TOSHIBA











HDD/DVD VIDEO RECORDER

RD-XS34SU RD-XS34SC

OWNER'S MANUAL











Read "INSTALLATION GUIDE" first.



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Caution for safety

Read "SAFETY PRECAUTIONS", "IMPORTANT SAFETY INSTRUCTIONS", "Precautions" and all other sections of the "INSTALLATION GUIDE" that came with this product prior to reading this "OPERATIONS GUIDE".

About this product

Some differences

Because of its recording capability and hard disc drive (HDD), this DVD recorder operates more like a computer and differently than a standard DVD player. In addition to containing a microprocessor, it contains a HDD, an operating system, random access memory (RAM), and a DVD-RAM/RW/R drive. The operating system includes software stored on the HDD that is transferred to the RAM when the machine is turned on and at other times during operation. This transfer can take time. Therefore. when you turn the DVD recorder on, it may take a little while before it is ready to use. Likewise, other functions may not be performed as quickly as they would on other AV equipment. Additionally, because programs stored on the DVD-RAM/RW/R drive cannot be accessed as quickly as those stored on the HDD, accessing those programs (or deleting a program from a DVD-RAM disc) may take more time. Please take these factors into consideration as you use the DVD recorder.

About the hard disc drive (HDD)

Like any HDD, the HDD in the DVD recorder is a fragile device that is susceptible to partial or complete failure if it is jarred or as a result of use over time. It will not last forever. Therefore, do not use the HDD for longer term storage of programs you wish to retain. [If portions of the HDD become damaged, programs recorded on those portions may exhibit pixelization or block noise when played back. Repeated playback of the program may cause the problem to get worse and, eventually, the program may become unplayable. Accordingly, if you notice such noise in a program that you want to save, you should transfer to a recordable DVD disc as soon as possible.] Recordable DVD discs are also susceptible to damage if not handled and stored carefully and some or all of the programs on them may become unplayable. You can reduce these risks by using high quality DVD recordable discs and checking their playability from time to time. If it becomes necessary to service your DVD recorder, it may be necessary to delete some or all of the programs on the HDD.

Playback Restrictions

This owner's manual explains the basic instructions for this recorder. Some DVD video discs are produced in a manner that allows specific or limited operation during playback. As such, the recorder may not respond to all operating commands. This is not a defect in the recorder. Please refer to the notes on compatible discs later in this Introduction and to the discussion of DVD playback and features later in this manual.

"O" may appear on the TV screen during operation.
"O" means that the operation is not permitted by the recorder or the disc.

Recording Restrictions and Copyright

Copy-protected contents of DVD-Video discs, VIDEO CDs or audio CDs on the market cannot be copied on this recorder. Contents without copy protection should be copied or edited only in accordance with applicable copyright laws, which may restrict copying or editing. Contents that permit single copying (copy once contents) can be recorded onto DVD-RAM discs, with some dubbing and editing restrictions. DVD-R/RW discs cannot record these contents.

The unauthorized recording, use, distribution, or revision of copyrighted materials including, without limitation, television programs, videotapes, and DVDs, is prohibited under the Copyright Laws of the United States and other countries, and may subject you to civil and criminal liability.

Compatibility

In isolated cases, a disc bearing the DVD or CD logo may not fully and properly play back all features or as intended by the creator of the disc. This can be due, among other reasons, to problems and errors that can occur during the creation or recording of DVD and other software and the manufacture of software discs (including blank discs). Moreover, because of variations in the quality of discs, this recorder may not be able to record on all discs that bear a DVD-RAM, DVD-RW or DVD-R logo, but you should not encounter difficulty if you use only high quality recordable DVD discs. Additionally, discs recorded in this device may not operate properly in other DVD players, recorders and/or personal computer drives. If you happen to encounter difficulties playing or recording a DVD disc or playing a CD disc, please feel free to call our Customer Service Hotline at 1-800-319-6684.

Choosing a disc

For recording / playback

When you want to play DVD or CD software or copy programs from the HDD to a recordable DVD, load an appropriate disc into the recorder. There are many types and formats of discs. Please use the following information to select an appropriate disc.

Notes

- Handle the disc according to the disc instruction manual.
- Toshiba cannot guarantee that all discs bearing the DVD or CD logos will operate as expected. Additionally, Toshiba cannot
 guarantee that discs recorded in this device will operate properly in other DVD players, recorders and/or personal computer
 drives.

For recording / playback			
Disc	Mark	Specification	Remarks
DVD-RAM	DYD	 Single sided 4.7GB (12cm (4³/₄ in.)) Double sided 9.4GB (12cm (4³/₄ in.)) 	Read carefully the section "On DVD-RAM discs" (page 8).
	R A M R A M 4.7		Select a DVD-RAM disc that shows a statement on its package such as "this disc can be used with video recorders and drives compatible with 4.7GB DVD-RAM discs" or "this disc can copy images that permit single copying."
DVD-R	R R 4.7	• 4.7GB For General Ver.2.0 (12cm (4³/₄ in.))	Read carefully the section "On DVD-R discs" (page 9). Depending on the disc status or the recording equipment, playback of the disc may not be possible on this recorder.
DVD-RW	R W	• Ver. 1.1 or later (12cm (4³/4 in.))	Read carefully the section "On DVD-RW discs" (page 9). Depending on the disc status or the recording equipment, playback of the disc may not be possible on this recorder.

Using different disc types for different purposes

DVD-RAM discs for your personal library

DVD-RAM discs comply with the global standard DVD-VR (Video Recording) format, and are optimized for recording of TV programs. You can rewrite repeatedly without deterioration of an image quality, erase unnecessary parts, divide a chapter, or specify playback area by frame. Its cartridge is suitable for a longer-term storage and family use, and its large capacity of 9.4 GB allows more recording space.

DVD-R/RW discs when creating your own original discs for distribution

DVD-R discs are designed to comply with the global standard DVD-Video format, and can be recorded only once. DVD-R discs are convenient when you edit your original content (recorded personal events such as a wedding party) with this recorder, transfer them to the recorder and make copies to send to your friends or relatives. The discs can be played on other compatible DVD players. DVD-RW discs, which are rewriteable, can be used as well.

- * DVD-R and DVD-RW may not be the best suited format for recording TV programs. Because of the way the discs are formatted, it may not be possible to edit or divide the program as you may prefer, to record secondary languages, or programs that are copy protected in a way that allows only one copy. (NOTE: "Copy once" protected programs generally can be recorded to DVD-RAM discs.)
- * This recorder records on a DVD-R/RW disc in DVD-Video format only.
- * On DVD-R/RW discs, direct recording, copying or the method "Creating a DVD-Video" (page 122) are available.

We cannot guarantee that DVD-RAM/R/RW discs recorded on this recorder will be playable on all DVD recorders/ players. Similarly, there is no guarantee that all DVD-RAM/R/RW discs recorded on other recorders will be playable on this recorder.

For playback only

Disc Mark Specification Remarks **DVD** video 12cm (4³/₄ in.) / 8cm (3¹/₄ in.) The region number of this DVD recorder is 1. disc Region number If region numbers, corresponding to a specific playable area, are printed on your DVD video disc and you do not find mo or , or the disc is encoded to permit playback only in regions other than Region 1, disc playback will not be allowed by the · Color system: NTSC recorder. **VIDEO CD** 12cm (4³/₄ in.) / 8cm (3¹/₄ in.) Color system: NTSC • Version 1.1 and 2.0 **Audio CD** • 12cm (4³/₄ in.) / 8cm (3¹/₄ in.) CD-R • 12cm (4³/₄ in.) Depending on the disc status, playback may • CD-DA (audio CD) format not be possible. **CD-RW**

- · You cannot play discs other than those listed above.
- You cannot play non-standardized discs even if they may be labeled as above.
- You cannot play discs with specialized encoding (such as SACD discs) or the DVD audio portions of DVD Audio discs.
- This recorder uses the NTSC color system, and cannot play DVD video discs recorded in any other color system (PAL, SECAM, etc.), even if they have region marks or .
- Toshiba cannot guarantee that all discs bearing the DVD or CD logos will operate as expected. Please see the discussion of compatibility on page 5.
 - Toshiba is not liable for any damage or loss caused directly or indirectly by the malfunction of this recorder, including, without limitation, any one of the following:
 - Failure to record contents intended to be recorded by the consumer.
 - · Failure to edit contents as intended by the consumer.
 - When a DVD-RAM/R/RW disc created on this recorder is used (e.g., insertion, playback, recording or editing) in another DVD player, recorder or personal computer drive.
 - When a DVD-RAM/R/RW disc that is used in the manner described in the immediately preceding bullet point is used again in this recorder.
 - When a DVD-RAM/R/RW disc that was recorded in another DVD recorder, or in a personal computer drive is used in this recorder.
 - Some functions such as Library may not work with personal computer discs.
 - Discs recorded in this recorder may not operate as expected on other DVD players, recorders or personal computer drives.

