standard quality. (Approx. 2 hours)

LP (low quality) : Select when a long recording time is required.(Approx. 4 hours)

EP (extended mode) : Select when a longer recording time is required. (Approx.6 hours at 1.2 Mbps or Approx.8 hours at 0.8 Mbps)

Note

■ When you are recording at EP mode on a DVD-RW(V)/-R disc, it may not record for the full 6 or 8 hours because the unit uses the VBR(Variable Bit Rate) ENCODING system. For example, if you record a program with a lot of action, it uses a higher bit rate which in turn consumes more disc memory.

- **Recording mode (VCR)**

AUTO : Select when you want to set video quality automatically. The auto quality depends on remaining time of VCR tape.

SP : Standard Play, for best picture quality.

SLP : Super Long Play, for maximum recording time (3 times SP).

7 Press the **ENTER** button.
- ◴ will appear on the front panel. It means that a timer recording is registered.

If the timer settings overlap

The programs are recorded in order of priority. If timer recording is set for the first program and then again for the second program and both programs overlap, the following message will appear on the screen: “This setting is identical with 1,2.” The message shows that the first program has priority. After recording of the first program is complete, the second program starts being recorded.

To exit without saving the current setting

Press the **MENU** or **TIMER REC** button.

To return to the previous menu

Press the **RETURN** button if you don’t want to set a timer recording.

8 Turn the power off to finish the timer recording.
- ◴ will blink if disc or tape is not inserted.

Note

■ The timer recording time may differ from the set time depending on disc status and overall timer recording status (for example, recording times overlapping, or when the previous recording ends within 3 minutes before the start time of the next recording.)

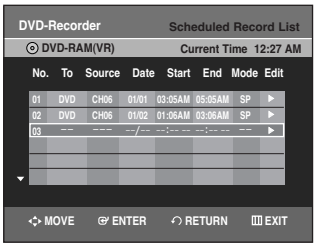
Editing the Scheduled Record List

Follow these directions to edit the timer record list.

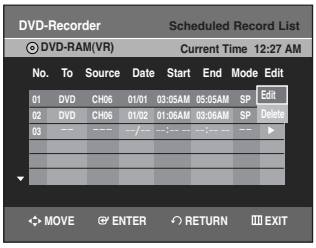
1 Press the **MENU** button.

2 Press the ▲▼ button to select **Timer Rec.**, then press the **ENTER** or ► button.

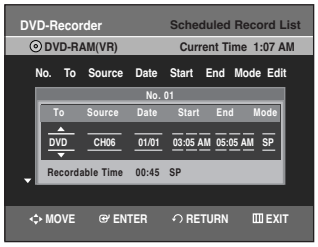
3 Press the ▲▼ button to select **Scheduled Record List**, then press the **ENTER** or ► button.



4 Press the ▲▼ button to select the number of the scheduled record list you want to edit, then press the **ENTER** or ► button.
- The Edit and Delete items are displayed.



5 Press the ▲▼ button to select **Edit**, then press the **ENTER** button.
- The Timer Recording screen is displayed. Edit the items you want to modify. See the Timer Recording section for more information on Timer Recording Input items. (See pages 69~70)



6 Press the **ENTER** button to confirm the edited setting.

7 Press the **MENU** button after finishing the operation. The menu screen will disappear.

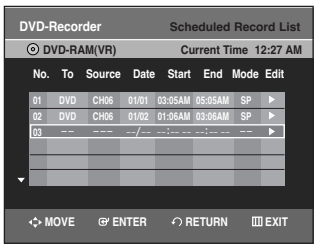
Deleting the Scheduled Record List

Follow these directions to delete a title from the timer record list.

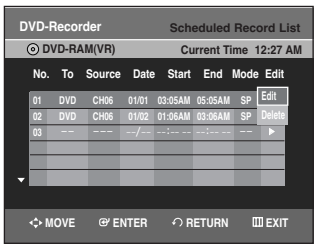
1 Press the **MENU** button.

2 Press the ▲▼ button to select **Timer Rec.**, then press the **ENTER** or ▶ button.

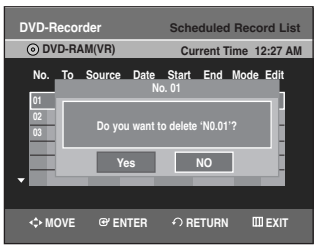
3 Press the ▲▼ button to select **Scheduled Record List**, then press the **ENTER** or ▶ button.



4 Press the ▲▼ button to select the number of the scheduled record list you want to delete, and then press the **ENTER** button.
- The Edit and Delete items are displayed.



5 Press the ▲▼ button to select **Delete**, then press the **ENTER** or ▶ button.
- You will be prompted with a delete confirm message such as “Do you want to delete ‘No.01’?”.



6 Press the ◀ ▶ buttons to select **Yes**, then press the **ENTER** button.
- The selected title will be deleted from the list.

7 Press the **MENU** button after finishing the operation. The menu screen will disappear.

Note

■ You can not delete programs that are currently being recorded.

Basic VCR Recording

Before starting
1. Check TV channel and Antenna connections.
2. Check the remaining time on the tape.

You can record a TV show in progress by inserting a blank tape and pressing the ●(**REC**) button. You can even add time in preset increments up to 4 hours by pressing the ●(**REC**) button repeatedly.

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.

CAUTION
■ Warning: Do not cover this opening unless you are sure you want to record over the tape.

1 Insert a blank VHS tape into the VCR deck.
• Make sure the tape is long enough to record the entire program.

2 Press the **Number** buttons or the **CH/TRK** (∧/∨) buttons to select the desired channel.
Press the INPUT SEL. button to select AV 1, AV 2 or DV if recording from an external device connected to the input jacks of the recorder.

3 Press the **REC SPEED** button on the remote control to set the Record Speed to one of the following options:
• SP – Standard Play, for best picture quality.
• SLP – Super Long Play, for maximum recording time (3 times SP).

Note
■ The selected Record Speed will appear on the front panel and on-screen displays.

Maximum Recording Time - SP vs. SLP

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

Note
■ When you watch or record on the VCR during DVD Recording, some function buttons may not operate.
The message “This function is not available.” will be displayed.

4 Press the ●(**REC**) button on the remote control or front panel.
For options while recording is in progress, see “Special Recording Features”.

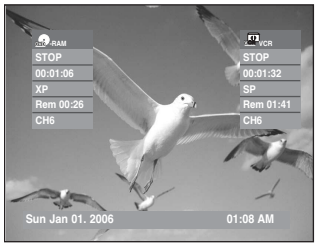
5 Press the **STOP** button to stop or finish a recording in progress.

Pausing / Resuming

• Press the **REC PAUSE** button to pause a recording in progress.
• Press the **REC PAUSE** button again during pause to resume recording.
• You can switch channels by pressing the **CH/TRK** (∧/∨) buttons while recording pauses.

Check Remaining Time

1 Press **INFO** button on the remote control.
Following information will be displayed.
(Current deck status, recording speed, remaining time, input channel, current time.)



Special Recording Features

While a recording is in progress, you can watch a different media, or add recording time in preset increments. (for example, you can watch VCR playback while recording from a DVD and vice-versa)

Recording

1 To Watch a Different Channel from the One being Recorded

When you watching through the Antenna input during recording, Press the TV/VCR button on the remote control. Change the channel you want to watch with the TV's remote.

2 Watch a different media during recording

You can watch a DVD during VCR recording or watch a Video tape during DVD recording.

- During VCR recording, insert a DVD in the DVD deck. The output will automatically change to the DVD and start playback.
- During DVD recording, insert a Video tape in the VCR deck. The output will automatically change to the VCR and start playback. (Only if tape is missing the safety tab)

3 To Add Recording Time

Refer to the One-Touch Recording (OTR).
(See page 68)

4 Recording on the DVD and VCR at the same time

You can record on the DVD and VCR at the same time, but both modes must be set up to record separately.

- Press the **DVD/VCR** button to set the unit to DVD or VCR mode.
- Choose AV input mode (CH, AV1, AV2 or DV). for DVD or VCR.
- Choose REC mode for DVD or VCR.
- Press **REC** button for DVD or VCR.

Note

- **When the DVD Recorder & VCR is connected to your TV using an S-Video or component video cable, the video tape's playback screen will not be displayed during DVD recording.**
- You cannot record different channels at the same time.
- The DVD and VCR cannot start recording at the exact same time. You must set one mode to start recording, then the other.

Copy to DVD or VCR

DVD-RAM DVD-RW DVD-R DVD+RW DVD+R MPEG4

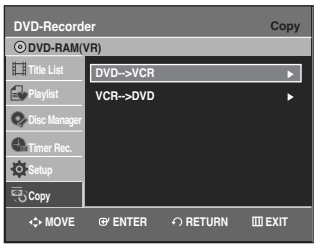
You can copy from the DVD to VCR or VCR to DVD. Check the remaining time on the tape and Disc.

To copy from DVD to VCR

DVD-RAM DVD-RW (VR mode)

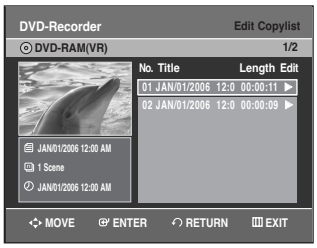
1 With the unit in Stop mode, press the **MENU** button.

2 Press the ▲▼ buttons to select **Copy**, then press the **ENTER** or ► button.



3 Press the ▲▼ buttons to select **DVD --> VCR**, then press the **ENTER** or ► button.

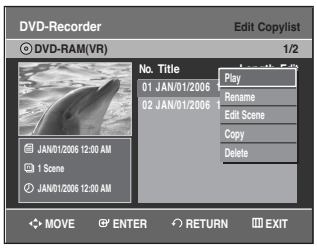
4 Press the ▲▼ buttons to select **Edit Copylist**, then press the **ENTER** or ► button.



Recording

To copy from "Edit Copylist", you need to make a copylist in advance.
Select "New Copylist" at step 4on page 73 and create the new copylist.
If you want to copy directly, choose "Direct Copy".
On DVD-RW(V)/DVD+RW/±R disc, you can only use Direct copy function.

5 Press the ▲▼ buttons to select desired copylist, then press the **ENTER** or ► button.



6 Press the ▲▼ buttons to select **Copy**, then press the **ENTER** or ► button.

Direct copy DVD to VCR

- Insert a DVD disc you want to copy.
- Insert a VHS tape.
- Press the VCR copy button on front panel or remote control (TO VCR).
- To stop recording, press the **STOP** button.
- You can also copy from DivX to VCR when the desired DivX is played back or highlighted in the file list. If the DivX disc has various files, only the selected file will be played back

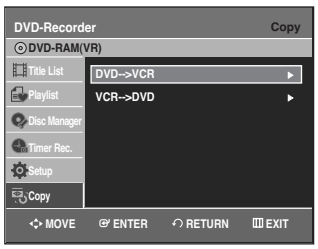
Note

■ Copy function is not allowed in progressive scan mode.

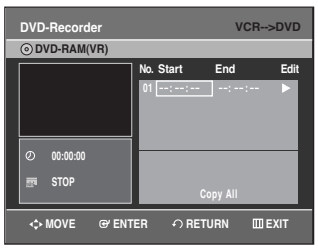
To copy from VCR to DVD

1 With the unit in Stop mode, press the **MENU** button in stop mode.

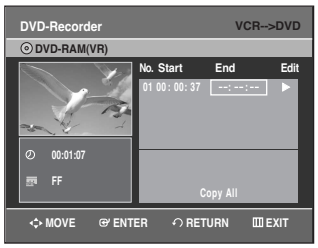
2 Press the ▲▼ buttons to select **Copy**, then press the **ENTER** or ► button.



