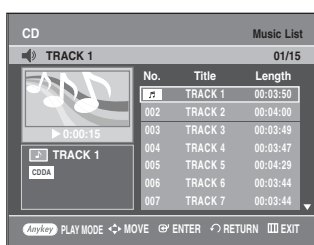


Playing back an Audio CD (CD-DA)

Each disc has a variety of menu functions available.

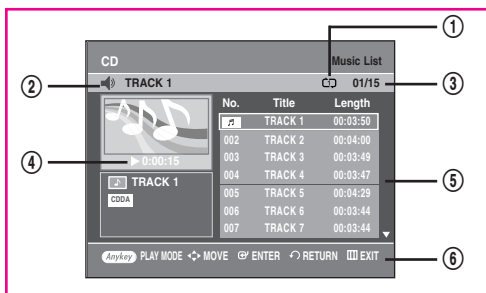
Playing an Audio CD(CD-DA)

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



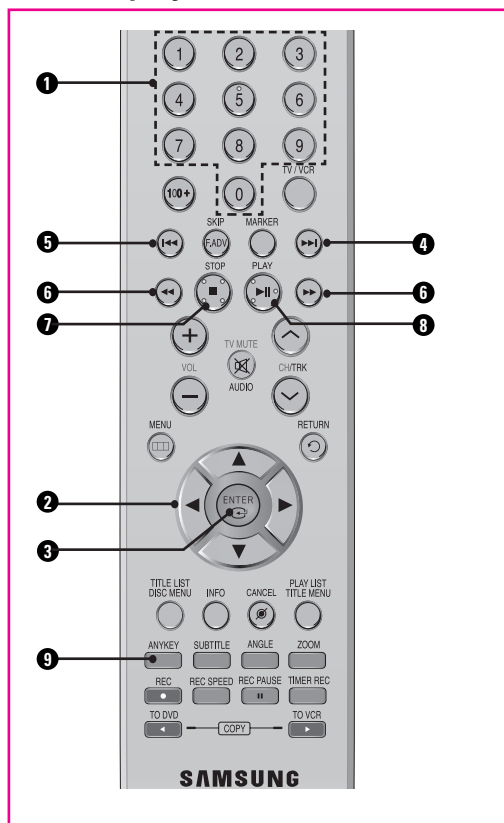
- 2 Press the ▲▼ buttons to select the track (song) to start playback from, and then press the **ENTER** button.
 - You can also select the track (song) by pressing the number buttons on the remote **control**.

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

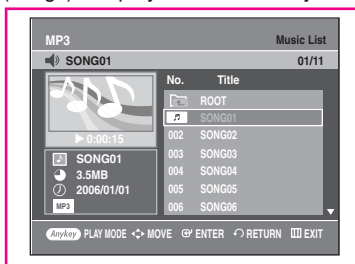


1. **▲▼, 0-9**: Selects a track (song).
2. **▶**: Plays the selected track (song).
3. **ENTER button**: Plays the selected track (song).
4. **▶▶ button**: Plays the next track.
5. **◀◀ button**: Returns to the beginning of the current track when pressed during playback. If pressed again, your DVD Recorder & 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.
6. Press the (**◀◀/▶▶**) button: Fast Play (**X2, X4, X8**)
7. **■**: Stops a track(song).
8. **▶||**: Plays a track(song) or pauses playback.
9. **ANYKEY**: To display the play mode window. (Repeat or Play Option).

Playing back an MP3 CD

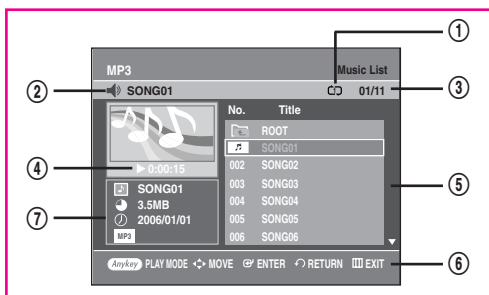
Playing an MP3 Disc

- 1 Insert an MP3 CD into the disc tray.
 - The MP3 menu is displayed and the tracks (songs) are played automatically.



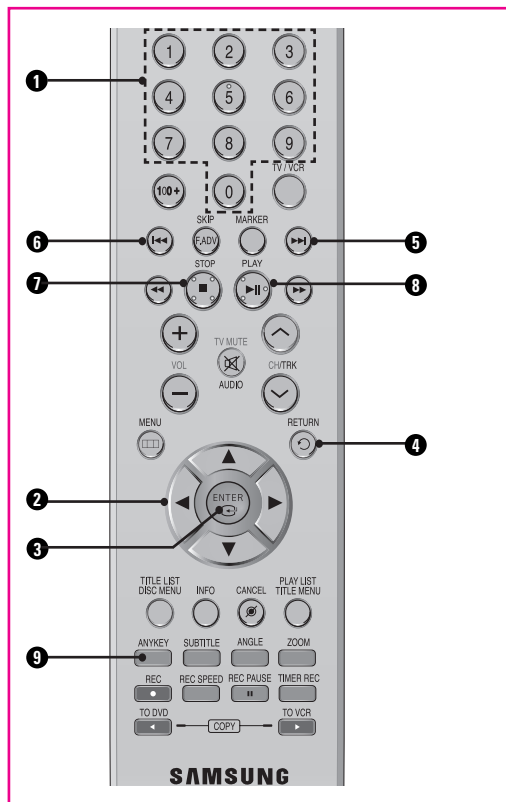
- 2 Press the **▲▼** buttons to select the folder you want to hear, and then press the **ENTER** button.
 - Press the **▲▼** buttons to select the track (song) you want to hear, and then press the **ENTER** button.
 - You can also select the desired track (song) by pressing the number buttons on the remote.

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 CD playback

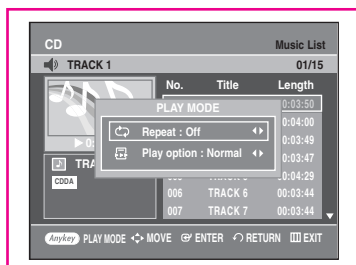


1. **▲▼, 0-9:** Selects a track (song).
2. **▶ :** Plays the selected track (song) or displays the files in the selected folder.
3. **ENTER** button: Plays the selected track (song) or displays the files in the selected folder.
4. **RETURN** button: Moves to the folder to which the current song belongs.
5. **▶▶** button: Plays the next track.
6. **◀◀** 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.
7. **■ :** Stops a track(song).
8. **⏸ :** Plays a track(song) or pauses playback.
9. **ANYKEY :** To display the play mode window. (Repeat or Play Option).

Repeat Playback of an Audio/MP3 CD



- 1 Press the **ANYKEY** button during playback.
The **PLAY MODE** window appears.



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

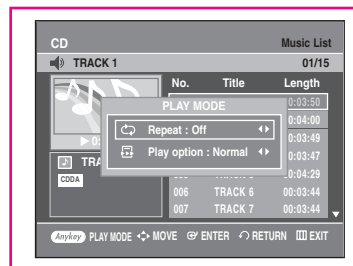
- **CD** Repeat Track (CD (CD-DA)/MP3)
- **CD** Repeat Folder (MP3)
- **ALL** Repeat All (CD (CD-DA)/MP3)

- To return to normal playback -

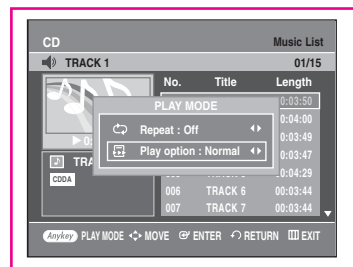
- 3 Press the **CANCEL** button to return to normal playback.

Play Option Mode

- 1 Press the **ANYKEY** button during playback.
The **PLAY MODE** window appears.



- 2 Press the **▲▼** buttons to select **Play option**.