Choosing a disc (Continued)

On DVD-RAM discs

■ Use only DVD-RAM discs that comply with DVD-RAM standard Version 2.0, 2.1 or 2.2.

The recorder cannot record on a disc formatted in any other standard. When using such a disc, initialize it by using the disc-format function of this recorder.

- The recorder may not record, dub, or edit some DVD-RAM discs, because they are edited/recorded with another manufacturer's equipment or PC, contain a large number of titles, or have little remaining capacity. Also, a DVD-RAM disc may not be edited or recorded if its title contains still pictures.
- DVD-RAM discs formatted in UDF2.0 on a PC are not compatible with this recorder. Before using these discs, initialize them on this recorder.
- This recorder complies with current copyright protection technology and can copy a disc only when the disc permits copying once. When there is no indication on the disc, copying will not be allowed. Such an indication on a disc is required also for the Library Management database.

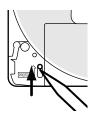
DVD-RAM discs with cartridges are recommended for recording.

• Two types of DVD-RAM discs are available: ones with cartridges and ones without cartridges. You can use either of them with this recorder, but the former ones are recommended.



- In order to record highly detailed data, make sure the disc is clean. DVD-RAM discs with cartridges are easier to handle in this regard.
- Do not open the cartridge shutter. The disc may not play, or may not be recorded or edited once it becomes dirty.
- There are two types of DVD-RAM cartridges; removable (TYPE 2/4) and not removable (TYPE 1). It is recommended you do not remove the disc even when you can.
 - Refer to the instruction manual that comes with the disc if it is absolutely necessary to remove the disc.
- Some commercially available cartridge discs cannot be recorded or edited once the inside discs are removed.

● To protect recorded contents Slide the write-protect tab to "PROTECT" with something small enough. The disc can play, but cannot be edited or erased. Refer to the instructions that come with the disc.



- When using a disc without a cartridge (commercially available discs)
- available discs)
 Discs without cartridges can easily attract fingerprints and dust, which is the reason they are not recommended. If you cannot avoid using them, handle with proper care.
- When you write in a title column on a disc, use a pen with a soft tip. Do not use a pen with a hard tip, such as a ballpoint pen.

Recommended discs

The following discs have been tested with this recorder: 9.4 GB double-sided cartridge: Panasonic 2X, 3X, 5X 4.7 GB single-sided cartridge: Panasonic 2X, 3X, 5X



On DVD-R discs

■ Standards

- DVD-R for General Ver.2.0 discs can be used for recording and playback.
- Discs compatible with 2X speed recording (labeled Ver.2.0/2X etc.) and discs compatible with 4X speed recording (labeled Ver.2.0/4X etc.) and discs compatible with 8X speed recording (labeled Ver.2.0/ 8X etc.) can also be used.
- Select discs labeled "for video," "for recording," "120 min." etc.

■ Recording conditions

 Images for which copying is prohibited or restricted (copy once or copy prohibited) cannot be recorded.
 Even if the disc is labeled as CPRM compatible, this recorder can only be used to record copy-free material.

■ Recommended discs

That's (Taiyo-Yuden) 4X, 8X

■ Tested discs

Panasonic 4X

On DVD-RW discs

Standards

- Discs labeled DVD-RW Ver.1.1 or 1.2 can be used.
- Discs compatible with 2X speed recording (labeled Ver.1.1/2X etc.) can also be used.
- Select discs labeled "for video," "for recording," "120 min." etc.

■ Recording conditions

- Images for which copying is prohibited or restricted (copy once or copy prohibited) cannot be recorded.
 Even if the disc is labeled as CPRM compatible, this recorder can only be used to record copy-free material.
- DVD-VR mode recording is not possible.

■ Recommended discs*

JVC 2X, 4X

*Operation has been confirmed with recommended discs and tested disc, but some other discs may not be usable.

Marks on DVD video discs

The following are examples of marks and the meanings.

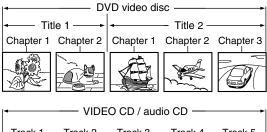
Mark	Meanings
2))	Number of audio streams recorded in the disc. (2 streams such as English and Japanese in this example.)
2	Number of subtitle languages recorded in the disc. (2 subtitle languages are recorded in this example.)
3 1	Number of camera angles recorded in the disc. (3 camera angles are recorded in this example.)
4:3	Pictures are recorded in the standard picture shape (4:3 aspect ratio).
LB	Pictures are recorded in the letter box picture shape (4:3 aspect ratio with horizontal black bars in the top and bottom of pictures).
16:9 LB	Pictures are recorded in the 16:9 wide picture shape. TVs with 4:3 aspect ratio will display them in the letter box style.
16:9 PS	Pictures are recorded in the 16:9 wide picture shape. TVs with 4:3 aspect ratio will display them in the pan scan style (one or both sides of pictures are cut).
	Actual picture shape may vary depending on the aspect ratio or mode selection of the TV.

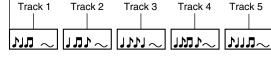
Choosing a disc (Continued)

Structure of disc contents

Normally, DVD video discs are divided into titles, and the titles are subdivided into chapters.

VIDEO CDs/audio CDs are divided into tracks.





Title: Divided contents of a DVD video disc.

Roughly corresponds to a story title in short

stories

Chapter: Divided contents of a title. This corresponds

to a chapter in a story.

Track: Divided contents of a VIDEO CD or an audio

CD.

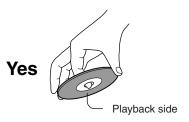
Each title, chapter, or track is assigned a number, which is called "title number", "chapter number", or "track number" respectively.

Some discs may not have these numbers.

When you record on the HDD or a DVD-RAM disc, one recording will always equal one title. You can divide a title into several chapters by marking borders in it to facilitate scene search.

On handling discs

Do not touch the playback side of the disc.



Do not stick paper or tape to discs.



On cleaning discs

 Fingerprints and dust on the disc cause picture and sound deterioration. Wipe the disc from the center outwards with a soft cloth. Always keep the disc clean.



 Do not use any type of solvent such as thinner, benzine, commercially available cleaners or antistatic spray for vinyl LPs. It may damage the disc.

On storing discs

- Do not store discs in a place subject to direct sunlight or near heat sources.
- Do not store discs in places subject to moisture and dust such as a bathroom or near a humidifier.
- Store discs vertically in a case. Stacking or placing objects on discs outside of their case may cause warping.

Discs and purposes

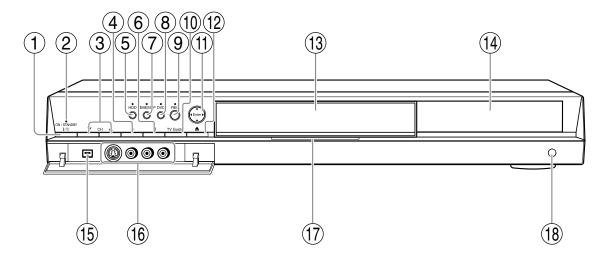
The table shows main functions which are available on this recorder per disc category. This will help you choose discs.