3 Press the ▲▼ buttons to select **VCR-->DVD**, then press the **ENTER** or ► button.

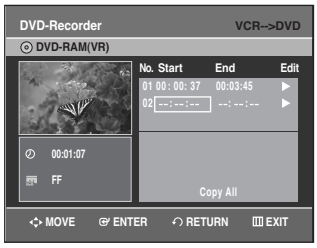


4 You can use the ►II, I◄◄ or ►►I, ◄◄ or ►► buttons to search for the Start position.
Press the **ENTER** button at the start point.



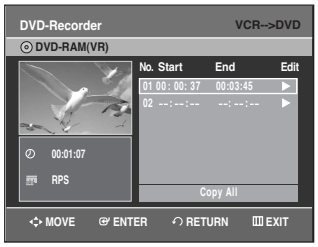
5 You can use the ▶II, I◀◀ or ▶▶I, ◀◀ or ▶▶ buttons to search for the end position.
Press the **ENTER** button at the end point.

- A copylist will be generated.
  Repeat the above steps to create the copylist.
- In VCR mode, the copylist cannot be saved.



6 Press the ▲▼ buttons to select desired copylist, then press the **ENTER** or ▶ button.

7 Press the ▲▼ buttons to select **Copy**, then press the **ENTER** or ▶ button.



- The VCR will fast forward, searching for a start position and then automatically start a copy.
- The Start and End points may not match up exactly.
- If you want to copy all content, select **Copy All**.

Direct copy VCR to DVD

- Insert the VHS tape you want to copy.
- Insert a recordable DVD disc.
- Press DVD copy button on front panel or remote control(TO DVD).
- To stop recording press the **STOP** button.

Editing

This section introduces basic functions of DVD editing and explains both edit functions for the recording on a disc and edit functions for the entire disc.

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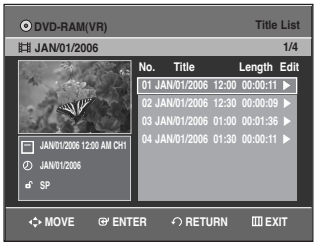
Playing the Title List

Follow these instructions to play back a scene from the Title List.

Using the TITLE LIST button

1 Press the **TITLE LIST** button.
The Title List screen is displayed.



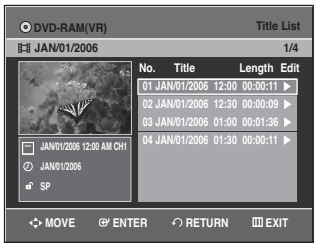
2 Press the ▲▼ buttons to select a title you want to play from Title List, and then press the **PLAY** button.
The selected title will be played back.

3 To stop title play, press the **STOP** button.
To return the title list screen, press the **TITLE LIST** button.

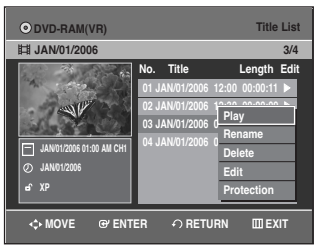
Using the MENU button

1 Press the **MENU** button.

2 Press the ▲▼ buttons to select **Title List**, then press the **ENTER** or ► button twice.
The Title List screen is displayed.



3 Press the ▲▼ buttons to select a Title, then press the **ENTER** or ► button.
The Edit menu is displayed:Play, Rename, Delete, Edit, Protection(See pages 78~81)

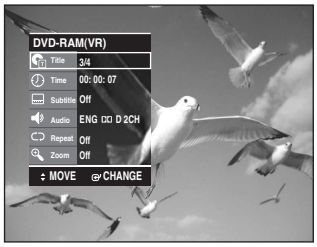


4 Press the ▲▼ buttons to select **Play** to play the title list, then press the **ENTER** button.
The selected title will be played back.

5 Press the **STOP** button to stop playing.
To return the title list screen, press the **TITLE LIST** button.

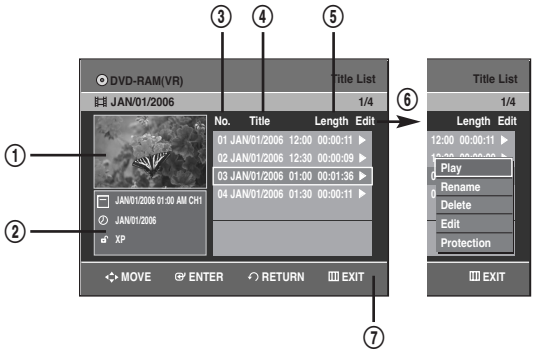
Note

- You can also play a recorded program by pressing the **ANYKEY** button.



- Press the ▲▼ buttons to select **Title**.
- Press the ◄ ► buttons to select to play the title list, then press the **ENTER** button.

Title List Screen Elements



① Playback screen for recorded titles.
② Information window for the selected title: Title name, recording date, lock status, recording mode
③ Recorded title No.
④ Recorded title name
⑤ Recording Length (i.e., the playing time)
⑥ Edit menu
Play: Plays the selected title.
Rename: Changes the name of a selected title.
Delete: Deletes the selected title from the list.
Edit: Deletes a section of title.
Protection: Locks or unlocks the selected title.
⑦ Button display

Note

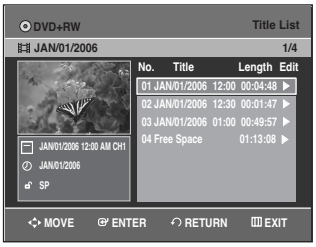
- This may depend on the disc type.
- DVD-RW(V)/DVD+RW/±R has limited editing function.

Free Space Function

This function is only available with DVD+RW discs.
If existing titles are deleted, new free space will be created.
When you operate free space function, on-air TV images will appear on the left side of the title list.

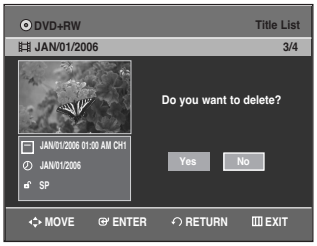
1 Press the **TITLE LIST** button.
The Title List screen is displayed.

Or use the **MENU** button.
- Press the **MENU** button.
- Press the ▲▼ buttons to select **Title List**, then press the **ENTER** or ► button twice.



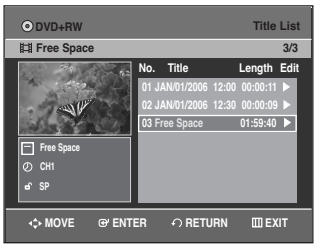
2 Press the ▲▼ buttons to select a Title you want to delete, then press the **ENTER** or ▶ button.

3 Press the ▲▼ button to select **Delete**, then press the **ENTER** or ▶ button.



- You will be prompted with the confirmation message 'Do you want to delete?'.

4 Press the ◀ ▶ buttons to select **Yes**, then press the **ENTER** button.
The selected title has been deleted and Free Space is displayed.



- New free Space will be created equal to the length of the deleted title.

- Recording a title

1 Press the ▲▼ button to select **Free Space**, then press the **ENTER** or ▶ button.
On-air TV images will appear on the left side of the title list.

2 Press the **ENTER** button.

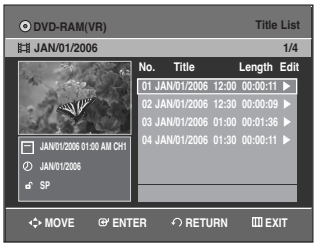
Basic Editing (Title List)

Renaming(Labeling) a Title

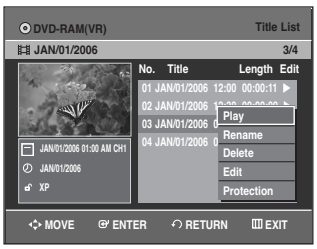
Follow these instructions to rename a title list name, i.e., to edit the title of a recorded program.

1 Press the **TITLE LIST** button.
The Title List screen is displayed.

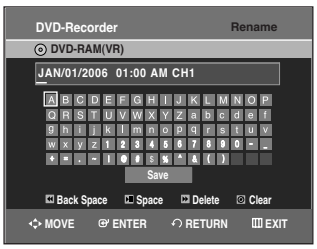
Or use the **MENU** button.
- Press the **MENU** button.
- Press the ▲▼ buttons to select **Title List**, then press the **ENTER** or ▶ button twice.



2 Press the ▲▼ buttons to select a title you want to rename from the Title List, then press the **ENTER** or ▶ button.

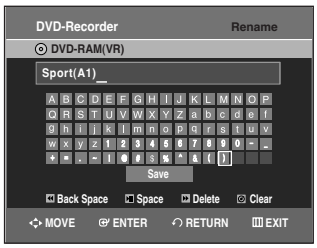


3 Press the ▲▼ buttons to select **Rename**, then press the **ENTER** or ▶ button.
The Rename screen is displayed.



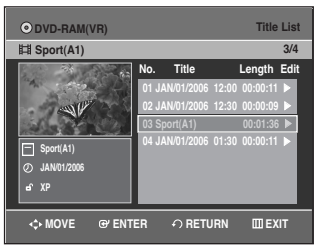
Editing

4 Select the desired characters using the ▲▼ ◄ ► buttons, press the **ENTER** button.



- **Back Space:** Moves the cursor one position backwards.
- **Space:** Enters a blank and moves the cursor one forward (to the right).
- **Delete:** Deletes the character at the cursor position.
- **Clear:** Deletes all the character inputs.
- **Save:** Registers the character inputs.

5 Press the ▲▼ ◄ ► buttons to select Save, and then press the **ENTER** button.
The changed title name is displayed in the title field of the selected title.



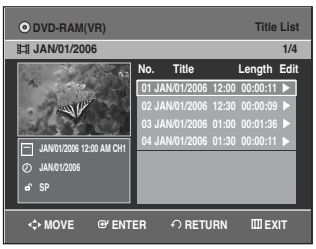
Locking(Protecting) a Title

Follow these instructions to lock a title to protect it from accidental deletion.

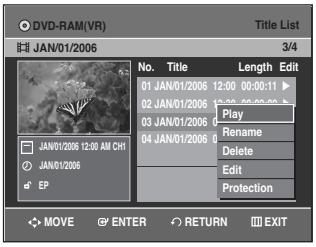
DVD-RAM DVD-RW DVD-R DVD+RW DVD+R

1 Press the **TITLE LIST** button.
The Title List screen is displayed.

Or use the **MENU** button.
- Press the **MENU** button.
- Press the ▲▼ buttons to select **Title List**, then press the **ENTER** or ► button twice.

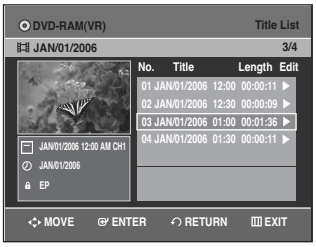


2 Press the ▲▼ buttons to select a title you want to protect in the Title List, then press the **ENTER** or ► button.



3 Press the ▲▼ buttons to select **Protection**, then press the **ENTER** or ► button.

4 Press the ◄ ► buttons to select **On**, then press the **ENTER** button. The lock icon on the information window for the selected title changes to the locked status. (🔓→🔒)

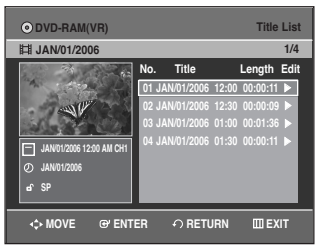


Deleting a Title

Follow these instructions to delete a title from the Title List.