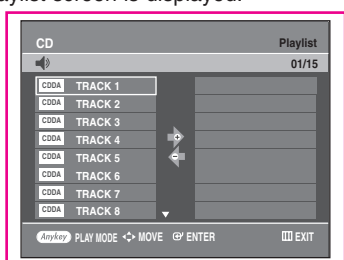
- 3 Press the **◀▶** buttons to select a desired Play Option, then press the **ENTER** button.

- **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:** 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:** The Random option plays the tracks of a disc in random order. After a random list is generated and played completely, another random list is generated and played.
When the Random play mode is selected, the Random play mode icon (**CD**) is displayed at the position of play mode icon. Random Play is continued until the play option is changed. If you want to exit the Random play mode, set **Play option** to **Normal**.

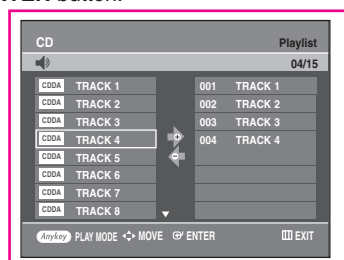
To Program Tracks

You can register a maximum 30 tracks in the playlist.

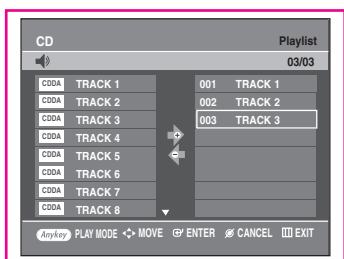
- 1 Press the **ANYKEY** button during playback.
The **PLAY MODE** window appears.
- 2 Press the **▲▼** buttons to select **Play option**.
- 3 Press the **◀▶** buttons to select **Playlist**, then press the **ENTER** button.
Playlist screen is displayed.



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



- 5 If you playlisted a wrong track, press the **▶** button and the **▲▼** buttons to select wrong track. Then press the **CANCEL** button. The wrong track will be removed.



- 6 Press the **PLAY** button to play the playlist.

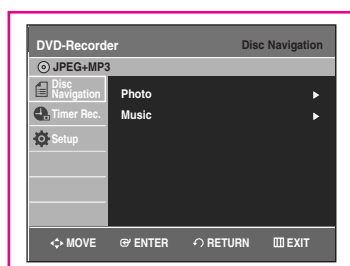
Playing a Picture CD



There are two types of Picture CDs. One is a CD with only JPEG files. The other one is a CD with JPEG files and MP3 files.(mixed CD)

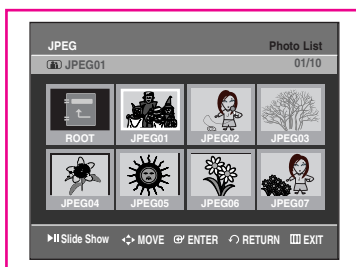
1. When a mixed CD is played, a menu will be shown in order to let you choose which contents, either JPEG or MP3, you want to play.
 - 1-1. If you want to play MP3 files on a mixed CD, choose Music on the menu, then it will take you to the MP3 playback screen.
 - 1-2. If you want to play JPEG files on a mixed CD, choose Photo on the menu, then it will take you to the photo playback screen. See number 3 on this page.
2. When a Picture CD(CD with only JPEG files) is played, the recorder will show the Album screen, with thumbnail images. See number 3 on this page.

- 1 Insert a mixed CD(JPEG + MP3) into the disc tray.
(when playing a Picture CD, see number 3 on this page.)



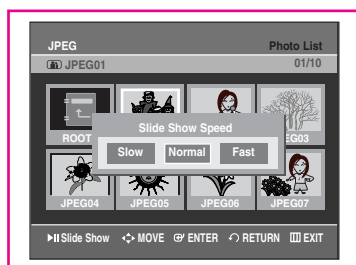
- 2 Press the **▲▼** buttons to select **Disc Navigation**, then press the **ENTER** or **▶** button twice.

3 Press the **▲▼◀▶** buttons to select a picture.

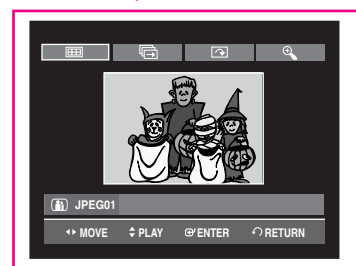


- To see the next 6 pictures, press the **▶▶** button.
- To see the previous 6 pictures, press the **◀◀** button.

4-1 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.



4-2 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 **OK** 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).

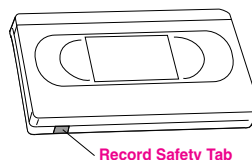
→ normal size → 2X → 4X → 2X

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

Playing the VCR



To play a standard VHS tape, just insert it into the VCR deck and press the **PLAY** button. You can turn on the Auto Play to enable the VCR deck to play automatically when you insert a videotape of which the **Record Safety Tab** is removed.



- 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** (Λ/V) 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** (Λ/V) 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 a 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 starts. 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.

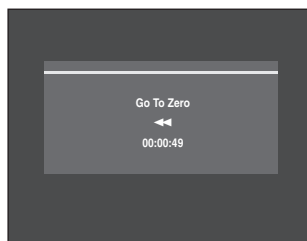
Go To Zero

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.



End Search

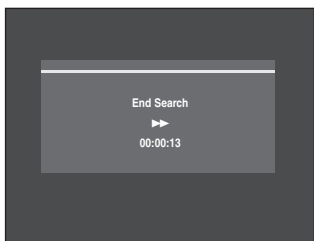
Use this feature when you want to search for a blank position to record a program on a cassette.

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

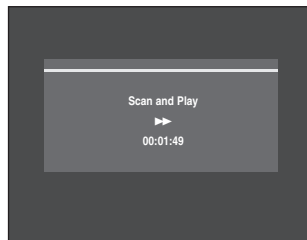


- 2 Press the **▲▼** buttons to select **End Search**, then press the **ENTER** button.

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.



- 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.



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.



Recording

This section shows various DVD recording methods.

◆ DVD Recording	
Before Recording	58
Recordable discs	58
Recording Formats	59
Recording Mode	59
Unrecordable video	59
Recording the Current Channel you are watching	60
Recording from External Devices	61
Recording through a DV Input jack	61
Making a One Touch Recording(OTR)	62
Making a Timer Recording	62
Editing the Scheduled Record List	64
Deleting a the Scheduled Record List	64
◆ VCR Recording	
Basic VCR Recording	65
Check Remaining Time	66
Special Recording Features	66
Copy to DVD or VCR	67

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

Compatibility between Samsung and Other Company's Recorder.

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
DVD-R	V Mode	Other Company	finalized	Not recordable
			not finalized	Not recordable
		Samsung	finalized	Not recordable
			not finalized	Recordable
		Other Company	finalized	Not recordable
			not finalized	Not recordable



Note

■ Finalize

- This closes the DVD-RW/-R so no additional recording can be done.

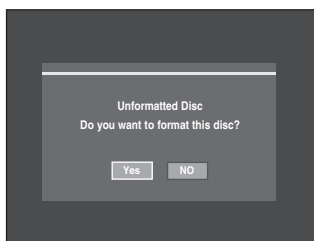
■ Unfinalize

- This allows additional recording on a DVD-RW disc originally recorded on the DVD-VR330.
- 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.

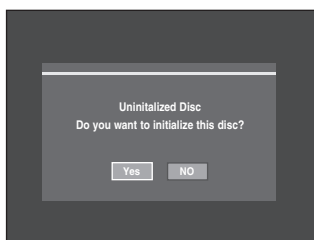
Recording Formats

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.