	DVD-RAM disc	DVD-RW disc	DVD-R disc
Characteristics on this recorder	Suitable for repeat use of the disc, and data storage for video library. Copy once contents can be recorded using a compatible disc.	Suitable for saving data in DVD-Video format to play on compatible devices. You can erase recorded contents to use the disc repeatedly.	Suitable for saving data in DVD-Video format to play on compatible devices. Once you execute DVD-Video finalizing process on a recorded disc so that it can be played on other players, you cannot make additions, corrections and deletions of contents on the disc.
For the first use	No preparatory steps required, however initializing is recommended.	Initialize the disc.	No preparatory steps required.
Recording a TV program	Yes	Yes	Yes
Erasing recorded contents	Yes	Yes If the disc has been executed DVD-Video finalizing process, first cancel the process then delete contents.	Yes Deleting contents cannot restore the disc space. After you execute DVD-Video finalizing process on a recorded disc, you cannot delete contents of the disc.
Recording additional content on a recorded disc	Yes	Yes If the disc has been executed DVD-Video finalizing process, first cancel the process then delete contents.	Yes After you execute DVD-Video finalizing process on a recorded disc, you cannot add contents to the disc.
Indexing recorded contents Naming a title Creating a thumbnail	Yes Yes	Yes Yes After you execute DVD-Video finalizing process on a recorded disc, you cannot name a title or create a thumbnail.	Yes Yes After you execute DVD-Video finalizing process on a recorded disc, you cannot name a title or create a thumbnail.
Collecting favorite scenes (Playlist Editing) Making a new title from a Playlist containing favorite scenes (Copy within the same disc)	Yes Yes	No No	No No
Playing contents recorded on this recorder, on other devices	Contents can be played on any devices compatible with DVD-RAM discs. Follow the instruction of the device to play.	Execute DVD-Video finalizing process on this recorder. This process makes the disc playable on other compatible devices. (Some models excepted.)	Execute DVD-Video finalizing process on this recorder. This process makes the disc playable on other compatible devices. (Some models excepted.)
When a message appears and the loaded disc cannot be used:	Initialize the disc. If it is still unusable, try to execute DVD-RAM physical Format.	Initialize the disc.	-

Index to Parts and Controls

See pages with arrows for details.

Front panel



- * The above illustration displays the front panel with the cover open. See the following page on how to open or close the cover.
- ① **ON/STANDBY button page 20, 21**Turns the power on/restores the unit in the standby mode.
- ② **ON/STANDBY indicator** page **20, 21** Displays the operational state of the recorder.
- ③ CH buttons

 page 20, 40
 Selects the channel.
- (PLAY) button page 62 ,64 Starts playback.
- ⑤ HDD button/HDD indicator
 page 40, 45
 Press this to operate the HDD.
- ⑥ (STOP) button page 42, 58 Stops playback or recording.
- ▼ TIME SLIP button/TIMESLIP indicator

 page 64, 65

 Selects the time slip mode.

 Illuminates in the time slip mode.

 Tim

- ① TV Guide button

 page 23
 Starts/exits TV Guide On Screen.
- (1) ▲ / ▼ / ◀ / ▶ /Enter button
 - **▲**/**▼**/**◀**/**▶**:

Moves highlight or changes value.

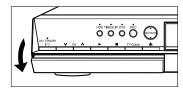
- Enter:
 Makes a selection or executes an action.
- ② ▲ (OPEN/CLOSE) button ▷ page 20, 21 Opens and closes the disc tray.
- ③ Disc tray
 page 20
 Loads a disc into the disc drive.

(5) DV IN terminal
 page 136
 Use this when recording from a digital video device such as a digital video camera.

- ① **LED** Illuminates when the power is turned on.
- Remote sensor
 page 18 in "INSTALLATION GUIDE"

■ To open or close the cover on the front panel

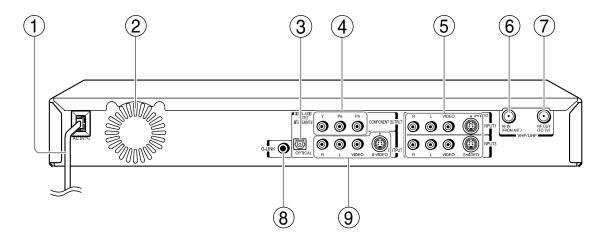
Put your finger on the left edge of the cover and pull it down to open.



Note

 Do not place a heavy object on the cover while it is open. Doing so may damage the recorder. **Index to Parts and Controls (Continued)**

Rear panel



- 2 Ventilation fan
- ③ DIGITAL AUDIO OUT BITSTREAM/PCM
 OPTICAL jack

 page 27 in "INSTALLATION
 GUIDE"

Use this to connect the recorder to an audio receiver equipped with an optical digital audio input jack.

④ COMPONENT OUTPUT jacks

page 26 in "INSTALLATION GUIDE"

Outputs video signals to a connected TV or monitor.

Connects to a TV or monitor equipped with component video jacks.

- ⑤ INPUT1/INPUT3 jacks
 page 44

 Use this to connect the recorder to output jacks of external devices such as another player or camcorder.
- ⑥ VHF/UHF RF IN (FROM ANT.) input socket page 20 in "INSTALLATION GUIDE" Connects to an antenna or cable signal.
- ∀HF/UHF RF OUT (TO TV) output socket
 page 20 in "INSTALLATION GUIDE"
 Connects the supplied coaxial cable to a TV.

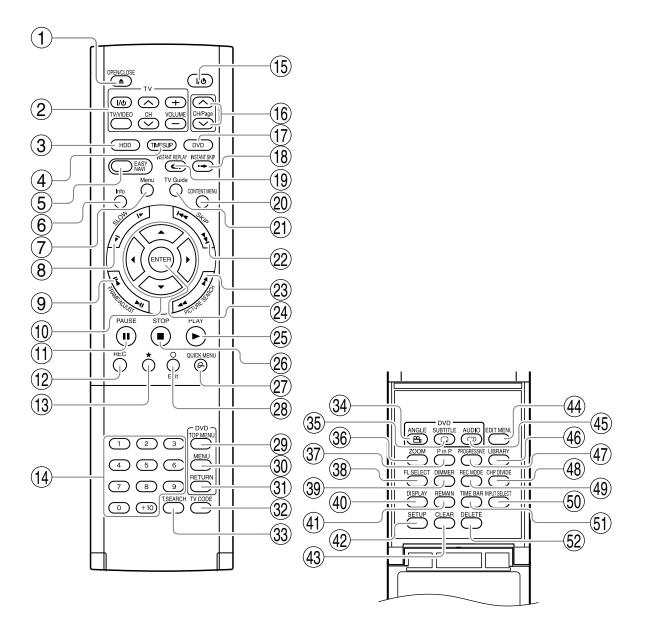
Connect the supplied G-LINK cable to this jack if you are connecting this recorder to a cable set top box. While the recorder is turned off, the TV Guide On Screen system changes channels on your cable box via the G-LINK cable to download free program listings for your area. You are also able to control your cable set top box using the recorder's remote control after you connect the G-LINK cable and go through the TV Guide On Screen setup.

⑨ OUTPUT jacks
 page 21, 23, 24, 26 in "INSTALLATION GUIDE"

Outputs video and audio signals to a connected TV or amplifier.

Index to Parts and Controls (Continued)

Remote control



- 1) OPEN/CLOSE button page 20, 21
- ② Buttons for TV operation

 □ page 44 in "INSTALLATION GUIDE"
- (3) HDD button page 42, 45, 116
- (4) TIMESLIP button page 64, 65
- (5) EASY NAVI button page 29
- (6) Info button 🖒 page 23
- (7) Menu button page 23
- (8) SLOW button

 page 65, 67
- (9) FRAME/ADJUST button ₽ page 41, 68
- (10) Direction buttons (▲/▼/◄/▶) ➡ page 57, 150
- (11) PAUSE button page 58, 64
- (12) REC button page 41, 45
- (13) ★ button 🖒 page 57
- (14) Number buttons page 40, 69
- (15) ON/STANDBY button page 20, 21
- (16) CH/Page buttons 🖒 page 20, 23, 40
- (17) DVD button page 62, 78, 80
- (18) INSTANT SKIP button ₽ page 66
- (19) INSTANT REPLAY button page 66
- (20) CONTENT MENU button page 57, 95
- (21) TV Guide button

 page 23
- (22) SKIP button page 67
- (23) PICTURE SEARCH button page 57, 64, 65
- (24) ENTER button 🖒 page 23, 24, 57, 150
- (25) PLAY button page 62, 68, 91
- (26) STOP button 🖒 page 58, 62, 117
- (27) QUICK MENU button page 41, 90
- (28) button page 133
- (29) TOP MENU button page 63
- (30) MENU button*1

- (31) RETURN button*2
- 32) TV CODE button ⇒ page 44 in "INSTALLATION GUIDE"
- (33) T.SEARCH button

 page 69
- (34) ANGLE button page 72
- (35) SUBTITLE button

 page 73
- (36) ZOOM button page 74
- (37) P in P button page 71
- (39) DIMMER button page 19
- (40) DISPLAY button page 82
- (41) REMAIN button

 page 33
- (42) SETUP button 🖒 page 150
- (44) EDIT MENU button page 108
- (45) AUDIO button page 75
- PROGRESSIVE button page 26 in "INSTALLATION GUIDE"
- (48) CHP DIVIDE button

 page 90
- (49) REC MODE button

 page 40
- (50) INPUT SELECT button

 page 45
- (51) TIME BAR button page 83
- (52) DELETE button page 52

*1 MENU

Use this to display a menu screen that is recorded on a DVD video disc.