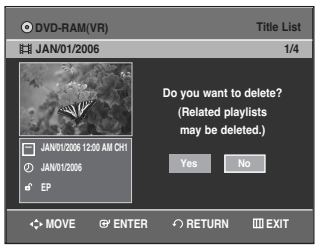
1 Press the **TITLE LIST** button.
The Title List screen is displayed.

Or use the **MENU** button.
- Press the **MENU** button.
- Press the ▲▼ buttons to select **Title List**, then press the **ENTER** or ▶ button twice.

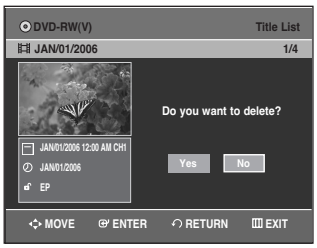


2 Press the ▲▼ buttons to select a title you want to delete in the Title List, then press the **ENTER** or ▶ button.

3 Press the ▲▼ buttons to select **Delete**, then press the **ENTER** or ▶ button.
You will be prompted with a confirmation message.
DVD-RAM(VR), DVD-RW(VR mode) : Since Playlist is present, the message 'Do you want to delete? (Related playlists may be deleted.)' is displayed.



DVD-RW(Video mode),DVD+RW, DVD±R : Since Playlist is not present, the message 'Do you want to delete?' is displayed.



- The message may depend on the type of disc.

4 Press the ◀ ▶ buttons to select **Yes**, then press the **ENTER** button.

Note

- You cannot delete a protected title.
  If you want to delete a protected title, select **Off** in the Title Protection menu.
- Once a title is deleted from the Title List it cannot be recovered.
- Once DVD±R, DVD-RW is finalized, it cannot be deleted.
- With DVD±R, titles are only deleted from the menu, however, the Title remains physically on the disc.

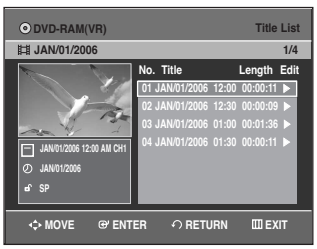
Deleting a Section of a Title

Follow these instructions to delete a section of a Title List title.

(VR mode)

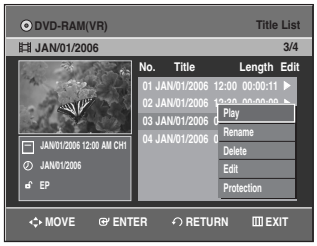
1 Press the **TITLE LIST** button.
The Title List screen is displayed.

Or use the **MENU** button.
- Press the **MENU** button.
- Press the ▲▼ buttons to select **Title List**, then press the **ENTER** or ▶ button twice.



Editing

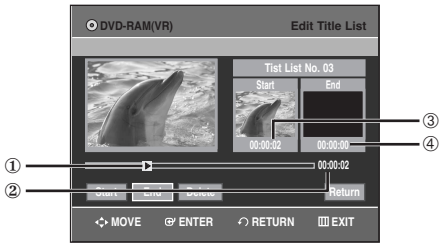
2 Press the ▲▼ buttons to select a title you want to delete from the Title List, then press the **ENTER** or ▶ button.



3 Press the ▲▼ buttons to select **Edit**, then press the **ENTER** or ▶ button.
The Edit Title List screen is displayed.

4 Press the **ENTER** button at the starting point.
The image and starting point time are displayed in the section deletion starting point window.

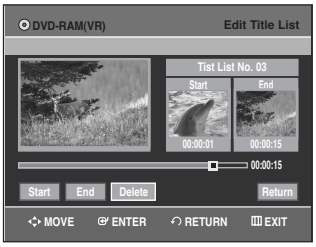
Edit Title List Screen Elements



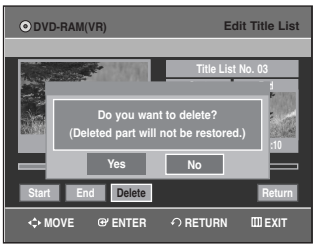
1 Playback bar
2 Playtime
3 Section deletion starting point window and time
4 Section deletion end point window and time

- Select the start and end points of the section you want to delete using the playback related buttons.
- Playback related buttons: (▶II,I◀◀,◀◀,▶▶).

5 Press the **ENTER** button at the end point.
The image and end point time are displayed in the Section deletion ending point window.



6 Press the ◀ ▶ buttons to select **Delete**, then press the **ENTER** button.



7 Press the ◀ ▶ buttons to select **Yes**, then press the **ENTER** button.
The selected section has been deleted.
To return to the Title List screen, press the ◀ ▶ buttons to select Return.

Note

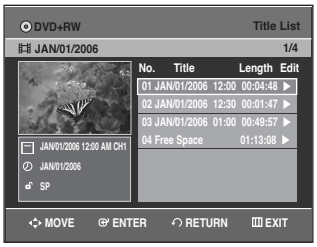
- The length of the section to be deleted must be at least 5 seconds long.
- If the length of the section to be deleted is less than 5 seconds, you will be prompted with the message 'The range is too short.'.
- If the end time precedes the starting time, you will be prompted with the message 'End point cannot be marked earlier than start point.'.
- The section cannot be deleted when it includes a still picture.
- Press the **MENU** button after the operation has finished.
  The Title List screen will disappear.

Editing a Chapter

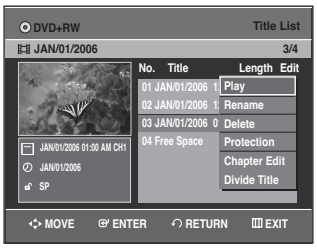
You can make your own chapters on DVD+RWs and edit them using the Chapter Edit menu.

1 Press the **TITLE LIST** button.
The Title List screen is displayed.

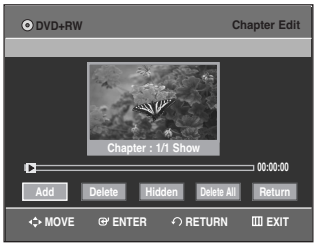
Or use the **MENU** button.
- Press the **MENU** button.
- Press the ▲▼ buttons to select **Title List**, then press the **ENTER** or ▶ button twice.



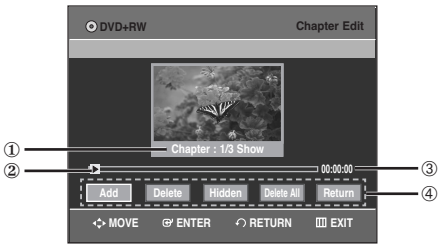
2 Press the ▲▼ buttons to select a title containing a chapter you want to edit, then press the **ENTER** or ▶ button.



3 Press the ▲▼ buttons to select **Chapter Edit**, then press the **ENTER** or ▶ button.
The Chapter Edit screen is displayed.



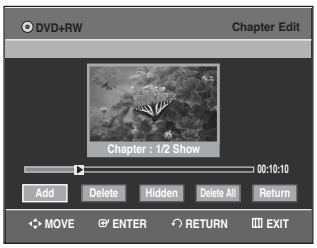
Chapter Edit Screen Elements



1. Current chapter number and status
2. Playback bar
3. Playtime
4. Chapter Edit menu

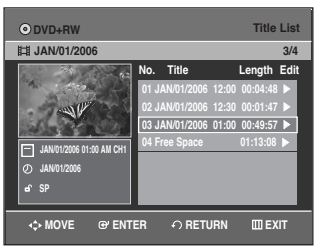
Adding a chapter

4 Select the point where you want to add a chapter using the playback related buttons, then press the **ENTER** button at that point.
Each time you press the **ENTER** button, a new chapter will be added.



- Playback related buttons: (▶II,I◀◀,▶▶I,◀◀,▶▶).

5 Press the ◀ ▶ buttons to select Return, and then press the **ENTER** button.
The edited title will now have the chapter you added.



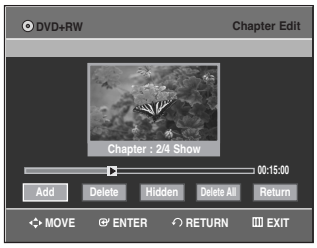
Note

- You can make up to 99 chapters in a title and 254 chapters in a disc.
- The edited chapters are shown on existing DVD players only after performing the Edit Compatible function. (See page 96)
- If you add a chapter, the title is divided at that point; If you add a chapter onto a title that has only one chapter, it creates another chapter.

Deleting a chapter

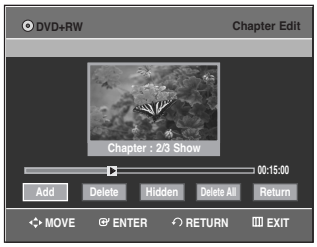
Follow steps 1 to 3 in page 82

4 Select a chapter you want to delete using the playback related buttons.



- Playback related buttons: (▶II,I◀◀,▶▶I,◀◀,▶▶).

5 Press the ◀ ▶ buttons to select Delete, and then press the **ENTER** button.
The selected chapter will be deleted.



- To finish the operation, select **Return** using the ◀ ▶ buttons then press the **ENTER** button.

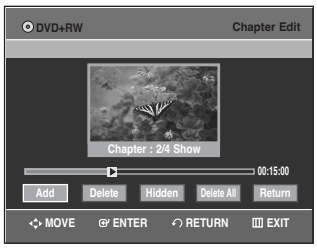
Note

- First chapter can't be deleted.
- **Delete** menu is not available if there is one chapter in the selected title.
- When deleting a chapter, only the chapter marker is actually deleted, not the recorded video.
- Deleting a chapter can't be canceled.

Hiding a chapter

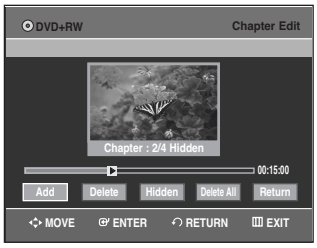
Follow steps 1 to 3 in page 82

4 Select a chapter you want to hide using the playback related buttons.



- Playback related buttons: (▶II,I◀◀,▶▶I,◀◀,▶▶).

5 Press the ◀ ▶ buttons to select Hidden, and then press the **ENTER** button.
The selected chapter is hidden.



- To finish the operation, select **Return** using the ◀ ▶ buttons then press the **ENTER** button.

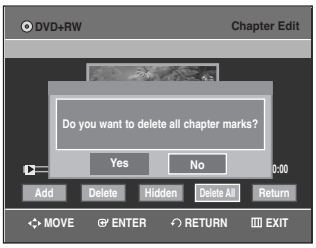
Note

- If there is only one chapter, it can't be hidden.
- **Hidden/Show** menu is not available if there is only one chapter in the selected title.
- The hidden chapters are not shown on the existing DVD players.
- **Hidden** chapters will be played when playing back the entire title. You can make the hidden chapter appear by pressing the **ENTER** button in the **Show** menu.

Deleting all chapters

Follow steps 1 to 3 in page 82

4 Press the ◀ ▶ buttons to select **Delete All**, and then press the **ENTER** button.



5 Press the ◀ ▶ buttons to select Yes, and then press the **ENTER** button.

Note

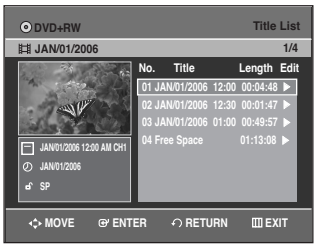
- When deleting a chapter, only the chapter marker is actually deleted, not the recorded video.
- **Delete All** menu is not available if there is one chapter in the selected title.