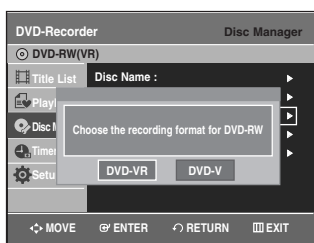
DVD-RAM: Use after formatting the disc.



DVD-RW: When an unused DVD-RW disc is first inserted, the message "Uninitialized Disc Do you want to initialize this disc?" will be displayed. If you select **Yes**, the disc will be formatted in VR mode.



If you want to change the mode, refer to Formatting a Disc on [page 82](#).



DVD-R: Formatting DVD is unnecessary and only Video Mode Recording is supported.

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.

Recording Mode

Select one of four recording modes by pressing the **REC SPEED** button repeatedly for the desired recording time and picture quality **while the unit is in Stop mode**.

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.

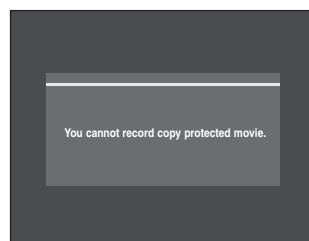
This function **applies** only one mode **among** XP,SP,LP and EP modes. And you can use this mode for timer recording.

Mode	Characteristic	Recording Times Data Rates
XP (high quality mode)	Select when the video quality is important.	Approx. 1 hours 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 page 62 .	Approx 60 to 480 Min approx 0.8 to 8Mbps

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 and DVD-RAM.

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

Once "Copy Once" has been recorded, additional recording cannot be performed.

This * marked parts are compatible with CPRM.

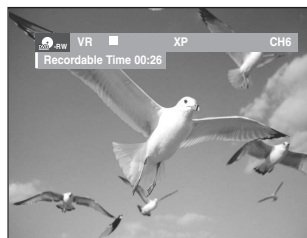
- Content Protection for Recordable Media (CPRM)

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. 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.

3 Press the **CH/TRK** (Λ/∨) 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** (Λ/∨) buttons while recording pauses.



Note

- You can not change the recording mode and the channel **during** recording.
- Recording will stop automatically if there is no free space left for recording.
- Up to 99 titles can be recorded onto a disc.
- If the power 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.

Recording

Recording the Current Channel you are watching



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

DVD-RAM/DVD-RW discs should be formatted in advance before beginning recording. Most new discs are sold unformatted. Make sure to format your unformatted discs before recording.

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.

Recording from External Devices

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

- 1 Connect the AV out jack of your External Devices to the AV IN jack on the front or rear of your DVD Recorder & VCR using 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.

→ Channel Number → AV 1 → AV 2 → DV →

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

→ SP → LP → EP → XP →

- 4 When your DVD Recorder & VCR is in the Stop mode, set the operation mode of your external devices to play mode.

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

- 6 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 Recorder & VCR using Audio/Video cables.
- For more information on changing the Video Input from AV1 to S-Video, see page 39(Video Input).

Recording through a DV Input jack

You may control the 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.

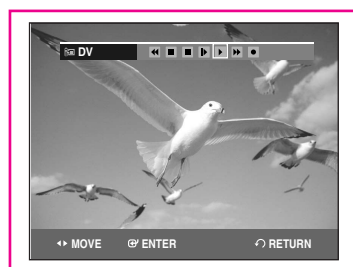
- 1 Connect the DV output jack of your camcorder to the DV input jack on the front of your DVD Recorder & VCR using a DV cable.

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

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

→ SP → LP → EP → XP →

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



- 5 Select the Play icon on the upper part of the screen to playback the camcorder and find the starting position to copy.
You can press the **PLAY** button on the remote control to playback the camcorder.

- 6 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 of the remote control to start recording. To display playback related icons on the screen, press any direction button on the remote control.

- 7 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 a DV jack.

Making a One Touch Recording (OTR)



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 **REC** button to start recording.

- 3 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.

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

→ 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.

Making a Timer Recording



The clock (**Setup – Clock Set**) must be set before proceeding with a timer recording. (See page 30)

- 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 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,
- ▲▼ 0~9 : Sets a value.

- **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

▲
01/31
01/30
:
01/02
Present Date 01/01
Mon~Fri
Sun's
Mon's
:
Sat's
▼

- **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.

This function **applies** only one mode **among** XP,SP,LP and EP modes. And you can use this mode 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. It 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." 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

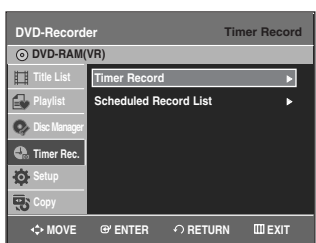
- The timer recording time may differ from the set time depending on disc status and overall timer recording status (for example, recording times overlapping, or when the previous recording ends within 3 minutes before the start time of the next recording.)

Editing the Scheduled Record List

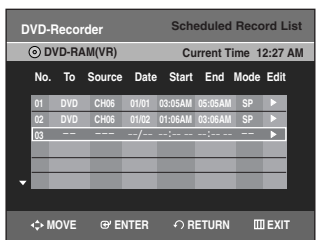


Follow these directions to edit the timer record list.

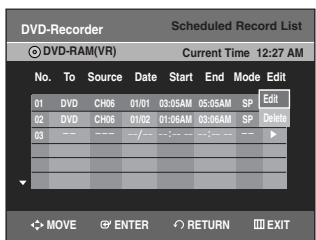
- 1 Press the **MENU** button.
- 2 Press the **▲▼** button to select **Timer Rec.**, then press the **ENTER** or **▶** button.



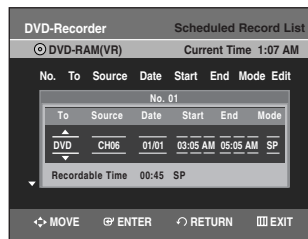
- 3 Press the **▲▼** button to select **Scheduled Record List**, then press the **ENTER** or **▶** button.



- 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 page 63)



- 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

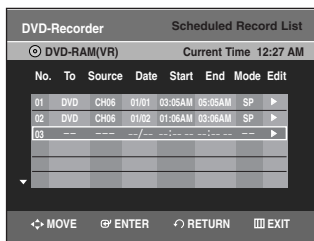


Follow these directions to delete a title from the timer record list.

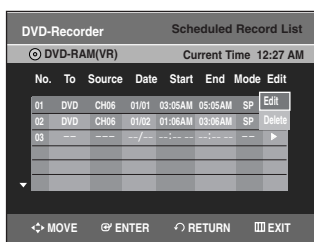
- 1 Press the **MENU** button.
- 2 Press the **▲▼** button to select **Timer Rec.**, then press the **ENTER** or **▶** button.



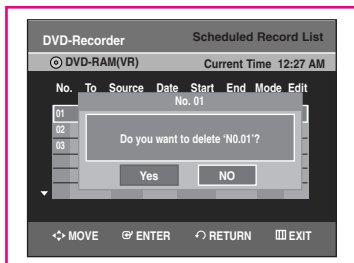
- 3** Press the **▲▼** button to select **Scheduled Record List**, then press the **ENTER** or **▶** button.



- 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 the 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.



- You can not delete programs that are currently **being recorded**.

Basic VCR Recording



Before starting

- Check TV channel and Antenna connections.
- 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.



- 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** (**^/v**) 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).



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

Maximum Recording Time - SP vs. SLP

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



- 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". (see page 66)

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

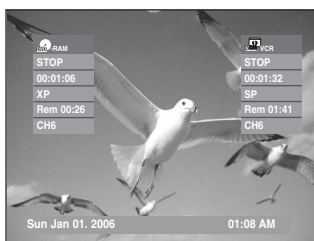
Pausing / Resuming

- 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 channel, watch a different media, or add recording time in **preset** increments.

1 Watch a Different Channel

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.

- When you watching through AV input during recording, change the input of your TV from AV to Antenna.
Change the channel you want to watch.