Operate the menu screen as the same manner as "Locating a title using the top menu (page 63)". A menu screen is not recorded on some discs.

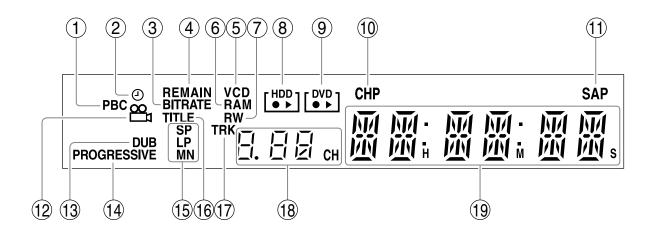
*2 RETURN

Returns to the previous screen (the screen may be specified depending on the disc).

Refer to the instructions of the disc.

Index to Parts and Controls (Continued)

Display



1 PBC indicator

Illuminates when a PBC-controllable VIDEO CD is loaded.

2 Program recording indicator

Illuminates when the recorder holds a timer program.

(3) Bit rate indicator

Illuminates when displaying the bit rate selected for recording, or when displaying the actual bit rate.

4) REMAIN (Remaining space) indicator

Illuminates when an available recording time is displayed.

(5) VCD/CD indicator

VCD: Illuminates when a VIDEO CD is loaded. CD: Illuminates when an audio CD is loaded.

6 DVD-RAM indicator

Illuminates when a DVD-RAM disc is loaded.

7 DVD-RW/R indicator

Illuminates when a DVD-RW/R disc is loaded.

8 HDD indicator

Displays an operating state of the HDD as below.

- : Recording
- ► : Playback
- F : Dubbing to the same disc, etc.

9 DVD indicator

Displays an operating state of a DVD disc as below.

- : Recording
- ► : Playback
- > : Dubbing to the same disc, etc.

10 CHP (Chapter) indicator

Illuminates when a chapter number is displayed.

(1) SAP indicator

Illuminates when receiving a SAP broadcast.

12 Angle icon page 72

Illuminates when playing a scene recorded with multi angles.

■ Dimming the display

Pressing DIMMER button on the remote control changes the brightness of the display (normal/dimmed/off).

■ Switching the display

Every time you press FL SELECT button, the display changes between the channel, title number, and time. The display may not change, depending on the disc or recording conditions.

(3) **DUB (Dubbing) indicator** Illuminates when copying.

14 PROGRESSIVE indicator

Illuminates when video signals are output in the progressive format.

(15) Picture quality mode indicator □ page 161

The current picture quality mode lights up. The modes are: MN (Manual)/SP (Standard Play)/ LP (Long Play)

16 TITLE indicator

Illuminates when a title number is displayed.

(17) TRK (Track) indicator

Illuminates when a track number is displayed.

(18) Channel indicator

Displays the current channel or other numbers such as a title number, track number, bit rate or input selection.

(19) Multi display

Displays the current time, elapsed time, remaining time, starting time of programmed recording, chapter number or message, etc.

Before operating this recorder

■ Is your recorder ready?

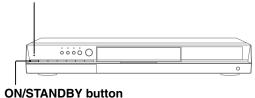
- Refer to "INSTALLATION GUIDE" manual and finish the necessary preparations.
- Turn on the connected equipment such as a TV or audio system and select the input from the recorder.

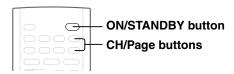
■ Turning the power on

(This owner's manual instructions are based on the premise that all proper connections have been completed and the TV is turned on.)

Press ON/STANDBY on the front panel of the recorder or on the remote control.

ON/STANDBY indicator





When the power turns on, the ON/STANDBY indicator changes from red (standby mode) to green (operation). After a few seconds, a start-up screen appears. The following icon appears at the top right corner of the screen.



When this icon disappears, the recorder is ready to operate. If the disc drive contains a disc, it takes a little longer to start up.

■ Viewing TV channels through this recorder

After turning the power on, the recorder will output TV channel signals to the connected TV (also in the stop mode).

You can select a desired channel by pressing the CH/ Page or the number buttons.

Loading a disc

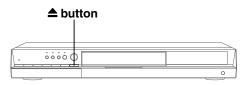
Check disc compatibility beforehand (page 6, 7) and use a proper playable disc.

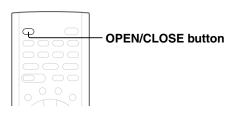
Caution

- Keep your fingers well clear of the disc tray. Neglecting this may cause serious personal injury. Keep a close watch on children
- Do not use a cracked, deformed, or repaired disc.

1 Open the disc tray.

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



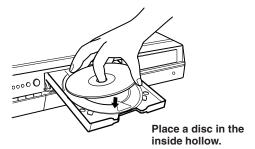


2 Insert a disc.

Disc without a cartridge

Insert with the playback side down.

There are two kinds of disc size. Place a disc to fit the dish. If a disc is out of the dish, it may result in damage to the disc or malfunction.



DVD-RAM disc with cartridge (TYPE1/TYPE2/TYPE4) Single sided

Turn the printed side up, and insert the cartridge into the tray frame following the direction of the arrow on the cartridge.

Double sided

Turn the desired recording/playback side up, and insert the cartridge into the tray frame following the direction of the arrow on the cartridge.



3 Close the disc tray.

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

Notes

- Use the button on the front panel or the remote control to open and close the disc tray. Do not push or hold the disc tray while it is moving. Doing so may cause the recorder to malfunction.
- Do not insert a disc which is unplayable, or any object other than a playable disc.
- Do not apply downforce to the disc tray. Doing so may cause the recorder to malfunction.
- If the disc tray stops while closing, the mechanical protection system of this recorder will open it. Do not force it to close. Doing so may cause malfunction.
- If the disc tray would not open, turn the recorder off, and press
 button on the front panel or OPEN/CLOSE button on the remote control. This may turn the recorder on and open the disc tray. If it still wouldn't open, contact your nearest TOSHIBA dealer.

■ Turning the power off

Press ON/STANDBY on the front panel of the recorder or on the remote control.

The "Unloading" icon appears at the top right corner of the screen, and ON/STANDBY indicator turns red, then the power turns off (Standby mode.)

Caution

- If the power fails or the power cord is disconnected from a
 wall outlet while the recorder is in operation (ON/STANDBY
 indicator lit in green), the HDD or a loaded disc may
 become recording disabled. In such a case, executing an
 initialization of the disc using the formatting function of the
 recorder may refresh it. However, all contents stored on
 the disc will be completely erased by this initialization
 process.
- This recorder may indicate alert messages with some DVD-RAM discs right after insertion. If such a disc is used for playback or recording on other equipment, all data in the disc may be damaged and the disc will not be played. By executing an initialization of the disc using the formatting function of the recorder, the disc will become operational.
- If the recorder freezes and does not respond at all, leave it alone for about 15 minutes or longer. This may restore the recorder. After the recorder has recovered, turn it off once and turn it on again to use as usual. If the recorder is still inoperable after more than 15 minutes have passed, press and hold the ON/STANDBY button on the front panel for about 10 seconds or longer. The recorder is forced to quit and the power turns off. Turn the recorder on again and use it as usual. (This is an emergency measure, which may cause losses and/or damages of data. Avoid casual use of this measure. If you try this while the recorder is working properly, especially while the "Loading" or "Unloading" icon is flashing, it may result in initializing of the HDD.) (This 15-minute measure is available only when "Screen protector" is set to "On." (□ page 159))

Note

 If there are any performance malfunctions of the HDD or the DVD-RAM drive, immediately discontinue use of this recorder, and disconnect the power cord from a wall outlet, then contact your dealer. Continuous use of the recorder in such a condition will aggravate the condition and result in increased cost and repair time.