Dividing a Title

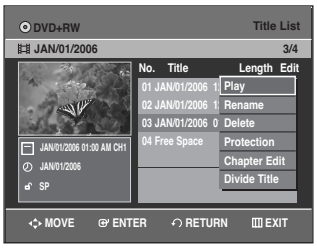
Follow these instructions to divide a long title into several titles.

1 Press the **TITLE LIST** button.
The Title List screen is displayed.

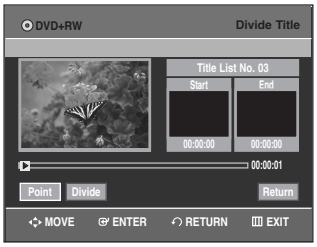
Or use the **MENU** button.
- Press the **MENU** button.
- Press the ▲▼ buttons to select **Title List**, then press the **ENTER** or ► button twice.



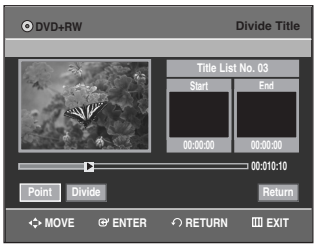
2 Press the ▲▼ buttons to select a title you want to divide from the Title List, then press the **ENTER** or ► button.



3 Press the ▲▼ buttons to select **Divide Title**, then press the **ENTER** or ► button.
The Divide Title List screen is displayed.

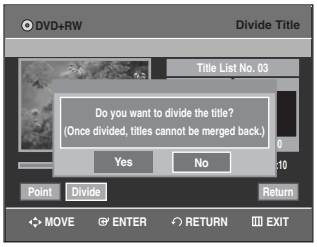


4 Select the point you want to divide using the playback related buttons, then press the **ENTER** button.

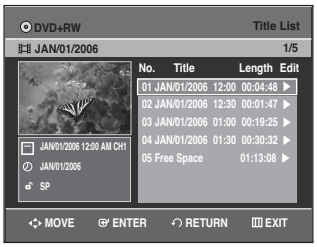


- Playback related buttons: (►II,I◄◄,◄◄,►►).

5 Press the ◄ ► buttons to select **Divide**, then press the **ENTER** button.



6 Press the ◄ ► buttons to select **Yes**, then press the **ENTER** button.
The selected title has been divided into two titles.



Note

- If the point length to be divided is less than 5 seconds, you will be prompted with the message 'The range is too short.'.
- Press the **MENU** button after the operation has finished.
  The Title List screen will disappear.

Editing

Advanced Editing (Playlist)

Creating a Playlist

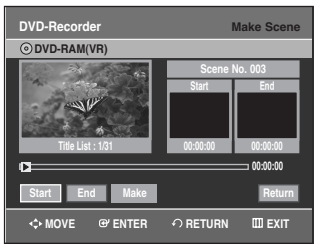
Follow these instructions to create a new playlist title from a recorded title.

DVD-RAM DVD-RW
(VR mode)

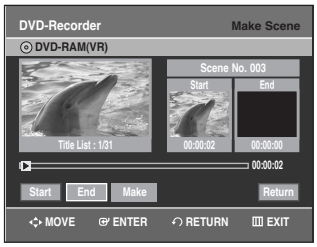
1 With the unit in Stop mode, press the **MENU** button.

2 Press the ▲▼ buttons to select **Playlist**, then press the **ENTER** or ► button.

3 Press the ▲▼ buttons to select **New Playlist**, then press the **ENTER** or ► button.
The Make Scene screen is displayed.



4 Press the **ENTER** button at the start point.



- The image and time at the start point are displayed on the Start window.
- The yellow-colored selection bar moves to the End item.
- Select the starting point of the section from which you want to create a new scene using the playback related buttons (▶II,I◀◀,▶▶I,◀◀,▶▶).

5 Press the **ENTER** button at the end point.

- The image and end point time are displayed in the End window.
- The yellow-colored selection bar moves to the Make icon.

- To make a new playlist -

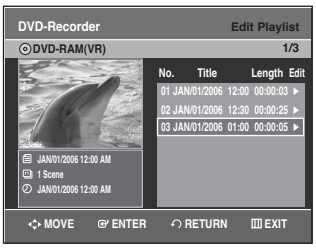
6 Press the ◄ ► buttons to select **Make**, then press the **ENTER** button.
A new Scene will be added to the current Playlist.
A new Make Scene screen is displayed.

Note

- You can check and see all the scenes on Edit Playlist screen.
- Repeat steps 1~6 if you want to make a new playlist.
- Repeat steps 4~6 if you want to add scenes to the playlist.

- To return to Edit Playlist menu -

7 Press the ▲▼ buttons to select **Return**, then press the **ENTER** button.
The Edit Playlist screen is displayed.



8 Press the **MENU** or **PLAY LIST** button after the operation has finished.
The Edit Playlist screen will disappear.

Note

- You can create up to 99 playlist titles.
- Depending on the kind of disc, the displayed screen may have a slight difference.

Editing

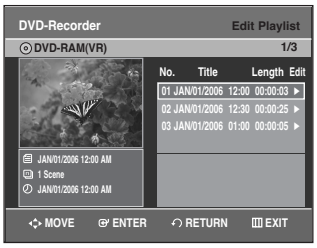
Playing Titles in the Playlist

Follow these instructions to play the playlist titles.

(VR mode)

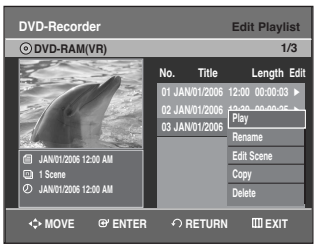
1 Press the **PLAY LIST** button with the disc stopped.
The Edit Playlist screen is displayed.

Or use the **MENU** button.
- Press the **MENU** button with the disc stopped.
- Press the ▲▼ buttons to select **Playlist**, then press the **ENTER** or ► button.
- Press the ▲▼ buttons to select **Edit Playlist**, then press the **ENTER** or ► button.



2 Press the ▲▼ buttons to select the title you want to play from the Playlist, then press the **ENTER** or ► button.
The Edit Playlist menu is displayed : Play, Rename, Edit Scene, Copy, Delete.

3 Press the ▲▼ buttons to select **Play**, then press the **ENTER** or ► button.
The playlist titles will be played back.



4 Press the **STOP** button to stop playing.
The screen returns to the Edit Playlist screen.

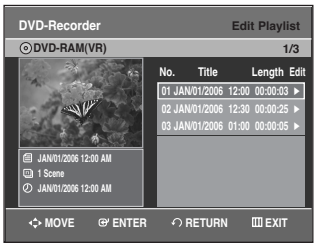
Renaming a Playlist Title

Follow these instructions to rename a playlist title, i.e. to edit the title of a playlist title.

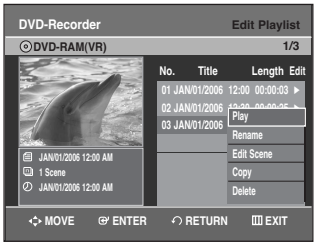
(VR mode)

1 Press the **PLAY LIST** button with the disc stopped.
The Edit Playlist screen is displayed.

Or use the **MENU** button.
- Press the **MENU** button with the disc stopped.
- Press the ▲▼ buttons to select **Playlist**, then press the **ENTER** or ► button.
- Press the ▲▼ buttons to select **Edit Playlist**, then press the **ENTER** or ► button.

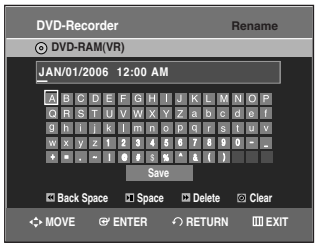


2 Press the ▲▼ buttons to select the title you want to rename from the Playlist, then press the **ENTER** or ► button.
The Edit menu is displayed : Play, Rename, Edit Scene, Copy, Delete

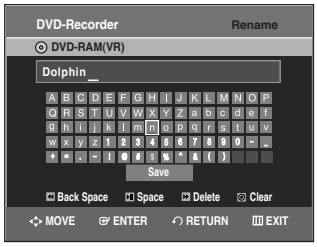


Editing

3 Press the ▲▼ buttons to select **Rename**, then press the **ENTER** or ▶ button.
The Rename screen is displayed.

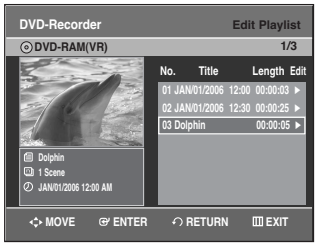


4 Enter the desired characters using the ▲▼ ◀ ▶ buttons.



- This function is the same as the Rename function in renaming the title list. (See page 79.)
- The maximum number of characters that can be entered is 31.

5 Press the ▲▼ ◀ ▶ buttons to select Save, then press the **ENTER** button.
The changed title is displayed in the title field of the selected title.



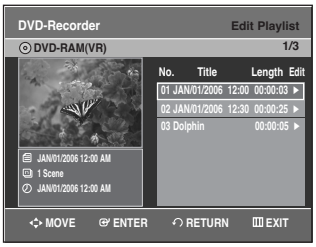
Editing a Scene for the Playlist

Follow these instructions to edit scenes for a playlist.

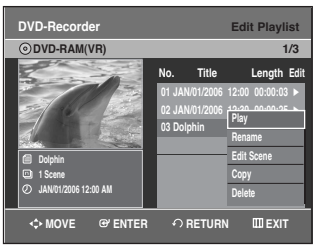
(VR mode)

1 Press the **PLAY LIST** button with the disc stopped.
The Edit Playlist screen is displayed.

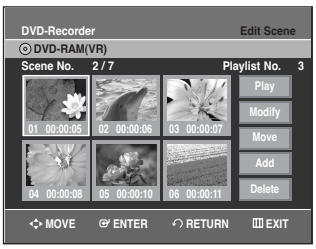
Or use the **MENU** button.
- Press the **MENU** button with the disc stopped.
- Press the ▲▼ buttons to select **Playlist**, then press the **ENTER** or ▶ button.
- Press the ▲▼ buttons to select **Edit Playlist**, then press the **ENTER** or ▶ button.



2 Press the ▲▼ buttons to select the title you want to edit from the Playlist, and then press the **ENTER** or ▶ button.
The Edit Playlist menu is displayed: Play, Rename, Edit Scene, Copy, Delete

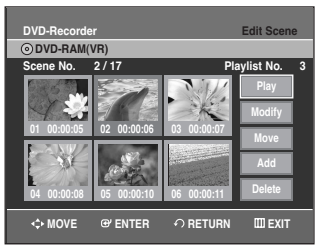


3 Press the ▲▼ buttons to select **Edit Scene**, then press the **ENTER** or ▶ button.
The Edit Scene screen is displayed.



Playing a Selected Scene

4 Press the ▲▼◄ ► buttons to select the scene you want to play, then press the **ENTER** button. The playlist title to be played is selected.



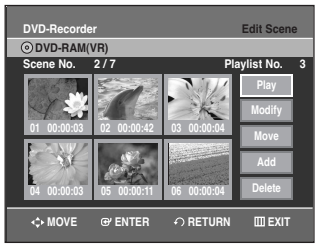
5 Press the **ENTER** button.
The selected scene will be played back.

- To stop scene play, press the **STOP** button.

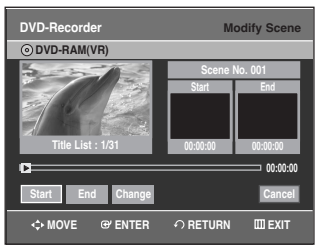
Modifying a Scene (Replacing a Scene)

To setup, follow steps 1 to 3 in page 87.