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 Add Recording Time

Refer to the One-Touch Recording (OTR).
(See page 62)

4 Recording DVD and VCR at the same time

You can record 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 DVD Recorder & VCR is connected to your TV using S-Video or component video cable, the playback screen on the video tape will not display 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



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



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

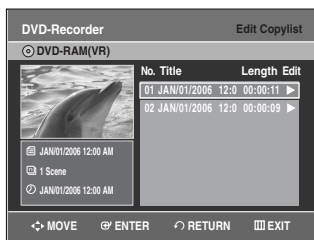
2 Press the **▲▼** buttons to select **Copy**, then press the **ENTER** or **▶** button.



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.



To copy from "Edit Copylist", you need to make a copylist in advance.

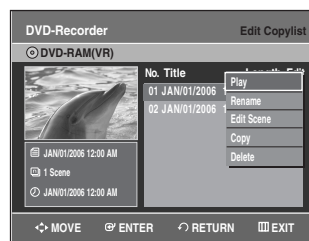
Select "New Copylist" and create the new playlist.

(See pages 74)

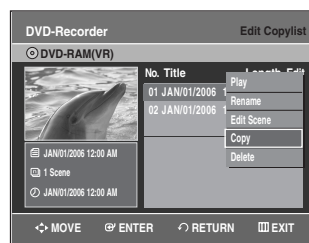
If you want to copy directly, choose "Direct Copy".

On DVD-RW(V)/-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.

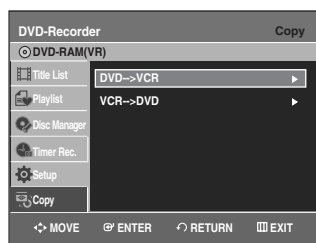


- Copy function is not allowed in progressive scan mode.

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.

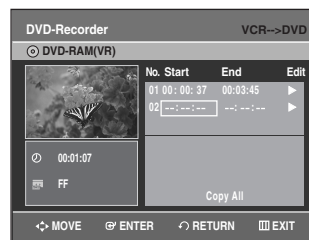


4 You can use the **▶II**, **I◀◀** or **▶▶I**, **◀◀** or **▶▶** buttons to search for the Start position. Press the **ENTER** button at the start point.

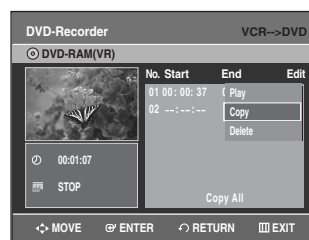


5 You can use the **▶II**, **I◀◀** or **▶▶I**, **◀◀** or **▶▶** buttons to search for the end position. Press the **ENTER** button at the end point.

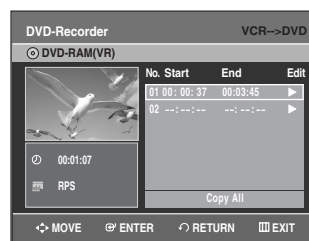
- A copylist will be generated.
- Repeat the above steps to create the copylist.
- In VCR mode, the copylist cannot be saved.



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.
- It may not be match up with Start and End point 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.

Playing the Title List	69
Basic Editing (Title List)	71
Renaming(Labeling) a Title	71
Locking(Protecting) a Title	72
Deleting a Title	72
Deleting a Section of a Title	73
Advanced Editing (Playlist)	74
Creating a playlist	74
Playing Titles in the Playlist	75
Renaming a Playlist Title	76
Editing a Scene for the Playlist	77
Copying a Playlist Title to the VCR	80
Deleting a Playlist Title from the Playlist	80
Disc Manager	81
Editing the Disc Name	81
Disc Protection	82
Formatting a Disc	82
Finalizing a disc	83
Delete All Title Lists	84
Unfinalizing a disc (V/VR mode)	85

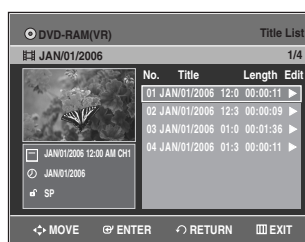
Playing the Title List



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.

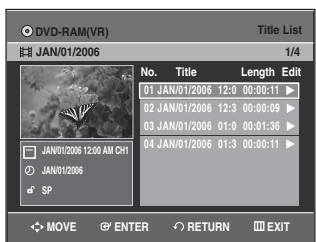
- 3 To stop title play, press the **STOP** button.
To return the title list screen, press the **TITLE LIST** button.

Using the MENU button

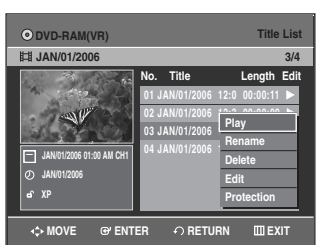
- 1 Press the **MENU** button.



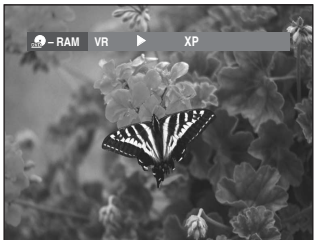
- 2** Press the **▲▼** buttons to select **Title List**, then press the **ENTER** or **▶** button twice. The Title List screen is displayed.



- 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 71~74)



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

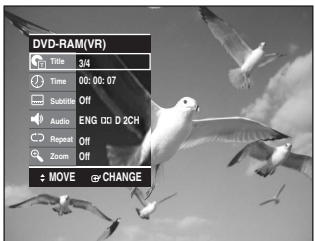


- 5** Press the **STOP** button to stop playing. To return the title list screen, press the **TITLE LIST** button.



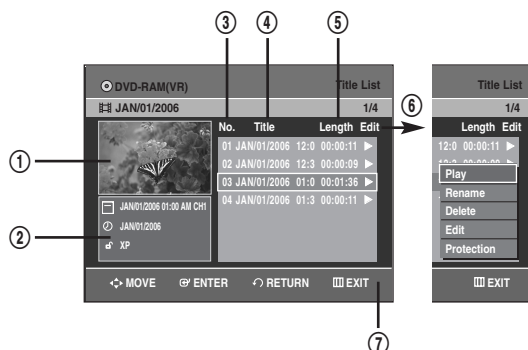
Note

- 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-R/DVD-RW(Video) has limited editing function.

Basic Editing (Title List)

Renaming(Labeling) a Title

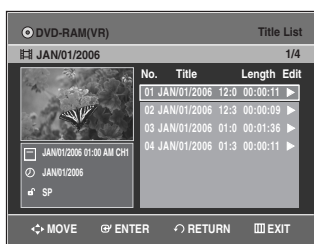
Follow these instructions to rename a title list name, i.e., to edit the title of a recorded program.



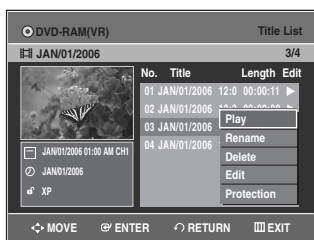
- 1 Press the **TITLE LIST** button.
The Title List screen is displayed.

Using the **MENU** button.

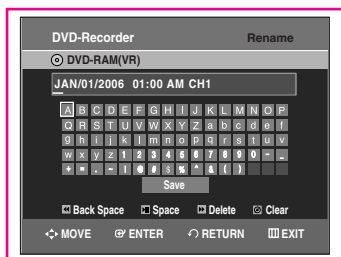
- Press the **MENU** button.
- Press the **▲▼** buttons to select **Title List**, then press the **ENTER** or **▶** button twice.



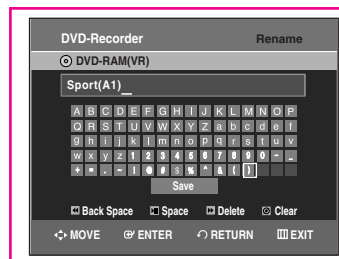
- 2 Press the **▲▼** buttons to select a title you want to rename from the Title List, then press the **ENTER** or **▶** button.