■ Disc tray lock (Child lock)

You can lock the disc trav.

Press and hold PAUSE on the remote control for longer than about 3 seconds.

To unlock, press the button for longer than about 3 seconds.

Note

• Turning the power off also unlocks the disc tray.

Before operating this recorder (Continued)

■ Start-up/Shutdown (closing) icons

These icons are displayed at the top right corner of the screen when startup or finishing. While they are flashing, the recorder is operating as follows:



Start-up, reading a disc, finishing the recording



Unloading a disc, finishing the operation



Opening a disc tray



Closing a disc tray

■ Status display

Each time you operate the recorder, the following displays appear on the TV screen to indicate the status of the recorder.

Status display

i.g.

Main on-screen displays

(Depending on the disc, some of these may not appear.)

: Playback! Pause

■ : Stop

► : Fast-forward

■ : Fast-reverse

► : Forward skip*

■ : Reverse skip*

I▶x1/2 : Forward slow-motion ◀|x1/2 : Reverse slow-motion

II▶ : Forward frame by frame playbackIII : Reverse frame by frame playback

: Recording: Recording pause

Title End : When title playback is completed

: Instant skip
: Instant replay
Chapter Divide: Chapter division

: Forward skip by 1/20 : Reverse skip by 1/20

* Accompanied with the followings:

HDD DVD-RAM DVD-RW DVD-R

Title number/title name and chapter number/chapter name

DVD-VIDEO :

Title number and chapter number

vcd cD :

Notes

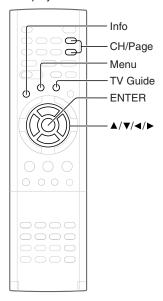
- To disable the status display, set "On screen display"
 (page 159) to "Off."
- You can add the current status of the settings to this display. See page 82.

Using TV Guide On Screen™

The TV Guide On Screen system in your recorder is a free interactive program guide that provides up to 8 days of program listings for over-the-air, cable-ready and analog cable in your area. The system allows you to easily find, set up reminders and schedule recordings of your favorite TV programs.

■ Entering TV Guide On Screen mode Press TV Guide.

TV Guide On Screen LISTINGS service is displayed.



e.g. New 239 JV SCAPE STANCE STANCE

Main service

The LISTINGS service contains a list of up to 8 days of TV programs including today.

To view a TV program

Press ▲ / ▼ to select a TV program and press ENTER.

To view information of a TV program

Press ▲ / ▼ to select a TV program and press Info. To close the Info Box, press Info twice.

To access options (e.g., recording, reminder, etc.) See the next page.

You also have access to the following services besides the LISTINGS service. While on the Main service bar select a service by pressing ◀/▶, then press ENTER. If you press Info while a service is highlighted, an Info box opens to show you more information about the service. Follow any instructions provided. For details, see the next page.

■ Buttons in TV Guide On Screen mode

▲/▼/∢/►:

Moves the highlight.

ENTER:

Makes a selection or executes an action.

Menu:

Displays a Panel Menu with options.

Info: (while INFO is displayed)
Changes the Info Box size.
Opens a Help screen when you move the highlight on the service bar.

CH/Page:

Scrolls one page up or down in the LISTINGS service.

RECORDINGS :

List all shows recorded through the TV Guide On Screen system.

SEARCH

Sort by keyword, movies, sports, HDTV, and more.

SCHEDIILE

Review, add or modify scheduled recordings and reminders.

SETUP

Change the TV Guide On Screen defaults to your preference or redo. the setup

Notes

- To exiting TV Guide On Screen mode, press TV Guide.
- While the TV Guide On Screen system is displayed other menus (e.g. EASY NAVI, CONTENT MENU, EDIT MENU, LIBRARY MENU) are not available.
 To use these menus, exit the TV Guide On Screen system.

In the United States, TV Guide and other related marks are registered marks of Gemstar-TV Guide International, Inc. and/or one of its affiliates. In Canada, TV Guide is a registered mark of Transcontinental Inc., and is used under license by Gemstar-TV Guide International, Inc.

The TV Guide On Screen system is manufactured under license from Gemstar-TV Guide International, Inc. and/or one of its affiliates.

The TV Guide On Screen system is protected by one or more of the following issued United States patents 6,498,895, 6,418,556, 6,331,877, 6,239,794; 6,154,203; 5,940,073; 4,908,713; 4,751,578; 4,706,121.

Using TV Guide On Screen™ (Continued)

Over the air or cable access to stations carrying TV Guide On Screen data is required for the TV Guide On Screen system to operate. TV Guide On Screen data is not provided by Toshiba, Therefore Toshiba is not liable for the content of such data. The date provider may elect to discontinue the service or it may cease to be (or never be) available in your area. In any of these circumstances, the TV Guide On Screen feature will not function. Toshiba is not liable in the event this service is unavailable or for any consequences arising from customers having used or not being able to use this service.

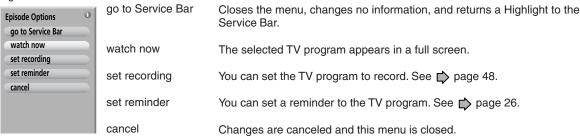
Services and options

For more details press Info while navigating through the various options and services.

LISTINGS

If you select a TV program and press Menu, a panel menu appears under the video window. Press ▲ / ▼ to select an option then press ENTER.

e.g.



Your selections below are entered and this menu is closed.

e.g.



Tips on panel menu operation

- ▲ / ▼ buttons move a highlight. If you see "A" or "▼" on the top or bottom of a panel menu, CH/Page buttons can be used to turn the page.
- To enter a digit, use the number buttons.
- When a box has "◀" and "▶" on both sides, use ◀/▶ buttons to cycles between the options.
- Press ENTER from an option to highlight the default command button (e.g., "done"). Press ENTER again to execute the action and close the panel menu.
- To cancel any changes and close the menu, press Menu, or select "Cancel" then press ENTER.

Notes

- You can set the video window to remain on a single channel ("lock") or change channels ("unlock") as you navigate through LISTINGS. With a channel logo or "LISTINGS" is highlighted, press Menu button to display the option to select "lock" or "unlock".
- You can access a TV program advertised in a panel ad. While the panel ad is highlighted press ENTER. If the TV program is airing now, you would tune to it. A panel menu appears, if the program is in the future.

SEARCH

If you select this service and press ENTER, categories appear on a bar under the Service Bar.

By selecting one of the categories, you can search TV programs.

After searching, you can open "Episode Options" by pressing Menu to access the options (above).

To search by Search type (Alphabetical, HDTV, Movies, Sports, Children, Educational, News, Variety, Series)

- Press ◀/▶ to select a Search type.
- 2) Press ▲ / ▼ to select a category, then press ENTER.

To search by entering a keyword

1) Press **◄/▶** to select "KEYWORD" then press ENTER.

"Keyword Search" appears.

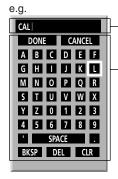
2) Press ▲ / ▼ to select "new search" then press ENTER.

"Search Options" appears.

- 3) Press ▲ / ▼ to select "category" then press ◀ / ▶ to select a category.
- 4) Press ▲ / ▼ to select "enter keyword" then press ENTER.

The keyboard appears.

5) Press ▲ / ▼ / ◀ / ▶ to enter a keyword.



Press **◄/** ► to select a entry point then press ENTER.

The selected letter is entered.

Press $\blacktriangle/\blacktriangledown/\blacktriangleleft/\blacktriangleright$ to select then press ENTER.