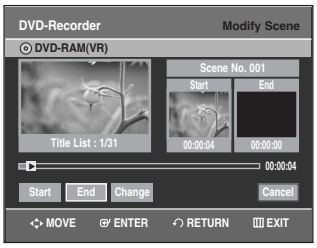
4 Press the ▲▼ ◄ ► buttons to select the scene you want to modify, then press the **ENTER** button.



5 Press the ▲▼ buttons to select **Modify**, then press the **ENTER** button.
The Modify Scene screen is displayed.

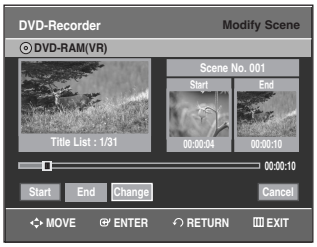


6 Press the **ENTER** button at the start point of the scene.



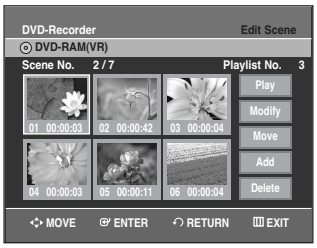
- The image and starting point time are displayed on the Start window.
- Select the starting or ending point of the section you want to modify using the playback related buttons (▶II,I◀◀,▶▶I,◀◀,▶▶).

7 Press the **ENTER** button at the end point of the scene.



- The image and ending point time are displayed in the End window.

8 Press the ◄ ► buttons to select **Change**, then press the **ENTER** button.



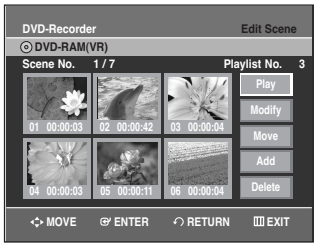
- The scene you want to modify is changed with the selected section.

Editing

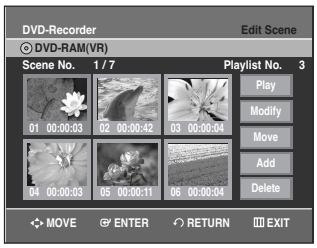
Moving a Scene (Changing the Position of a Scene)

To setup, follow steps 1 to 3 in page 87.

4 Press the ▲▼ ◄ ► buttons to select the scene you want to move (change the position), then press the **ENTER** button.

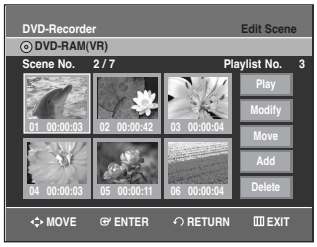


5 Press the ▲▼ buttons to select **Move**, then press the **ENTER** button.

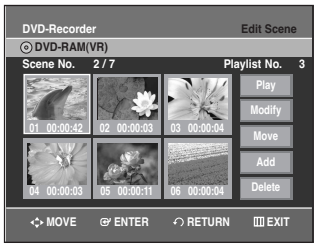


- A yellow selection window is displayed on the scene to be moved.

6 Press the ▲▼ ◄ ► buttons to select the position to which you want to move the selected scene, then select the **ENTER** button.



- The selected scene is moved to the selected position.



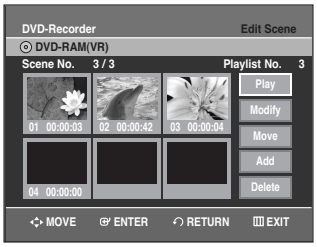
Note

- Depending on the kind of disc, the displayed screen may have a slight difference.

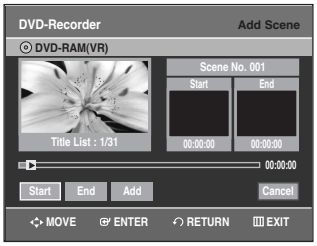
Adding a Scene

To setup, follow steps 1 to 3 in page 87.

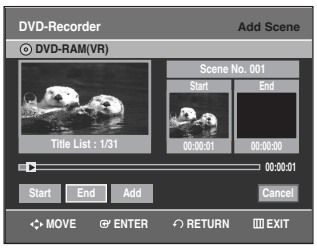
4 Press the ▲▼ ◄ ► buttons to select the scene that will have a new scene inserted before it, then press the **ENTER** button.
A yellow selection window is displayed on the scene to be added as the new scene.



5 Press the ▲▼ buttons to select **Add**, then press the **ENTER** button.
The Add Scene screen is displayed.

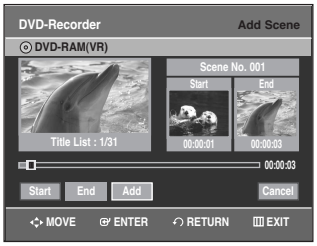


6 Press the **ENTER** button at the starting point of the scene.



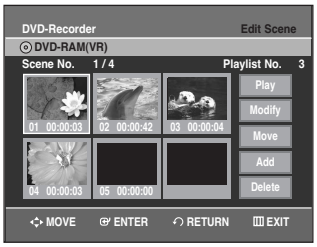
- The image and starting point time are displayed in the Start window.
- Select the end point of the section where you want to add the new scene using the playback related buttons (▶II,I◀◀,▶▶I,◀◀,▶▶).

7 Press the **ENTER** button at the end point of the scene.



- The image and time of the end point are displayed in the End window.
- To cancel, press the ◄ ► buttons to select cancel and then press the **ENTER** button.

8 Press the ▲▼ buttons to select **Add**, then press the **ENTER** button.

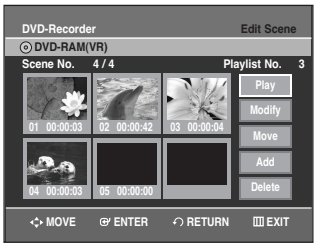


- The section you want to add is inserted prior to the scene selected in step 4.

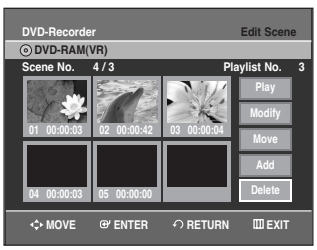
Deleting a Scene

To setup, follow steps 1 to 3 in page 87.

4 Press the ▲▼ ◄ ► buttons to select the scene you want to delete, and then press the **ENTER** button.



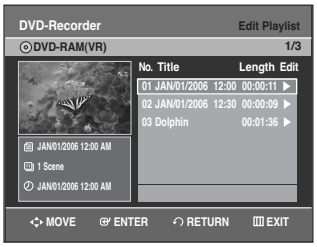
5 Press the ▲▼ buttons to select **Delete**, then press the **ENTER** button.



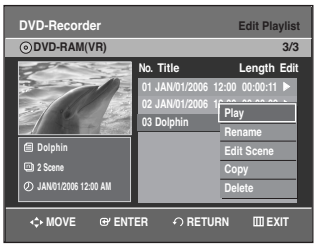
Copying a Playlist Title to the VCR

1 Press the **PLAY LIST** button with the disc stopped. The Edit Playlist screen is displayed.

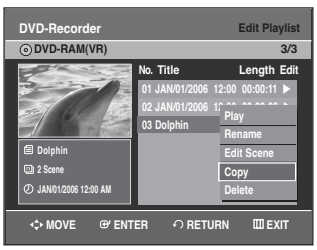
Or use the **MENU** button.
- Press the **MENU** button with the disc stopped.
- Press the ▲▼ buttons to select **Playlist**, then press the **ENTER** or ► button.
- Press the ▲▼ buttons to select **Edit Playlist**, then press the **ENTER** or ► button.



2 Press the ▲▼ buttons to select the title you want to copy to the VCR, and then press the **ENTER** or ► button.
The Edit Playlist menu is displayed: Play, Rename, Edit Scene, Copy, Delete.



3 Press the ▲▼ buttons to select **Copy**, then press the **ENTER** button.
- The title you choose is played and copied to VCR tape.



4 Press the **MENU** button after the operation has finished. The menu screen will disappear.

Note

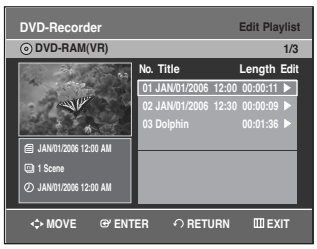
■ The playlist can contain up to 99 playlist titles.

Editing

Deleting a Playlist Title from the Playlist

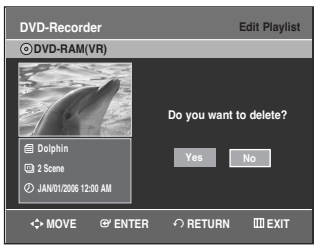
1 Press the **PLAY LIST** button with the disc stopped. The Edit Playlist screen is displayed.

Or use the **MENU** button.
- Press the **MENU** button with the disc stopped.
- Press the ▲▼ buttons to select **Playlist**, then press the **ENTER** or ► button.
- Press the ▲▼ buttons to select **Edit Playlist**, then press the **ENTER** or ► button.

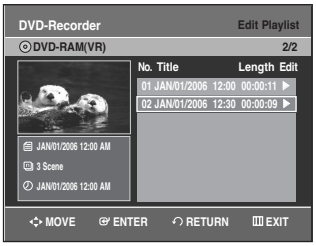


2 Press the ▲▼ buttons to select the title you want to delete from the Playlist, then press the **ENTER** or ► button.
The Edit Playlist menu is displayed: Play, Rename, Edit Scene, Copy, Delete

3 Press the ▲▼ buttons to select **Delete**, then press the **ENTER** button.
- You will be prompted with the delete confirmation message 'Do you want to delete?'.



4 Press the ◄ ► buttons to select **Yes**, then press the **ENTER** button.
It automatically returned to the Edit Playlist screen after the delete operation has finished.



Disc Manager

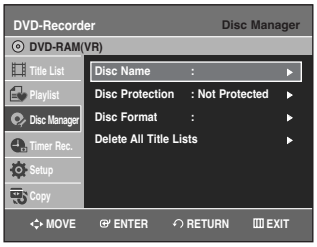
Editing the Disc Name

Follow these instructions to give a name to a disc.

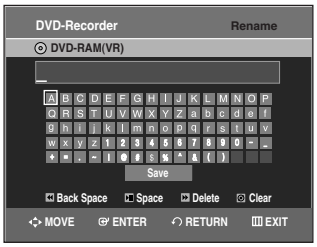
DVD-RAM DVD-RW DVD-R DVD+RW DVD+R

1 With the unit in Stop mode, press the **MENU** button.

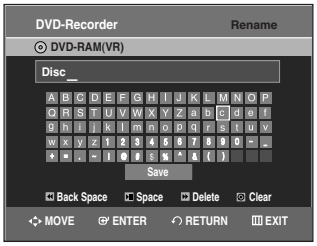
2 Press the ▲▼ buttons to select **Disc Manager**, then press the **ENTER** or ▶ button.



3 Press the ▲▼ buttons to select **Disc Name**, then press the **ENTER** or ▶ button.
The Edit Name screen is displayed.



4 Enter the desired characters using the ▲▼ ◀ ▶ buttons.



- This function is the same as the Rename function in renaming the title list. (See page 79.)
- The maximum number of characters that can be entered is 31.

5 Press the ▲▼ ◀ ▶ buttons to select **Save**, then press the **ENTER** button.
A disc name is given to the disc.

Note

- You may need to clear disc protection before beginning editing.
- Depending on the kind of disc, the displayed screen may be different.

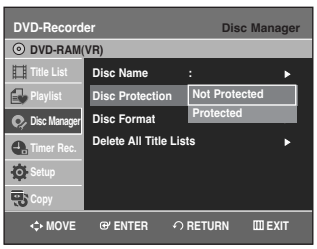
Disc Protection

Disc Protect allows you to protect your discs from being formatted or deleted due to unintended operations.