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

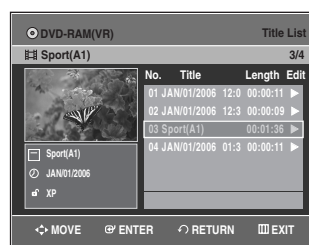


- 4 Select the desired characters using the **▲▼◀▶** buttons, press the **ENTER** button.



- **Back Space:** Moves the cursor one position backwards.(Equivalent to the **CANCEL** button)
- **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.

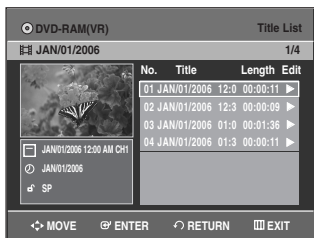


Locking(Protecting) a Title

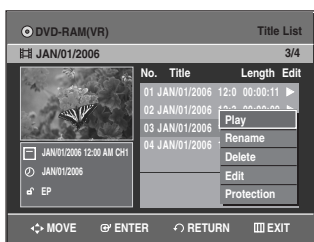
Follow these instructions to lock a title to protect it from accidental deletion.



- 1 Press the **TITLE LIST** button.
The Title List screen is displayed.
Using the **MENU** button.
 • Press the **MENU** button.
 • Press the **▲▼** buttons to select **Title List**, then press the **ENTER** or **▶** button twice.



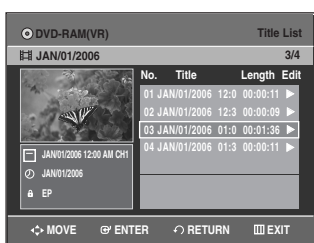
- 2 Press the **▲▼** buttons to select a title you want to protect in the Title List, then press the **ENTER** or **▶** button.



- 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 key icon on the information window for the selected title changes to the locked status. (🔒 → 🔒)

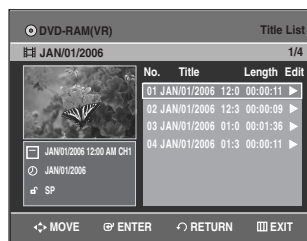


Deleting a Title

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



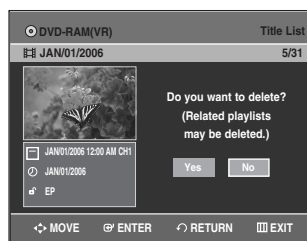
- 1 Press the **TITLE LIST** button.
The Title List screen is displayed.
Using the **MENU** button.
 • Press the **MENU** button.
 • Press the **▲▼** buttons to select **Title List**, then press the **ENTER** or **▶** button twice.



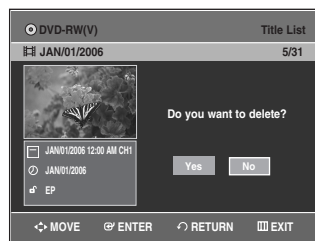
- 2 Press the **▲▼** buttons to select a title you want to delete in the Title List, then press the **ENTER** or **▶** button.



- 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-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

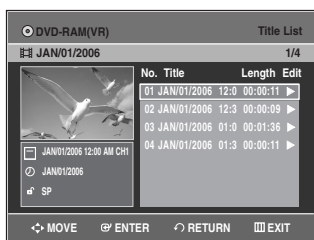
Follow these instructions to delete a section of a Title List title.



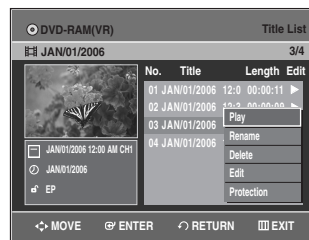
1 Press the **TITLE LIST** button.
The Title List screen is displayed.

Using the **MENU** button.

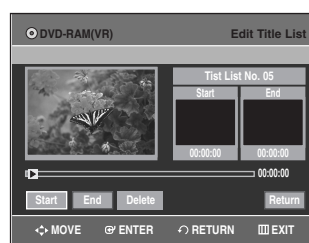
- Press the **MENU** button.
- Press the ▲▼ buttons to select **Title List**, then press the **ENTER** or ▶ button twice.



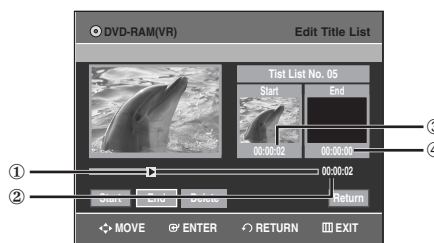
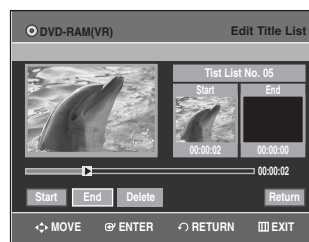
2 Press the ▲▼ buttons to select a title you want to delete from the Title List, then press the **ENTER** or ▶ button.



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.

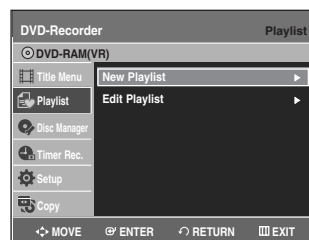
Advanced Editing (Playlist)

Creating a Playlist

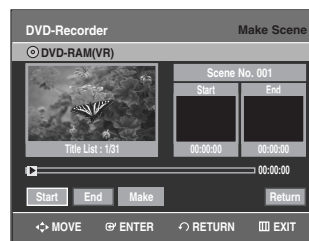
Follow these instructions to create a new playlist title from a recorded title.



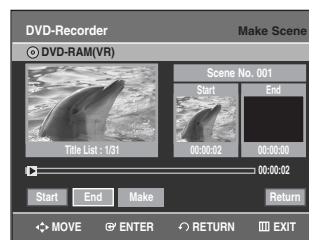
- 1** With the unit in Stop mode, press the **MENU** button.
- 2** Press the **▲▼** buttons to select **Playlist**, then press the **ENTER** or **▶** button.



- 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.

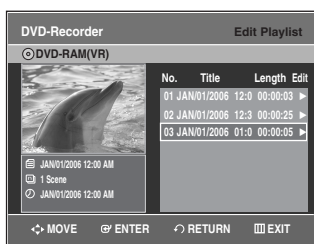


Note

- 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 make scenes of 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.

Playing Titles in the Playlist

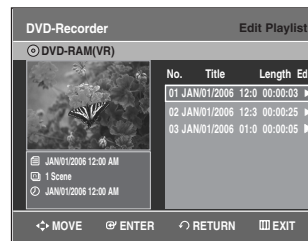
Follow these instructions to play the playlist titles.



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

Using the **MENU** button.

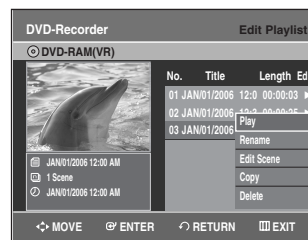
- Press the **MENU** button with the disc stopped.
- Press the **▲▼** buttons to select **Playlist**, then press the **ENTER** or **▶** button.
- Press the **▲▼** buttons to select **Edit Playlist**, then press the **ENTER** or **▶** button.



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

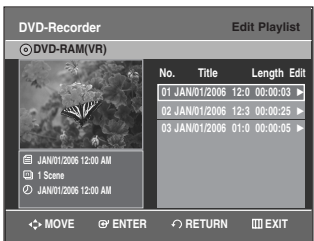
Follow these instructions to rename a playlist title, i.e. to edit the title of a playlist title.