The text entry box is highlighted.

BKSP erases a letter on the left of the cursor.

DEL erases a letter on the right of the cursor.

SPACE inserts a space on the left of the cursor.

CLR erases all letters.

6) When complete, press **△** / **▼** / **⋖** / **▶** to select "DONE" then press ENTER.

A list of all matching TV programs for that keyword is displayed.

RECORDINGS

If you select this service and press ENTER, TV programs previously recorded or currently recording are listed. You can select one from the list to view or delete.

To list programs in alphabetical order or by date and time

1) While "RECORDINGS" is highlighted, press Menu.

"Recordings Options" appears.

2) Press ▲ / ▼ to select an option.



Press **◄**/ ▶ to select.

group: Titles of recorded TV programs are listed.

ist: Displays a detailed list of every recorded program.

sort by Press ◀/▶ to select.

title: Listed in alphabetical order

date: Listed by date and time, with most recent date and time first.

3) When complete, press ▲ / ▼ to select "done" then press ENTER.

A list of all matching TV programs for that keyword is displayed.

To play recorded program ("view as" is set to "group")

- 1) Press ▲ / ▼ to select a TV program then press ENTER.
- 2) Press ▼ to select an episode and press ENTER.

Notes

- If you play a TV program which you played before, playback starts from where you last stopped. To view it from the beginning, select the TV program on RECORDINGS, then press ENTER and ▼ to select an episode then Menu. On "Episode Options" select "play from beginning" then press ENTER.
- When "view as" is set to "list", press ▲ / ▼ to select a TV program, then press ENTER.

Using TV Guide On Screen™ (Continued)

To delete recorded programs ("view as" is set to "group")

- 1) Press **▲** / ▼ to select a TV program and press ENTER.
- 2) Press ▼ to select an episode and press Menu.
 - "Episode Options" appears.
- 3) Press ▲ / ▼ to select "delete episode" then press ENTER.

A confirming menu appears.

4) Press ▲ / ▼ to select "yes" or "no" then press ENTER.

Note

When "view as" is set to "list", press ▲ / ▼ to select a TV program and Menu. On "Episode Options", press ▲ / ▼ to select "delete episode" then ENTER. Press ▲ / ▼ to select "yes" or "no" then ENTER.

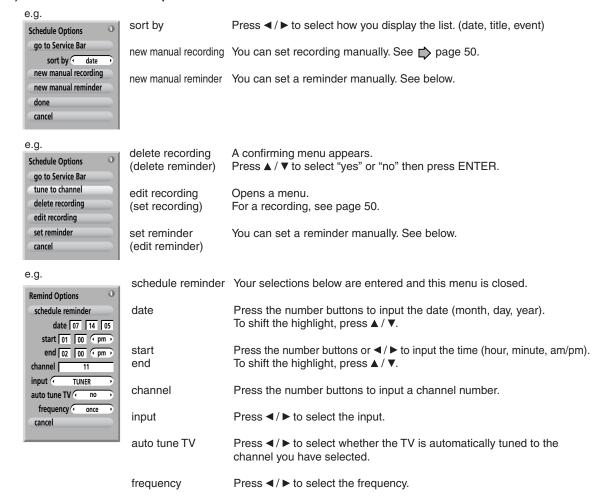
SCHEDULE

If you select this service and press ENTER, reminder and recordings you set previously are listed. You can edit or delete them.

- 1) Press ▲ / ▼ to select a TV program.
- 2) Press Menu.

"Schedule Options" appears.

3) Press ▲ / ▼ to select then press ENTER.



Notes

- When a reminder message appears, select an option by pressing ◄/► and then press ENTER. If you don't make a selection
 within 30 seconds, the recorder proceeds with the scheduled recording or reminder.
- If reminders conflict, "REMINDER CONFLICT!" appears. Press ▲ / ▼ to select an option, then press ENTER.

SETUP

If you select this service and press ENTER, options to change settings are listed.

To execute the setup again

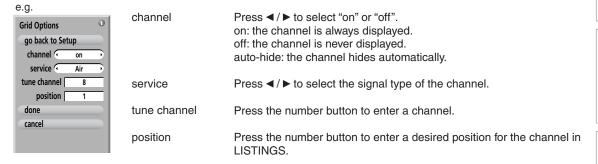
- Press ▲ / ▼ to select "Change system settings" then press ENTER.
 Your current settings are displayed.
- 2) Press ▲ / ▼ to select your answer then press ENTER.
- 3) Follow the on-screen guidance.

To arrange the position the channel appears in LISTINGS

To change the tuning channel number

To switch channels on/off in LISTINGS

- Press ▲ / ▼ to select "Change channel display" then press ENTER. "Grid Options" appears.
- 2) Press ▲ / ▼ to select a channel then press Menu.
- 3) Press ▲ / ▼ to select then press ENTER.



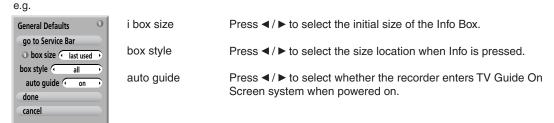
4) When complete, press ▲ / ▼ to select "done" then press ENTER.

To change Info Box size

- 1) Press ▲ / ▼ to select "Change default options" then press ENTER.
- 2) Press ▲ / ▼ to select "General defaults" then press Menu.

"General Defaults" appears.

3) Press ▲ / ▼ to select then press ENTER.



4) When complete, press ▲ / ▼ to select "done" then press ENTER.

Using TV Guide On Screen™ (Continued)

To change recording defaults

- 1) Press ▲ / ▼ to select "Change default options" then press ENTER.
- 2) Press ▲ / ▼ to select "Record defaults" then press Menu.

"Record Defaults" appears.

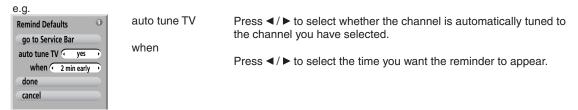


3) When complete, press ▲ / ▼ to select "done" then press ENTER.

To change reminder defaults

- 1) Press ▲ / ▼ to select "Change default options" then press ENTER.
- 2) Press ▲ / ▼ to select "Remind defaults" then press Menu.

"Remind Defaults TV" appears.



3) When complete, press ▲ / ▼ to select "done" then press ENTER.

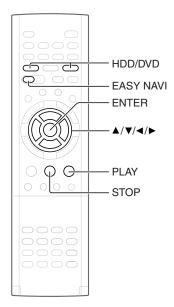
Key operation - EASY NAVI & QUICK MENU

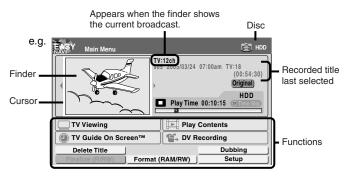
The EASY NAVI button opens "EASY NAVI Main Menu", a main gate to the functions of this recorder. From this menu, you can access the desired functions while viewing a current picture. Additionally, QUICK MENU button provides you a sub menu of the current function.

EASY NAVI

Press EASY NAVI.

Sound is muted and the following GUI appears. (Actual displays vary depending on operational status.)





- Operating the finder (For the HDD, DVD-RAM discs, DVD-R/RW discs recorded on this recorder and not finalized yet)
 - 1) When the cursor is on the finder, press **◄/▶**.

You can view thumbnails of recorded contents.

- You can select the drive by pressing HDD or DVD button.
- When you find a desired content, press PLAY or ENTER. The content is played.
 - Pressing ENTER button enlarges the finder's playback picture to the full of the screen.
 - You can change playback speed. See page 66.
- 3) To stop, press STOP.

A current channel broadcast appears. ("TV:xxxch" accompanies.)

Pressing REC button starts recording. On recording, see page 32.

Item selection

Press $\blacktriangle / \blacktriangledown / \blacktriangleleft / \blacktriangleright$ to select an item, then press ENTER.

(Unavailable features are grayed out.)