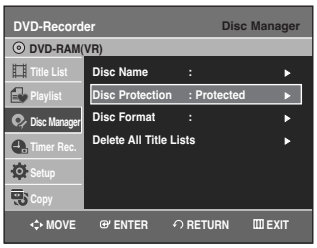
1 With the unit in Stop mode, press the **MENU** button.

2 Press the ▲▼ buttons to select **Disc Manager**, then press the **ENTER** or ▶ button.

3 Press the ▲▼ buttons to select **Disc Protection**, then press the **ENTER** or ▶ button.



4 Press the ▲▼ button to select **Protected**, then press the **ENTER** or ▶ button.



Editing

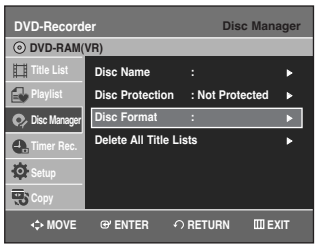
Formatting a Disc

Use these instructions to format a disc. Clear disc protection before formatting.

1 With the unit in Stop mode, press the **MENU** button.

2 Press the ▲▼ buttons to select **Disc Manager**, then press the **ENTER** or ▶ button.

3 Press the ▲▼ buttons to select **Disc Format**, then press the **ENTER** or ▶ button.



DVD-RAM/+RW

- You will be prompted with the confirmation message 'Do you want to format disc?'.

- You will be prompted with the confirmation message 'All data will be deleted. Do you want to continue?'.

DVD-RW

- You will be prompted with the confirmation message 'Choose the recording format for DVD-RW.'

4 Press the ◀ ▶ buttons to select **Yes**, then press the **ENTER** button. The disc is formatted.

DVD-VR and DVD-V modes are compatible with the following disc types.

	DVD-VR	DVD-V
DISC	DVD-RAM DVD-RW	DVD-RW DVD-R

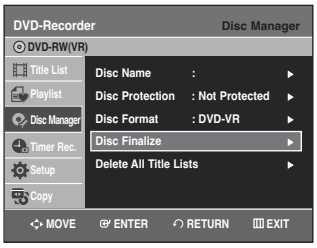
Finalizing a disc

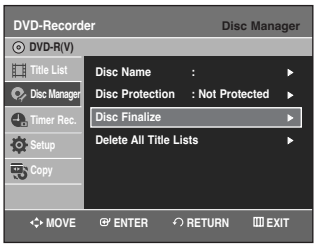
After you record titles onto a DVD-RW/DVD±R disc with your DVD Recorder & VCR, it needs to be finalized before it can be played back on external devices.

1 With the unit in Stop mode, press the **MENU** button.

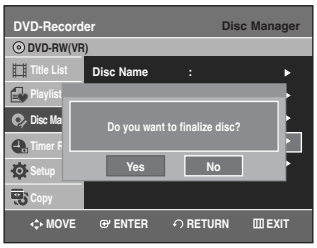
2 Press the ▲▼ buttons to select **Disc Manager**, then press the **ENTER** or ▶ button.

3 Press the ▲▼ button to select **Disc Finalize**, then press the **ENTER** or ▶ button.





You will be prompted with the message 'Do you want to finalize disc?'.



If you select Yes, you will be prompted again with the message 'Disc will be finalized. Do you want to continue?'

4 Press the ◀ ▶ buttons to select **Yes**, then press the **ENTER** button.
The disc is finalized.

Note

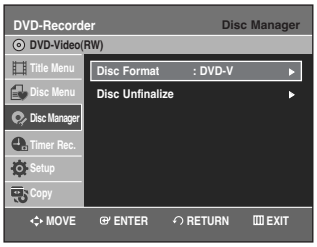
- Once a disc is finalized, you cannot delete titles from the record list.
- Once a DVD±R/DVD-RW (video mode)disc is finalized, it is playable in a standard DVD player.
- Depending on the disc type, the displayed screen may be different.
- Finalizing time may be different depending on the amount of data recorded on the disc.
- Data on the disc will be damaged if the recorder is powered off during finalize process.

Unfinalizing a disc (V/VR mode)

DVD-RW

1 With the unit in Stop mode, press the **MENU** button.

2 Press the ▲▼ buttons to select **Disc Manager**, then press the **ENTER** or ▶ button.



Editing

3 Press the ▲▼ button to select **Disc Unfinalize**, then press the **ENTER** or ► button.
You will be prompted with the message 'Do you want to unfinalize disc?'.

If you select Yes, you will be prompted again with the message 'Disc will be unfinalized. Do you want to continue?'

4 Press the ◄► buttons to select **Yes**, then press the **ENTER** button.
The disc is unfinalized.

Note

- A DVD-RW can be finalized or unfinalized in Video mode.

	Finalize	Unfinalize
Mark	DVD-Video(RW)	DVD-RW(V)
Operation	Same as DVD-Video	Additional recording, protection and deletion are possible.

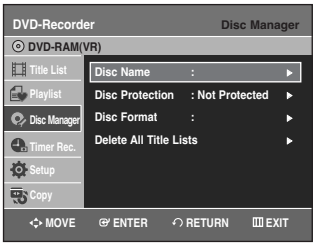
- A DVD-RW can be finalized or unfinalized in VR mode.

	Finalize	Unfinalize
Mark	DVD-RW(VR:F)	DVD-RW(VR)
Operation	Additional recording, deletion, editing, and protection are impossible.	Additional recording, deletion, editing, and protection are possible.

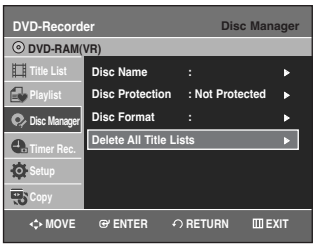
Delete All Title Lists

1 With the unit in Stop mode, press the **MENU** button.

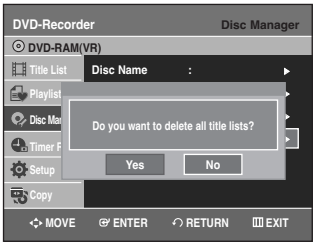
2 Press the ▲▼ buttons to select **Disc Manager**, then press the **ENTER** or ► button.



3 Press the ▲▼ button to select **Delete All Title Lists**, then press the **ENTER** or ► button.



- You will be prompted with the confirmation message 'Do you want to delete all title lists?'.



- When Protected Title exists: The Delete All Title List function will not operate. If there is a title containing a still picture, however, that function will not operate.
  If you want to delete a protected title, disable Protect for it on the Lock item.

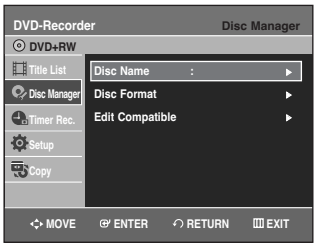
4 Press the ◄ ► buttons to select **Yes**, then press the **ENTER** button.
All title lists are deleted.

Edit Compatible

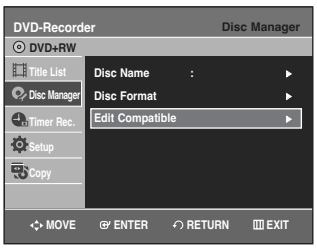
For DVD+RW discs, this function needs to be performed in order to view edited chapters or titles on a standard DVD player.

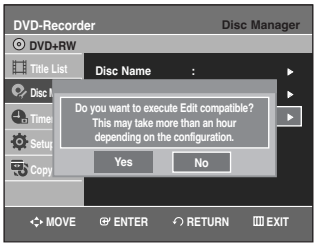
1 With the unit in Stop mode, press the **MENU** button.

2 Press the ▲▼ buttons to select **Disc Manager**, then press the **ENTER** or ► button.



3 Press the ▲▼ buttons to select **Edit Compatible**, then press the **ENTER** or ► button.





- You will be prompted with the confirmation message 'Do you want to execute Edit compatible? This may take more than an hour depending on the configuration.'.

4 Press the ◄ ► buttons to select **Yes**, then press the **ENTER** button to execute the edit compatible.

After performing this function, you can go to TITLE MENU screen directly by pressing the **TITLE MENU** button.

Reference

Troubleshooting (DVD-VIDEO/DVD-RAM/DVD±RW/DVD±R) 98
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Troubleshooting

▼

Cable Box/Satellite Receiver Brand Code Table

▼

Specifications

▼

LIMITED WARRANTY TO ORIGINAL PURCHASER

Troubleshooting (DVD-VIDEO/DVD-RAM/DVD±RW/DVD±R)

If your product malfunctions, go through the check points below before contacting a Samsung authorized service center,

Problem	Explanation/Solution
No power.	• Check whether the power cord is securely plugged into the power outlet. • Did you press the power button of your DVD Recorder & VCR.
The input is displayed for a while when the power turns on.	• The DVD Recorder & VCR requires some time to initialize after it is turned on. If Quick recording function is set to on, the DVD Recorder & VCR will power on quickly, which enables you to immediately record a desired channel. (See page 46.)
Cannot record TV programs.	• Check whether the power cord is securely plugged into the power outlet. • Did you set the DVD Recorder & VCR channel settings correctly? • Check the free space on your DVD-RAM/DVD±RW/DVD±R disc. • Check the antenna cable is connected.
Timer recording does not work properly.	• Check the recording time, end time and current time settings again. • Recording will be cancelled if the power is interrupted due to a power failure or other reason during recording.
Cannot record.	• Check whether the disc is formatted. This product can record on formatted discs only. (See pages 65, 93.) • Check whether your DVD-RAM/DVD±RW/DVD±R disc has a sufficient free space.
I pressed the REC button but there is no response.	• Recording is available on DVD-RAM/DVD±RW/DVD±R discs only. • If a program is copy protected, you cannot record it.
I forget the password for parental lock.	• Press and hold the **CH** (∧/∨) button on the front panel of your unit for more than 5 seconds with no disc, and then press the **POWER OFF/ON** button. All settings including password will revert to factory settings. Do not use it if not absolutely required. (Note that this function is available only when there is no disc inserted.)
Cannot play the disc.	• Check whether the disc is inserted correctly with the label facing up. • Check the regional code of your DVD disc. • This DVD Recorder & VCR cannot playback some types of disc. (See pages 5, 48.)
No sound.	• Are you watching a program in slow or skip mode? If you are playing a program at a speed other than normal speed, sound is not output. (Except for forward search Playback (Fast1)) • No sound will be heard when scanning an MPEG4 disc. • Check the connections and initial settings. • Check whether the disc is damaged. Clean up the disc, if necessary. • Check whether the disc is inserted correctly with the label facing up.