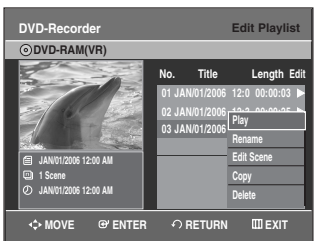
- 1** Press the **PLAY LIST** button with the disc stopped.
The Edit Playlist screen is displayed.

Using the MENU button.

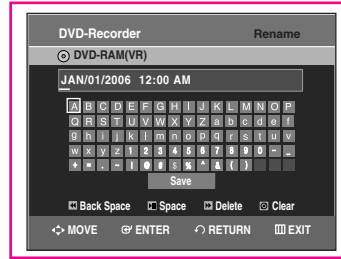
- Press the **MENU** button with the disc stopped.
- Press the **▲▼** buttons to select **Playlist**, then press the **ENTER** or **▶** button.
- Press the **▲▼** buttons to select **Edit Playlist**, then press the **ENTER** or **▶** button.



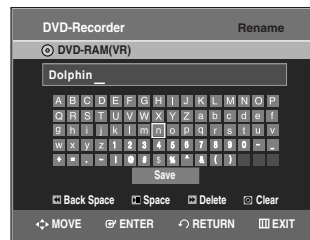
- 2** Press the **▲▼** buttons to select the title you want to rename from the Playlist, then press the **ENTER** or **▶** button.
The Edit menu is displayed : Play, Rename, Edit Scene, Copy, Delete



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

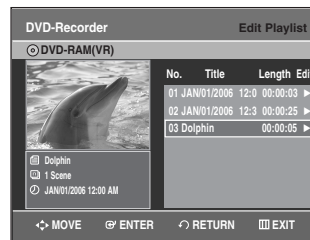


- 4** Enter the desired characters using the **▲▼◀▶** buttons.



- This function is the same as the Rename function in renaming the title list. (See page 71.)
- 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

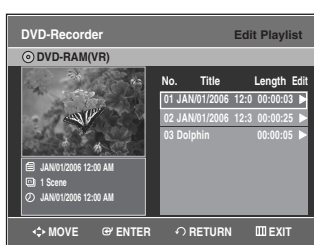
Follow these instructions to edit scenes for a playlist.



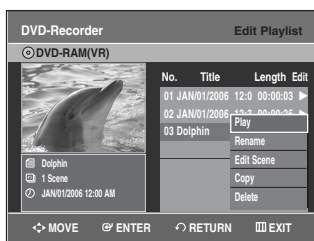
- 1 Press the **PLAY LIST** button with the disc stopped. The Edit Playlist screen is displayed.

Using the MENU button.

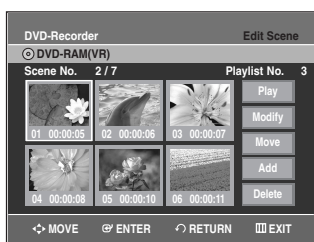
- Press the **MENU** button with the disc stopped.
- Press the **▲▼** buttons to select **Playlist**, then press the **ENTER** or **▶** button.
- Press the **▲▼** buttons to select **Edit Playlist**, then press the **ENTER** or **▶** button.



- 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

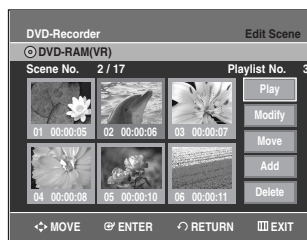


- 3 Press the **▲▼** buttons to select **Edit Scene**, then press the **ENTER** or **▶** button. The Edit Scene screen is displayed.

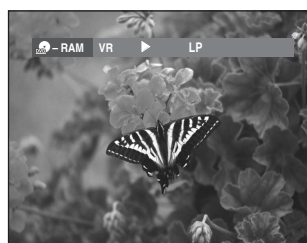


Playing a Selected Scene

- 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.

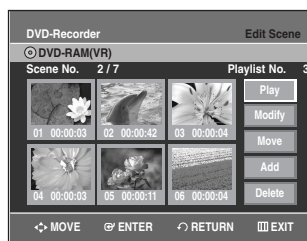


- To stop scene play, press the **STOP** button.

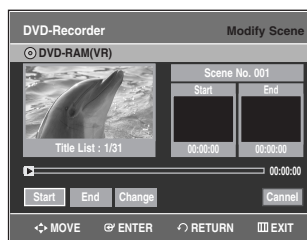
Modifying a Scene (Replacing a Scene)

To setup, follow steps 1 to 3 in page 77.

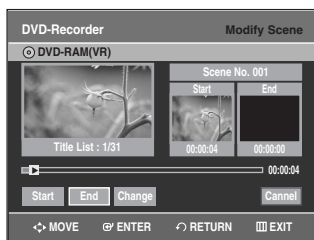
- 4 Press the **▲▼◀▶** buttons to select the scene you want to modify, then press the **ENTER** button.



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

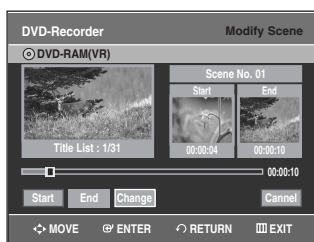


- 6** Press the **ENTER** button at the start point of the scene.



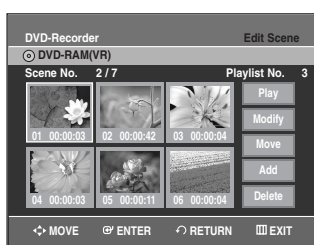
- The image and starting point time are displayed on the Start window.
- Select the starting or ending point of the section you want to modify using the playback related buttons (▶II,I◀◀,▶▶I,◀◀▶▶).

- 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.

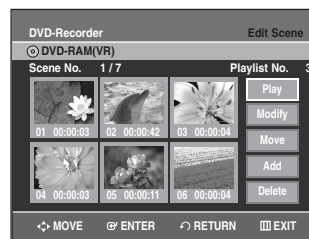


- The scene you want to modify is changed with the selected section.

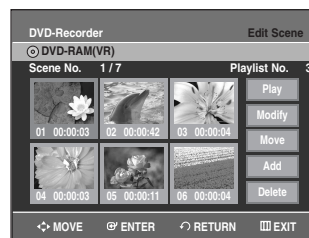
Moving a Scene (Changing the Position of a Scene)

To setup, follow steps 1 to 3 in page 77.

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

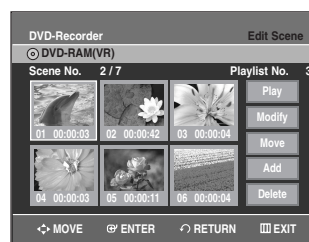


- 5** Press the ▲▼ buttons to select **Move**, then press the **ENTER** button.

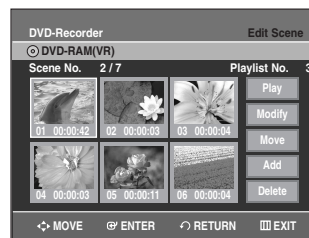


- A yellow selection window is displayed on the scene to be moved.

- 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.





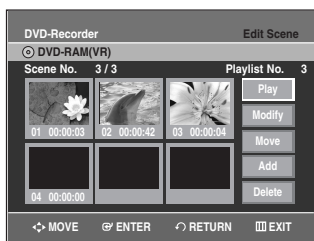
Note

- You cannot move the selected scene to the position of the next scene, because the selected scene should be inserted before that position, which requires no action.
- Depending on the kind of disc, the displayed screen may have a slight difference.

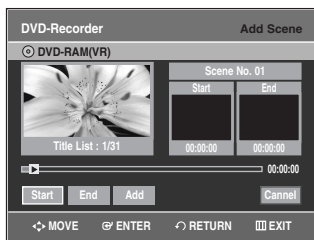
Adding a Scene

To setup, follow steps 1 to 3 in page 77.