Item	Function	page
TV Viewing	Return to current broadcast channel.	_
Play Contents	Recorded contents are listed in a thumbnail view.	57
■ TV Guide On Screen™	TV Guide On Screen LISTINGS appears.	24
DV Recording	The setting menu for recording contents from equipment connected to the DV terminal.	136
Delete Title	You can delete the current content. Operate according to the message.	52
Dubbing	You can access a menu to dub the current content.	106
Finalize (R/RW)	You can execute the DVD-Video finalizing process on the loaded disc.	132
Format (RAM/RW)	You can format the loaded disc.	34
Setup	A setup menu appears.	150

(Continued)

Using TV Guide On Screen™ (Continued)

To exit the EASY NAVI Press EASY NAVI again.

Note

 For a disc other than the specified one, the finder cannot be operated. To play the disc, exit the EASY NAVI then press the PLAY button, or select the "Play Contents" function.

Quick Menu operation

To access various optional functions of this recorder, open Quick Menu. Quick Menu displays a list of selections relevant to your current mode.

Opening Quick Menu

1) Press QUICK MENU.

The following menu ("Quick Menu") appears. (Actual selections vary depending on operational status.)

e.g.



- 2) Press ▲ / ▼ to select an item, then press ENTER.
- To exit Quick Menu

Press QUICK MENU again.

Alternatively

Select "Exit" with ▲ / ▼, then press ENTER.

Hint on reading this manual

The following icons show the playable discs for each function described on this instruction manual.

HDD : HDD

DVD-RAM : DVD-RAM disc

DVD-RW : DVD-RW disc

DVD-R : DVD-R disc

DVD-VIDEO : DVD video disc

VCD : VIDEO CD

CD : Audio CD

(For CD containing JPEG or MP3/WMA files,

see page 78, 80.)

Most instructions are based on remote control operation, unless otherwise noted. You can use the buttons on the remote control and those on the main unit as well when they have the same function.

If copy protection signal is detected during recording on this recorder, the recording automatically pauses and a message appears. In this case, the PAUSE button cannot release the recording. (It is possible to end the recording by pressing the STOP button.) If the copy protection signal continues, the recording will terminate.

Recording

Recording variations for many types of programs or situations.

- Before recording
- Selecting a disc according to purposes of use (DVD-RAM/R/ RW)
- Setting for recording on a DVD-R/RW disc in Video mode
- Recording a TV program
- Recording an external source
- Setting a recording
- Others

Before recording

Please be sure to read this critical background information prior to making a recording.

This recorder is equipped with a built-in HDD. Conventional video cassette recorders have required tapes to record, while this recorder enables recording on the HDD whenever you want, without selecting an available tape or confirming its recording time or tape remaining. Further, the DVD-RAM drive on this recorder can record on a DVD-RAM/R/RW disc in the same way as a tape. You can also copy contents recorded on the HDD to a DVD-RAM/R/RW disc to create your own library.

■ Is your recorder ready?

Before recording a TV program on this recorder, insure that channels you want to record are correctly tuned in on this recorder.

If not tuned in, read the separate "INSTALLATION GUIDE" volume again, and confirm all the necessary connections and settings have been done.

Also, insure the clock is set precisely for program recording.

■ Disc initializing

Whenever you use a new DVD-RAM disc on this recorder, be sure to initialize the disc. For DVD-RAM discs, initialization is indispensable to the database system of this recorder.

Normally, the HDD does not need to be formatted. If the HDD does not work normally due to a problem, format the HDD for possible recovery. Once you format the HDD, all the recorded titles and Library information are deleted. Before formatting, be sure to write library information to a DVD-RAM disc and check any titles to be deleted.

DVD-RW discs can be emptied by initializing. DVD-R discs can be used on this recorder without initializing.

For details of initialization of DVD-RAM discs, see page 34.

If an initialized DVD-RAM disc is still unusable, it may become usable by executing "DVD-RAM physical format" in "Management settings" menu. For "DVD-RAM physical format", see page 35.

■ Note on recording on a DVD-RAM disc Confirm disc compatibility and prepare an available DVD-RAM disc to record on (page 6, 8).

Some discs may need to be formatted for use on this recorder. A message will appear asking you to execute disc formatting. Follow the procedure displayed onscreen to format the DVD-RAM disc compatible with this recorder.

Some DVD-RAM discs formatted on a PC may not be usable.

Note

• This recorder records on a DVD-RAM disc if it complies with DVD-RAM standard Version 2.0, 2.1 or 2.2. However, you may not record on some DVD-RAM discs that have complicated contents (often, to protect the recorded data). When you select a DVD-RAM disc that has already been recorded, check that the disc is suitable for recording or the remaining time of the disc is displayed. It is recommended to use a new DVD-RAM disc for an important recording.

■ Note on recording on a DVD-RW disc

Confirm disc compatibility and prepare an available DVD-RW disc to record on (page 6, 9).

Some discs may need to be initialized for use on the recorder. A message will appear asking you to execute disc initializing. Follow the procedure displayed onscreen for initializing the DVD-RW disc compatible with this recorder.

Some DVD-RW discs initialized on a PC may not be usable.

To play a DVD-RW disc recorded on this recorder on an other device, finalize the DVD-RW disc on this recorder. (page 132)

The finalization disables the disc's rewritability. To rewrite a finalized DVD-RW disc, cancel the finalization (page 135).

- On DVD-RW discs recorded on other devices, you cannot execute DVD-Video finalize process or cancel the finalize process, or add recordings on this recorder.
- DVD-RW discs which are recorded on other devices and not finalized yet, cannot be read on this recorder. Do not rush to initialization. Check that the contents can be erased or not.

■ Note on recording on a DVD-R disc

Confirm disc compatibility and prepare an available DVD-R disc to record on (page 6, 9).

To play a DVD-R disc recorded on this recorder on other devices, finalize the DVD-R disc on this recorder. (page 132)

The finalization permanently disables the disc's writeability. (Canceling the finalization is not possible.)

- DVD-Video finalize process cannot be canceled if once executed on a DVD-R disc.
- On DVD-R discs recorded on other devices, you cannot execute DVD-Video finalize process or add recordings on this recorder.
- DVD-R discs with the method of "DVD-Video Creation" have been alreadly executed the DVD-Video finalize process. Therefore, they cannot be added the contents.
- If you want to record contents which will be copied to a DVD-R/RW disc later on

See page 43.

■ To check space remaining on a disc

1) Press REMAIN.

The current capacity per disc is displayed at the bottom of the screen. The current capacity of the selected drive is displayed on the front panel display.

- After checking the capacity, press REMAIN again to turn off the display.
- When "HDD recording is not possible due to..." appears

The HDD is full. To record new content, delete unnecessary titles or transfer some content to a DVD-BAM disc.

■ Programmed recording and operational status

The recorder gives priority to programmed recordings in every operating mode. Even if the recorder is playing, recording or editing, or even in standby mode, at a starting time of a programmed recording the recorder will make itself ready or stop those operations and start the recording.

However, "Creating a DVD-Video" (page 122) and "DVD-Video finalizing process" (page 132) operations may have priority over programmed recordings.

■ When the programmed settings overlap

Before the first recording is completed, the second program is scheduled to begin recording. When using a DVD-RAM disc, the recording of the previous program stops 10 seconds before the next program starts. (If you have been recording over 9 hours on the same drive, the current recording stops approximately 2 minutes before the next programme starts.) When using a DVD-R/RW disc, the recording of the previous program stops about 2 minutes before the next program starts, to complete data process. In this 2 minutes, you cannot operate the loaded DVD-R/RW disc.

Notes

- The "Loading" icon appears in the top right of the screen after recording. This indicates that the unit is executing
 the final recording process (writing managing information). Operations other than changing channels cannot be
 done until this icon disappears. The time for executing this process differs depending on the recording time or
 capacity of the disc.
- Note that all recording content may be deleted if the unit is disconnected from a wall outlet, or a power failure
 occurs, during recording.
- If a power failure occurs within 5 minutes prior to the programed recording start time, the programmed recording may not be executed.

Before recording (Continued)

Initializing a DVD-RAM/RW disc (Logical Format)

Be sure to read this section prior to using a DVD-RAM/RW disc on this recorder for the first time. For DVD-R, initializing is not necessary.

A disc should be initialized in the following cases: (The recorder may display a message to request you to do so.)

e.g.