Troubleshooting (DVD)

Problem	Explanation/Solution
⊘ icon appears on the screen.	You cannot use the operation or function due to one of the following reasons: (1) Your DVD disc does not support the feature (for example, angles) (2) You've requested a title, chapter, or scan time that is out of the correct range.
Play mode settings are different from the settings configured with the Setting menu.	The disc does not support all the selected functions. In this case, some settings you configure on the Setting menu may not work properly.
Cannot change the aspect ratio.	Aspect ratio is fixed on DVD disc.
No audio output.	Check whether you selected correct digital output options in the Audio Output Options menu.
No video or audio output. The disc tray is ejected after 2 to 5 seconds.	Did you move your DVD Recorder & VCR suddenly from a cold place to a warm place? In this case, do not connect the plug to the power outlet and wait for two hours. Then insert the disc and try to play back again. It will work properly when condensation has evaporated.
Angle operation does not work during playback of a DVD disc.	Angle operation is available only when the disc contains images captured at different angles.
The disc revolves, but no image or bad quality images are output.	• Check whether there is damage or foreign materials on your disc. • Some discs with bad manufacturing quality may not be played back. • If the scene changes from dark to bright suddenly, the screen may jitter temporarily, but it is not a defect.
Desired sound language and subtitle language are not played.	Sound languages and subtitle languages are disc-specific. Only the sound and subtitle languages contained on a DVD disc are available and displayed on the disc menu.
No progressive output.	• Check whether PS◯ is displayed on front panel. • Make sure to change the component video output using the Progressive button when the disc is stopped.
The remote control doesn't work.	• Point the remote control at the remote control sensor on your DVD Recorder & VCR. Operate within distance. (15ft) Remove obstacles between your DVD Recorder & VCR and remote control. • Check whether the batteries are depleted.
Other problems	• Read the table of contents and then find and read the sections describing your problem, and follow the directions given. • Turn the unit off and on. • If your problem still persists, contact your nearest Samsung service center.
No HDMI output.	• Check the Video output is HDMI enabled. • Check the connection between the TV and the HDMI jack of the DVD Recorder &VCR. • See if your TV supports this 480p/720p/1080i DVD Recorder &VCR.
Abnormal HDMI output screen.	• If snow noise appears on the screen,it means that TV does not support HDCP (High-bandwidth Digital Content Protection).
HDMI output Jitter	• Check your TV system setup correctly. • Screen Jitter may occur when the frame rate is converted from 50Hz to 60Hz for 720p/1080i HDMI (High Definition Multimedia Interface)Output. • Please refer to the user 's manual of your TV.

Troubleshooting (VCR)

Before contacting a Samsung authorized service center, perform the following simple checks.

Problem	Explanation/Solution
No power	• Check that the power plug is connected to a wall outlet. • Have you pressed the **POWER** button?
You cannot insert a video cassette	• A video cassette can only be inserted with the window side up and the safety tab facing you.
The television program was not recorded	• Check the DVD Recorder & VCR antenna connections. • Is the DVD Recorder & VCR tuner properly set? • Check if the safety tab is intact on the cassette.
Timer recording was unsuccessful	• Re-check the recording start/stop time settings and the current time • Check whether you insert a tape which has enough time record
No playback picture or the picture is distorted	• Check to see if you are using a prerecorded tape.
You cannot see normal broadcasts Noise bars or streaks on playback	• Check the tuner/external setting. It should be on tuner. • Check the TV antenna connections. • Press the CH/TRK (∧/∨) buttons to minimize this effect.
When the ▶II button is pressed during playback, the still picture has severe “noise bar” streaks	• A still picture may have “noise bars”, depending on the condition of the tape. Press the CH/TRK (∧/∨) buttons during slow motion to minimize this effect.
Video Head Cleaning	• If poor pictures appear on a variety of cassettes, the video heads may need cleaning. This is not a common problem and unless it appears, the heads should not be cleaned. When cleaning the video heads, read all instructions provided with the head cleaning cassette. Incorrect head cleaning can permanently damage the video heads.

If you are unable to solve the problem after reading the above instructions, note:

- **The model and serial number on the rear of your DVD Recorder & VCR**
- **The warranty information**
- **A clear description of the problem**

Then contact your nearest SAMSUNG authorized service center.

Cable Box/Satellite Receiver Brand Code Table

Cable box brand

Cable box brand	Code number
3M	0033
ABC	0003, 0011, 0017, 0008, 0014,
Accuphase	0007, 0001, 0013, 0206, 0047,
	0237, 0033
	0003, 0013, 0047, 0001, 0011,
Acorn	0017, 0014, 0206, 0007
	1102, 0237
Action	0237
Active	0237, 1102
Aim	0015
Allegro	0315, 0153
Amark	0008, 0277, 0144, 0056
American	0060
Americast	0899
Antronix	0207, 0022
Anvision	0211, 0111
Apache	0770
Arbatron	0014, 0011, 0003, 0476
Archer	0153, 0022, 0207, 0039, 0797,
ASE	0237, 0260
	1080
Auna	1269
BBT	0267
BCC	0276
Belcor	0056, 0022
Bell & Howell	0014
Bell Atlantic	0641
Bell South	0899
Bestlink	0303
Betavue	0022
British Telecom	0003
BVS	0641
Cable Healthcare	0769, 0058
Cable Star	0056
Cabletenna	0022, 0039
Cableview	0022
Century	0153, 0618, 0008, 0315
Citation	0017
Citizen	0153, 0315, 0078, 0242
Clearmaster	0883
ClearMax	0883, 1247
Colour Voice	0031, 0025
Comband	0233, 0232
Comtec	0274
Comtronics	0060, 0040
Comtronics Eagle	0040, 0060
Contec	0019
Coolmax	0883
Curtis Mathes	0015, 0242
Dae Ryung Eagle	0008
Dae Ryung	0008, 0877, 0477, 0277, 1877
Diamond	0035
Digeo	1476,1897
Digi	0637
Director	0476
Dumont	0637
Eagle Comtronics	0060, 0028

Cable box brand	Code number
Eastern	0002, 0274, 0418
Electricord	0078
Emerson	0797, 0303, 0015, 0014
Everquest	0040, 0015
Focus	0400
Fosgate	0276
Fujitsu	0246
Funai	0248, 0019
FutureVision	0649
Garrard	0153
Gateway	0764
GC Electronics	0207, 0056, 0330, 0016, 0040,
	0077, 0030
GE	0232, 0233, 0144, 0021
Gemini	0015, 0070, 0057, 0242, 0014,
	0797, 0013, 0400
General Instrument	0476,0011,0014,0098,0810,
	0024,0003,0015,0276,1376,1476
GHZ	0078
Gibraltar	0003
Global	1327
GMI	0069, 0057, 0015, 0797
Glodstar	0144, 0040
Goodmind	0770, 0797
Gradiente	1136
Hamlin	0020, 0009, 0034, 0259, 0015,
	0273, 0206
Healthway Interactive	0058, 1020, 1015, 0769
Hitachi	0011, 0154, 0009, 0008, 0003,
	0033, 0014, 0255
Houston Tracker	0011
Hwalin	0303
Hytex	0007
IBM	0670
IEEC	1018
Interbuy	0274
Jasco	0315, 0153, 0015
Jebsee	0014, 0400
Jerrold	0003, 0014, 0276, 0011, 0012,
	0020, 0024, 0015, 0047, 0098,
	0476, 0031, 0029,
	0111, 0032, 0054, 0810, 0028
Kuang Yu	0024
Leon	0069, 0015
LG	0040, 0144
Linsay	0440
Macom	0033
Maestro	0812
Magnavox	0797, 0027, 0032, 0334, 0069
Millennium	0618, 0153
Memorex	0000
Mitsubishi	0003
Motorola	0476, 0276, 1476, 0810, 1376,
	1254, 0400, 1106
Movie Time	0156, 0078, 0063, 0203
MS	0069, 0015, 1018, 0303
MultiVision	0012
Myrio	1117
NET	0274
Next Level	0764, 1316, 1315, 1314

Cable box brand	Code number
Nexus	0770
Northcoast	0671, 0314
Nova Vision	0277, 0008
Novabeam	0277
Novaplex	0618, 0277, 0017, 0008
NSC	0156, 0070, 0203, 0063, 0400, 0012, 0618, 0022, 0637, 0010, 0044
Oak	0019, 0007, 0303, 0248, 0017
Omega	0015
Omniview	0371
Optimus	0021
Pace	0008,0237,0277,0477,0877, 1877,0810,1376,1476
Pacific Bell	0843
Panasonic	0107, 0021, 0144, 0008, 0124, 0307, 0000, 0040
Panther	0637
Paragon	0000, 0525, 0008
Penney	0637, 0000
Philips	0025, 0031, 0290, 0027, 0030, 0153, 0060, 0242, 0028, 0334, 0211, 0029, 0259,0307, 0652, 0013, 0069, 0649, 0255, 0305, 0032, 0111, 0317
Pioneer	0144, 0023, 0533, 1877, 0877, 0260, 0008, 0277, 0477
Popular Mechanics	0400
Prelude	0770
Prism	0012, 0013, 0059
Protelcon	0786
Pulsar	0000, 0040
Quasar	0000
Quest	0144, 0020
R Line	0040
RadioShack	0883, 0015, 0315, 0303, 0797
Rampage	0255
Ranger	1247
RCA	0021, 0060, 0797,0047, 1256, 0843
Realistic	0207, 0153
Recoton	0153, 0400
Regal	0259, 0020, 0273, 0279, 0276
Regency	0002, 0020, 0682
Rembrandt	0070, 0153, 0040, 0022, 0011
RK	0304, 0479
Runco	0000
Samsung	0040, 0144, 0023, 0003, 0070, 0000, 1898
Sasktel	1737
Scientific Atlanta	0008, 0277, 0017, 0006, 0237, 0025, 0477, 0207, 0877, 0003, 0012, 0000, 0021, 1877
Seam	0510
Sears	0510
Sejin	1265
Siemens	0246
Sigma	0019
Signal	0040, 0015, 0011, 0035
Signature	0011
SkyCable	0112
Skygiant	1091
SL Marx	0040
Sony	1006, 1506, 1606
Spectradyne	0769, 0058
Spectravision	0058
Sprucer	0021, 0307, 0010, 0144
Standard Components	0203, 0096, 0155
Starcom	0003, 0015, 0047, 0014, 0098, 0305

Cable box brand	Code number
Stargate	0015, 0040, 0770, 0865, 0797, 0305, 0014
Starquest	0015
StarSight	0542, 0422
Stealth	0274
Stellar One	0807
Storm	1018, 0637
Suena Madritel	1230
Supercable	0276
Supermax	0883
Sylvania	0001
Tandy	0258
Tatung	0097
Teac	1018
Technics	0029
Teknika	0146
Teleavia	0040
TeleCaption	0221
Teleview	0063, 0040
Texscan	0001, 0096, 0010
TFC	0310
Thomson	1256
Timeless	0418, 0274, 0040
Tocom	0012, 0013, 0029, 0019, 0059, 0017
Torx	0003
Toshiba	0000
Trans PX	0303, 0276, 0153, 0315
Trinity	1248
Tristar	0883
TS	0255, 0024, 1018, 0003, 0303
Tusa	0015
TV COMM	0035, 0019
TV Guide	1476
TV86	0063, 0040
Uniden	0225, 0022
Unika	0207, 0153, 0022
United Artists	0007
United Cable	0003, 0014, 0011, 0276
Universal	0191, 0078, 0207, 0056, 0022, 0039, 0153, 0077, 0322, 0315
US Electronics	0276, 0008, 0003, 0017
V2	0883
Verizon	0246
Video way	0250, 0000
Video Works	0124
Vidtech	0244
Viewmaster	0883, 0770
Viewstar	0258, 0289, 0060, 0063, 0211, 0027, 0111, 0030, 0121
Vision	0883
Visionetics	1264
Vortex View	0883
WaveMaster	0565
Wiso	0078
Zenith	0000, 0525, 0054, 0017, 0039, 0153, 0060, 0315, 0191, 0899
Zenitek	0400

Satellite receiver brand

Satellite receiver brand	Code number
AlphaStar	0772
Atlantic Telephone	1333
Bell ExpressVu	0775
Century	0856
Chaparral	0216
Crossdigital	1109
DirecTV	1887, 0749, 0566, 0392, 1749,
	0099, 1109, 1076, 1442, 1856,
	0247, 1142, 1639, 0724, 0639,
	0819
Dish Network System	0775, 1005, 1170
Dishpro	0775, 1005
Echostar	0775, 1170, 1005
Expressvu	0775
Galaxis	0863
GE	0566
General Instrument	0361, 0869, 0627
GOI	0775
Gradiente	0856
Hitachi	0819, 0749
Houston Tracker	0775
HTS	0775
Hughes Network Systems	0749, 1749, 1442, 1142
Humax	1176, 1359, 1048, 0863, 0283
Innova	0099
Jerrold	0361, 0036, 0627
JVC	0775, 1170
Magnavox	0722, 0724
McIntosh	0869
Memorex	0724
Mitsubishi	0749
Motorola	0869
NEC	1270, 0496, 0499, 0507, 0508
Netsat	0099
Next Level	0869
Optimus	0724
Panasonic	0247, 0701
Paysat	0724
Philips	1076, 1142, 0724, 0722, 0749,
	1442, 1749, 0856, 0775, 0099
Primestar	0361, 0627, 0869
Proscan	0392, 0566
QNS	1367
RadioShack	0869
RCA	0566, 0392, 0143, 0855
Samsung	1109, 1276
Sky	0856, 0099, 1856
Sony	0639, 1639
Star Choice	0869
Star Trak	0869, 0772
Thomson	0566, 0392
Tivo	1142, 1442
Toshiba	0790, 0749, 1749, 1285
UEC	1333, 1358
Uniden	0724, 0722
Video Cipher II Plus	0361
Zenith	0856, 1856

Problems and Solutions (Display error Message)

Before contacting a Samsung authorized service center, perform the following simple checks.