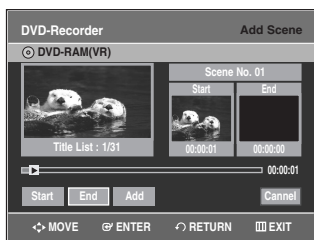
- 4** Press the **▲▼◀▶** buttons to select the scene that will have a new scene inserted before it, then press the **ENTER** button.
A yellow selection window is displayed on the scene to be added as the new scene.



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

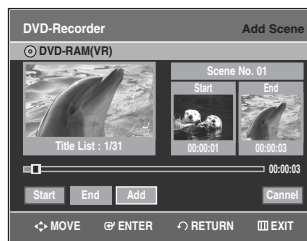


- 6** Press the **ENTER** button at the starting point of the scene.



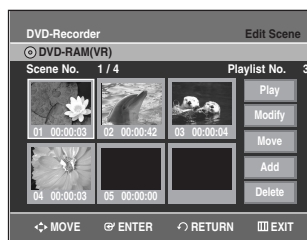
- The image and starting point time are displayed in the Start window.
- Select the end point of the section where you want to add the new scene using the playback related buttons (**▶II, I◀◀, ▶▶I, ◀◀, ▶▶**).

- 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.

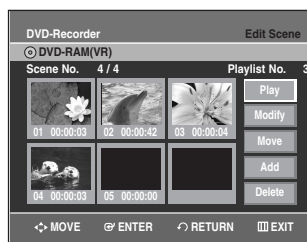


- The section you want to add is inserted prior to the scene selected in step 4.

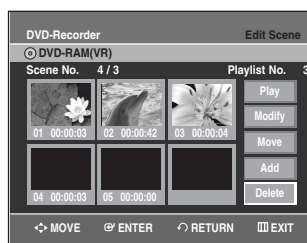
Deleting a Scene

To setup, follow steps 1 to 3 in page 77.

- 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.

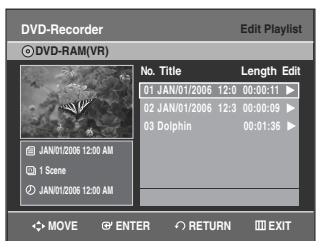


Copying a Playlist Title to the VCR

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

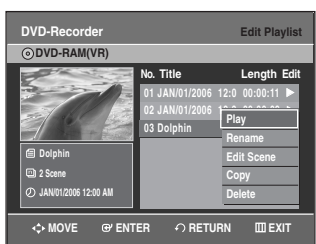
Using the MENU button.

- 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.



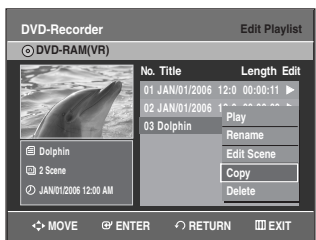
- 2 Press the **▲▼** buttons to select the title you want to copy to the VCR, and then press the **ENTER** or **▶** button.

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

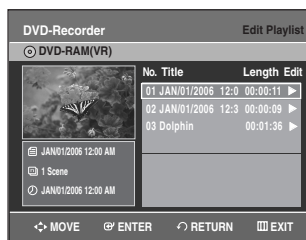
- The playlist can contain up to 99 playlist titles (titles).

Deleting a Playlist Title from the Playlist

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

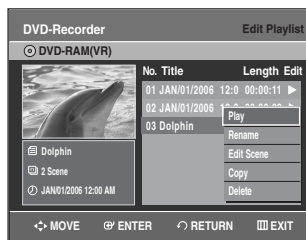
Using the MENU button.

- 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.



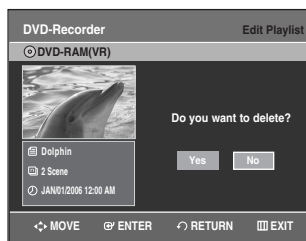
- 2 Press the **▲▼** buttons to select the title you want to delete from the Playlist, then press the **ENTER** or **▶** button.

The Edit Playlist menu is displayed: Play, Rename, Edit Scene, Copy, Delete

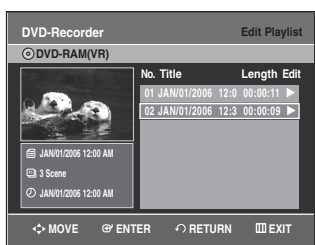


- 3 Press the **▲▼** buttons to select **Delete**, then press the **ENTER** button.

- 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.



- 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.



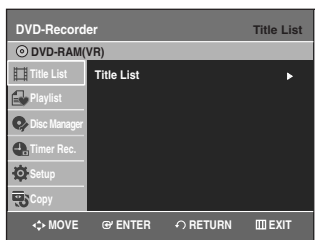
Disc Manager

Editing the Disc Name

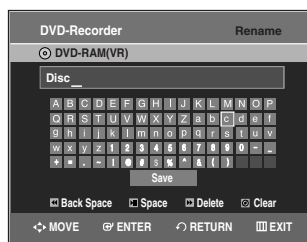
Follow these instructions to give a name to a disc.



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



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



- This function is the same as the Rename function in renaming the title list. (See page 71.)
- 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

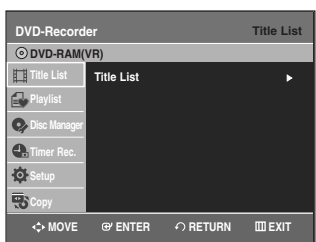
- You may need to clear disc protection before beginning editing. (see page 82)
- Depending on the kind of disc, the displayed screen may be different.

Disc Protection

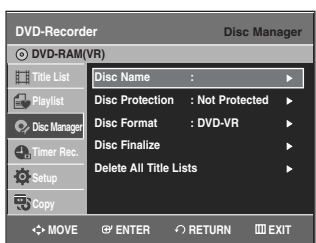
Disc Protect allows you to protect your discs from being formatted or deleted due to unintended operations.



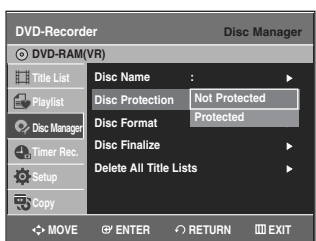
- 1 With the unit in Stop mode, press the **MENU** button.



- 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.

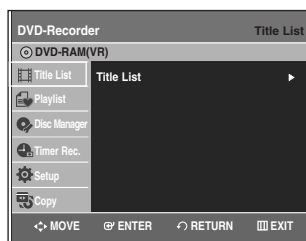


Formatting a Disc

Use these instructions to format a disc.
The disc protection should be cleared



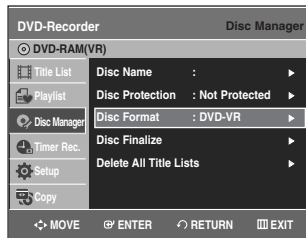
- 1 With the unit in Stop mode, press the **MENU** button.



- 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

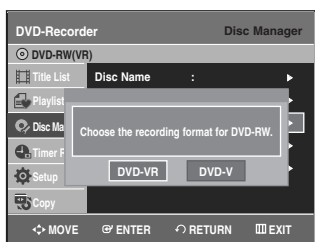
- You will be prompted with the confirmation message 'Do you want to format disc?'.



- 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 are defined according to their recording format.

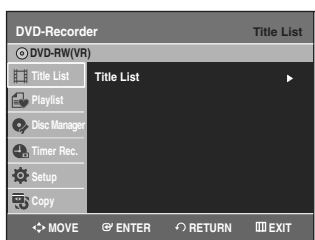
	DVD-VR	DVD-V
DISC	DVD-RAM DVD-RW	DVD-RW DVD-R

Finalizing a disc

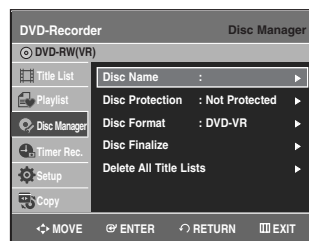
After you record titles onto a DVD-RW/DVD-R disc with your DVD Recorder & VCR, it needs to be finalized before it can be played back on external devices.