Problem	Explanation / Solution
You cannot record a copy protected movie.	• You can't record the video since it is protected by copyright.
You cannot record. This disc is protected.	• Disc you are using is protected. To record on this disc or use this function, cancel the disc protection function. Refer to page 92.
This disc cannot be formatted (the disc is protected).	
This disc cannot be renamed (the disc is protected).	
This disc cannot be finalized (the disc is protected).	
This [Menu] is not available (the disc is protected).	
The disc cannot be played, Please check the regional code of the disc.	• The disc does not match the regional code for your area and cannot be played on this device.
This disc cannot be formatted. Please check the disc.	• Make sure there are no scratches or dirt on the disc.
You could not format the disc because of error detection.	
You could not finalize the disc because of error detection.	
You could not unfinalize the disc because of error detection.	
The disc cannot be played, Please check the TV system.	• The disc is PAL format and cannot be played on this unit.
The disc can be neither played nor recorded.	• Make sure there are no scratches or dirt on the disc.
The disc cannot be played, Please check the disc.	
If the disc has invalid information, no more titles can be recorded. Please format the disc beforehand.	• You can't use the disc because it contains errors from previous recordings. Use the disc after formatting.

Problems and Solutions (Display error Message)

Problem	Explanation / Solution
Error is detected on the disc.	• You can't use the disc because it contains errors from previous recordings. Use the disc after formatting.
System error is found. Please try it again after turning off the power.	• When operating, errors happen. Turn off the device. (To turn off, press and hold the power button on the front of the device for 10 seconds.) After turning off, press the Open button and remove the disc from the device.
The DV device is not connected.	• Make sure the DV device is connected properly to the DV connection Jack. If it is connected properly, turn it off and on once again.

If you are unable to solve the problem after reading the above instructions, note:

- The model and serial number on the rear of your DVD Recorder & VCR
- The warranty information
- A clear description of the problem

Then contact your nearest SAMSUNG authorized service center. Call 1-800-SAMSUNG for a center near you.

Specifications

General	Power requirements	120V AC, 60Hz
	Power consumption	28 Watts
	Weight	8.75 lb
	Dimensions	16.9 in(W) x 10.6 in(D) x 3.1 in(H)
	Operating temp.	+41°F to +95°F
	Other conditions	Keep level when operating. Less than 75% operating humidity
Input	Video	1.0 V p-p at 75Ω load, sync negative S-Video input (Y: 1.0Vp-p, C: 0.286Vp-p at 75Ω load)
	Max. Audio Input Level	2Vrms
	DV Input	IEEE 1394(4p) compatible jack
	Receivable Channels	Regular TV broadcasting: VHF (2~13), UHF (14~69) Cable TV broadcasting: 1~125
	Audio	Audio output jacks 1, 2 Optical/Coaxial digital audio output support Min. 100 dB signal-to-noise ratio Max. 0.005% total harmonic distortion (T.H.D) at average 1 KHz
	Video	Video output jacks 1 S-Video output 1 (Y:1.0Vp-p, C:0.286Vp-p at 75Ω load) Component output (Y: 1.0Vp-p, Pb: 0.70Vp-p, Pr: 0.70Vp-p at 75Ω load)
		HDMI output (480p, 720p, 1080i)
DVD	Picture Compression format	MPEG-II
	Audio Compression format	Dolby AC-3 256kbps
	Recording Quality	XP (about 8 Mbps), SP (about 4 Mbps), LP (about 2 Mbps), EP (about 1.2 Mbps)
	Video S/N Ratio	Min. 50dB at standard recording
	Audio S/N Ratio	Min. 75dB
	Audio frequency characteristics	20 Hz ~ 20 KHz

Audio Output
For DVD discs, audio signals recorded at 96kHz sampling frequency are converted into and output at 48kHz.

Disc Type	DVD	AUDIO CD(CD-DA)
Analog Audio Output	48 / 96KHz	44.1KHz
Digital Audio Output	48KHz	44.1KHz

SAMSUNG DVD RECORDER & VCR

LIMITED WARRANTY TO ORIGINAL PURCHASER

This SAMSUNG brand product, as supplied and distributed by Samsung Electronics America, Inc. (SAMSUNG) and delivered new, in the original carton to the original consumer purchaser, is warranted by SAMSUNG against manufacturing defects in materials and workmanship for a limited warranty period of:

One (1) Year Parts / Ninety (90) days Labor
(90 days Parts and Labor for Commercial Use)

This limited warranty begins on the original date of purchase, and is valid only on products purchased and used in the United States. To receive warranty service, the purchaser must contact SAMSUNG for problem determination and service procedures. Warranty service can only be performed by a SAMSUNG authorized service center. The original dated bill of sale must be presented upon request as proof of purchase to SAMSUNG or SAMSUNG's authorized service center. Transportation of the product to and from the service center is the responsibility of the purchaser.

SAMSUNG will repair or replace this product, at our option and at no charge as stipulated herein, with new or reconditioned parts or products if found to be defective during the limited warranty period specified above. All replaced parts and products become the property of SAMSUNG and must be returned to SAMSUNG. Replacement parts and products assume the remaining original warranty, or ninety (90) days, whichever is longer.

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This limited warranty covers manufacturing defects in materials and workmanship encountered in normal, and except to the extent otherwise expressly provided for in this statement, noncommercial use of this product, and shall not apply to the following, including, but not limited to: damage which occurs in shipment; delivery and installation; applications and uses for which this product was not intended; altered product or serial numbers; cosmetic damage or exterior finish; accidents, abuse, neglect, fire, water, lightning or other acts of nature; use of products, equipment, systems, utilities, services, parts, supplies, accessories, applications, installations, repairs, external wiring or connectors not supplied and authorized by SAMSUNG, or which damage this product or result in service problems; incorrect electrical line voltage, fluctuations and surges; customer adjustments and failure to follow operating instructions, cleaning, maintenance and environmental instructions that are covered and prescribed in the instruction book; product removal or reinstallation; reception problems and distortion related to noise, echo, interference or other signal transmission and delivery problems. SAMSUNG does not warrant uninterrupted or error-free operation of the product.

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Some states do not allow limitations on how long an implied warranty lasts, or the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

To obtain warranty hardware service, please contact SAMSUNG at:

Samsung Electronics America, Inc.
105 Challenger Road Ridgefield Park, NJ 07660-0511
1-800-SAMSUNG (726-7864) and **www.samsung.com**

Contact SAMSUNG WORLD WIDE

If you have any questions or comments relating to Samsung products, please contact the SAMSUNG customer care center.

Region	Country	Customer Care Center ☎	Web Site
North America	CANADA	1-800-SAMSUNG (7267864)	www.samsung.com/ca
	MEXICO	01-800-SAMSUNG (7267864)	www.samsung.com/mx
	U.S.A	1-800-SAMSUNG (7267864)	www.samsung.com
Latin America	ARGENTINE	0800-333-3733	www.samsung.com/ar
	BRAZIL	0800-124-421	www.samsung.com/br
	CHILE	800-726-7864(SAMSUNG)	www.samsung.com/cl
	COSTA RICA	0-800-507-7267	www.samsung.com/latin
	ECUADOR	1-800-10-7267	www.samsung.com/latin
	EL SALVADOR	800-6225	www.samsung.com/latin
	GUATEMALA	1-800-299-0013	www.samsung.com/latin
	JAMAICA	1-800-234-7267	www.samsung.com/latin
	PANAMA	800-7267	www.samsung.com/latin
	PUERTO RICO	1-800-682-3180	www.samsung.com/latin
	REP. DOMINICA	1-800-751-2676	www.samsung.com/latin
	TRINIDAD & TOBAGO	1-800-7267-864	www.samsung.com/latin
	VENEZUELA	1-800-100-5303	www.samsung.com/latin
Europe	BELGIUM	02 201 2418	www.samsung.com/be
	CZECH REPUBLIC	844 000 844	www.samsung.com/cz
	DENMARK	38 322 887	www.samsung.com/dk
	FINLAND	09 693 79 554	www.samsung.com/fi
	FRANCE	08 25 08 65 65 (0,15 € /Min)	www.samsung.com/fr
	GERMANY	01805 - 121213 (€ 0,12/Min)	www.samsung.de
	HUNGARY	06 40 985 985	www.samsung.com/hu
	ITALIA	199 153 153	www.samsung.com/it
	LUXEMBURG	02 261 03 710	www.samsung.lu
	NETHERLANDS	0900 20 200 88 (€ 0.10/Min)	www.samsung.com/nl
	NORWAY	231 627 22	www.samsung.com/no
	POLAND	0 801 801 881	www.samsung.com/pl
	PORTUGAL	80 8 200 128	www.samsung.com/pt
	SLOVAKIA	0850 123 989	www.samsung.com/sk
	SPAIN	902 10 11 30	www.samsung.com/es
	SWEDEN	08 585 367 87	www.samsung.com/se
	U.K	0870 242 0303	www.samsung.com/uk
CIS	RUSSIA	8-800-200-0400	www.samsung.ru
	UKRAINE	8-800-502-0000	www.samsung.com/ur
Asia Pacific	AUSTRALIA	1300 362 603	www.samsung.com/au
	CHINA	800-810-5858, 010- 6475 1880	www.samsung.com.cn
	HONG KONG	2862 6001	www.samsung.com/hk
	INDIA	3030 8282 1600 1100 11	www.samsung.com/in
	INDONESIA	0800-112-8888	www.samsung.com/id
	JAPAN	0120-327-527	www.samsung.com/jp
	MALAYSIA	1800-88-9999	www.samsung.com/my
	PHILIPPINES	1800-10-SAMSUNG (7267864)	www.samsung.com/ph
	SINGAPORE	1800-SAMSUNG (7267864)	www.samsung.com/sg
	THAILAND	1800-29-3232 02-689-3232	www.samsung.com/th
	TAIWAN	0800-329-999	www.samsung.com/tw
	VIETNAM	1 800 588 889	www.samsung.com/vn
Middle East & Africa	SOUTH AFRICA	0860 7267864 (SAMSUNG)	www.samsung.com/za
	U.A.E	800SAMSUNG (7267864)	www.samsung.com/mea

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