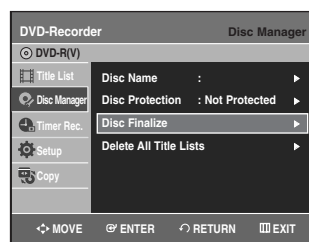
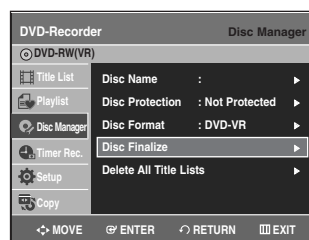
- 1** With the unit in Stop mode, press the **MENU** button.



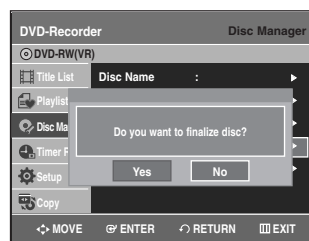
- 2** Press the ▲▼ buttons to select **Disc Manager**, then press the **ENTER** or ▶ button.



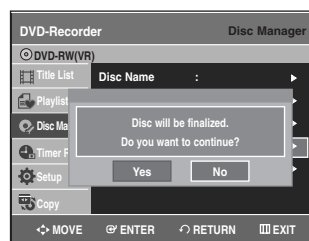
- 3** Press the ▲▼ button to select **Disc Finalize**, then press the **ENTER** or ▶ button.



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.

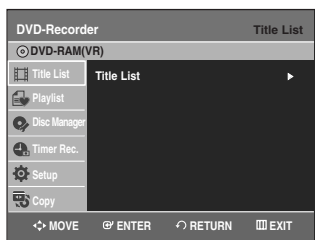


- Once a disc is finalized, you cannot delete titles from the record list.
- After being finalized, the DVD-R/DVD-RW(video mode) operates in the same manner as a DVD-Video.
- Depending on the disc type, the displayed screen may be different.
- Finalizing time may be different depending on the amount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

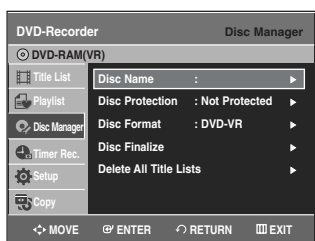
Delete All Title Lists



- 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?'.



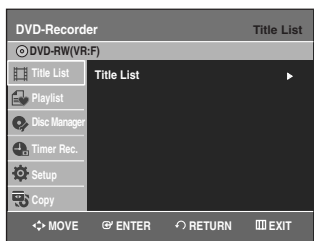
- When Protected Title exists: The Delete All Title List function will not operate. If there is a title containing a still picture, however, that function will not operate.
If you want to delete a protected title, disable Protect for it on the Lock item.

- 4** Press the ◀▶ buttons to select **Yes**, then press the **ENTER** button.
All title lists are deleted.

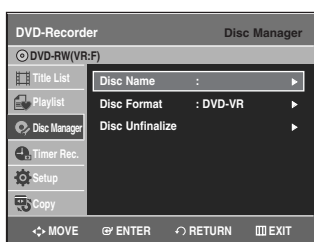
Unfinalizing a disc (V/VR mode)



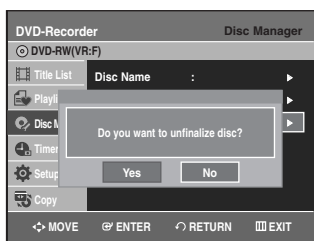
- 1 With the unit in Stop mode, press the **MENU** button.



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



- 3 Press the **▲▼** button to select **Disc 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.



- 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.



Reference

Troubleshooting (DVD-VIDEO/DVD-RAM/DVD-RW/DVD-R)	87
Troubleshooting(DVD)	88
Troubleshooting(VCR)	89
Problems and Solutions(Display error Message)	90
Specifications	92

Reference

- Troubleshooting
- ▼
- 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.
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 page 83.) • 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 the ► and ►► buttons of your DVD Recorder & VCR at the same time when the power is on, 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 page 5.)
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. • 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 for 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.

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	- Check the tuner/external setting. It should be on tuner. - Check the TV antenna connections.
Noise bars or streaks on playback	Press the CH/TRK (Λ/∇) buttons to minimize this effect.
When the ► 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 (Λ/∇) 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.

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.	
This disc cannot be formatted (the disc is protected).	
This disc cannot be renamed (the disc is protected).	
The disc cannot be finalized (the disc is protected).	
This [Menu] is not available (the 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 85.
The disc cannot be played, Please check the regional code of the disc.	
This disc cannot be formatted. Please check 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.	Make sure there are no scratches or dirt on the disc.
The disc cannot be played, Please check the TV system.	
The disc can be neither played nor recorded.	
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
- 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	45 Watts
	Weight	9.03 lb
	Dimensions	16.9 in(W) x 12.6 in(D) x 3.3 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
Output	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)
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.

SAMSUNG's obligations with respect to software products distributed by SAMSUNG under the SAMSUNG brand name are set forth in the applicable end user license agreement. Non-SAMSUNG hardware and software products, if provided, are on an "AS IS" basis. Non-SAMSUNG manufacturers, suppliers, publishers, and service providers may provide their own warranties.

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.

THERE ARE NO EXPRESS WARRANTIES OTHER THAN THOSE LISTED AND DESCRIBED ABOVE, AND NO WARRANTIES WHETHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, SHALL APPLY AFTER THE EXPRESS WARRANTY PERIODS STATED ABOVE, AND NO OTHER EXPRESS WARRANTY OR GUARANTY GIVEN BY ANY PERSON, FIRM OR CORPORATION WITH RESPECT TO THIS PRODUCT SHALL BE BINDING ON SAMSUNG. SAMSUNG SHALL NOT BE LIABLE FOR LOSS OF REVENUE OR PROFITS, FAILURE TO REALIZE SAVINGS OR OTHER BENEFITS, OR ANY OTHER SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES CAUSED BY THE USE, MISUSE OR INABILITY TO USE THIS PRODUCT, REGARDLESS OF THE LEGAL THEORY ON WHICH THE CLAIM IS BASED, AND EVEN IF SAMSUNG HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. NOR SHALL RECOVERY OF ANY KIND AGAINST SAMSUNG BE GREATER IN AMOUNT THAN THE PURCHASE PRICE OF THE PRODUCT SOLD BY SAMSUNG AND CAUSING THE ALLEGED DAMAGE. WITHOUT LIMITING THE FOREGOING, PURCHASER ASSUMES ALL RISK AND LIABILITY FOR LOSS, DAMAGE OR INJURY TO PURCHASER AND PURCHASER'S PROPERTY AND TO OTHERS AND THEIR PROPERTY ARISING OUT OF THE USE, MISUSE OR INABILITY TO USE THIS PRODUCT SOLD BY SAMSUNG NOT CAUSED DIRECTLY BY THE NEGLIGENCE OF SAMSUNG. THIS LIMITED WARRANTY SHALL NOT EXTEND TO ANYONE OTHER THAN THE ORIGINAL PURCHASER OF THIS PRODUCT, IS NONTRANSFERABLE AND STATES YOUR EXCLUSIVE REMEDY.

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 Ridgely Park, NJ 07660-0511
1-800-SAMSUNG (7267864) 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 centre.

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



SAMSUNG ELECTRONICS AMERICA, INC.

105 Challenger Road, Ridgefield Park,
N.J. 07660-0511
TEL: 1-800-SAMSUNG (7267864)