- When you use a DVD-RAM/RW disc on this recorder for the first time.
- If data fragments produced by repeated recording or erasing have accumulated.
- If a disc error has occurred.
- When you want to record on a DVD-RAM disc for PC.
 (page 8)

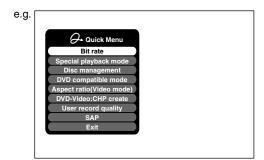
Initializing formats a disc logically and insures that it will perform to its full capability. However, this erases all data on the disc, so make sure that it does not matter if data on the disc is erased whenever you initialize a disc.

■ How to initialize a disc

To initialize a DVD-RAM disc, load it in the recorder. See \implies page 20 for loading a disc.

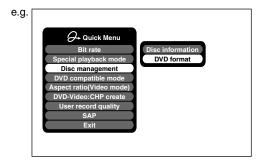
1) Press QUICK MENU.

The following menu appears. (The actual contents depends on the operational status of the recorder.)

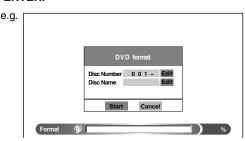


 Press ▲/▼ to select "Disc management," then press ENTER.

A sub menu appears on the right side.



 Press ▲ / ▼ to select "DVD format," then press ENTER.



Numbering a disc

The recorder automatically numbers discs when initializing. However, you can assign a desired number (using 3 digits) and designate sides A and B on a double-sided disc. (DVD-RW discs cannot be numbered.)

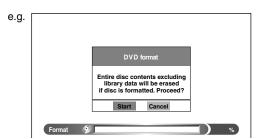
- Press ▲ / ▼ buttons to select "Edit" of "Disc Number" then press the ENTER button.
- (2) Press ▲ / ▼ buttons to select a digit.
- (3) Press
 ✓/ ▶ buttons to shift.
- (4) Repeat steps (2) and (3).
- (5) Press ENTER button.

Naming a disc

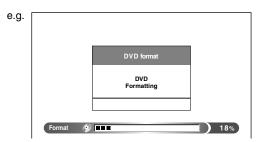
You can name a disc.

- Press ▲ / ▼ buttons to select "Edit" of "Disc Name," then press ENTER button.
 - The character input window appears.
- (2) Enter a disc name following the procedure of "Entering characters" (page 36).
- (3) Press ★ button to eliminate the window.

4) Press / ► to select "Start," then press ENTER.



5) Press **◄/▶** to select "Start," then press ENTER. Initialization starts.



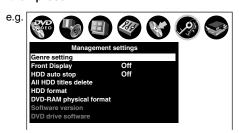
When the initialization is completed, the setup window disappears.

DVD-RAM physical format

Physical formatting is a simple execution for a disc which cannot be used or read (or which is becoming hard to read). It may refresh such a disc for recording and playback. (There is no guarantee that all such discs will be recovered.)

"DVD-RAM logical format" process only rewrites certain data on file system and management information, however, "DVD-RAM physical format" rewrites all data on a disc, therefore it takes a much longer time to complete. For a 4.7GB single sided DVD-RAM, about 70 minutes will be necessary. While processing, all recorder operations and functions including program recording will not work until the process is finished. Also this process erases all data stored on the DVD-RAM disc.

- 1) Press SETUP.
- Press ◄/► to select "Management settings" then press ENTER.



- 3) Press ▲ / ▼ to select "DVD-RAM Physical Format," then press ENTER.
- Press ◄/► to select "Yes," then press ENTER to execute.



To cancel, select "No", then press ENTER button.

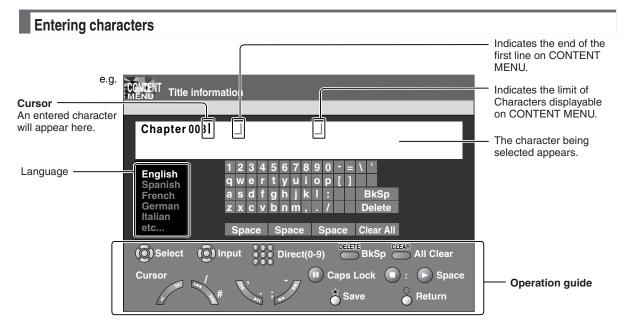
5) Read the message, and press
√ be to select "Yes" or "No", then press ENTER.

Notes

- The physical format process may fail if executed to a dirty DVD-RAM disc. Also, the disc may be difficult to record, even if it is finished. Before executing DVD-RAM physical format process, be sure to confirm the disc is not dirty. Clean it if necessary. If the disc has scratches or dust beyond cleaner's efficacy, do not execute DVD-RAM physical format process on the disc.
- The following DVD-RAM discs require physical formatting:

 A disc which is not formatted correctly.
- The disc which has errors during writing because of dirt on the disc, and cannot be further recorded, or cannot initialize normally.
- You need to start physical formatting from the first step again when you use a failed disc.
- Physical formatting does not work if the disc contains a lot of yolds beyond the limitation of this recorder.
- If an error occurs in physical formatting, "ERR-01" appears in the front panel display. To turn off the message, press DISPLAY button on the remote control.

Before recording (Continued)



Operation guidance of the remote control

To enter the character, normally use $\blacktriangle/\blacktriangledown/\blacktriangleleft/\blacktriangleright$ buttons on the remote. About the other buttons to be used are shown on the operation guide.



: Shifts the cursor.



: Enters a number.



: Erases one character immediately to the left side of the cursor.



: Erases all the characters.



: Caps Lock



: Saves the changes and returns to the previous screen.



: Cancels the changes and returns to the previous screen.



: Enters a space.





: Enters a symbol.

Switching a language

Before entering a character, move a cursor to the language selection area by pressing $\blacktriangleleft/\triangleright$ buttons. Then press $\blacktriangle/\blacktriangledown$ buttons to select a language, then press ENTER button.

■ Entering characters

The cursor may be followed by unwanted characters. You can erase them if necessary by either of the following measures:

Erasing characters

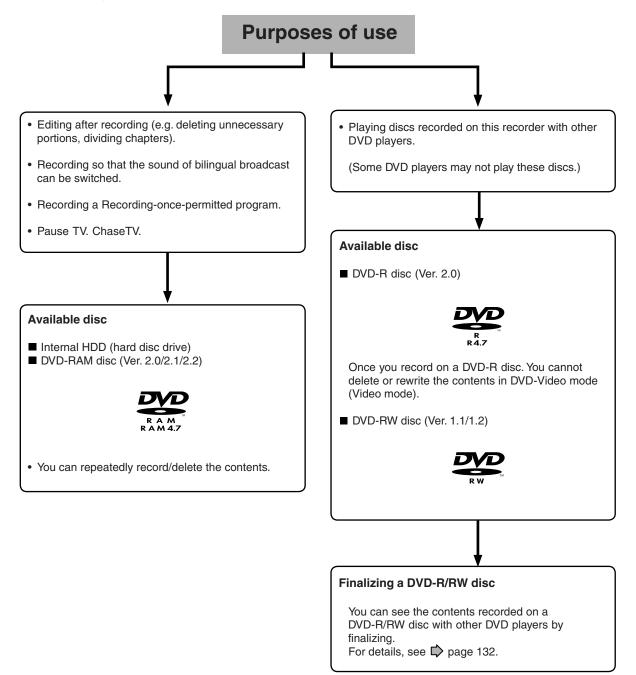
- Erasing all the characters on the writing board Select "Clear All" by pressing ▲ / ▼ / ▼ / ▶ buttons, then press ENTER button.
 Alternatively, press CLEAR button.
- Erasing one character before the cursor Select "BkSp" by pressing ▲ / ▼ / ▼ / ▶ buttons, then press ENTER button.
 Alternatively, press DELETE button.
- (1) Press **■** button to select an input mode.
- (2) Press ▲ / ▼ / ▼ / ▶ buttons to select a character, then press ENTER button.
 - The selected character is input on the cursor.
- (3) Repeat steps (1) and (2) to enter characters.
- (4) When finished, press ★ button to save the characters.

The characters you entered appears.

- You can enter up to 64 characters.
- When unnecessary information appears, or when you want to alter the input character, press CLEAR button to erase all, or press DELETE button to erase an unnecessary character.

Selecting a disc according to purposes of use (DVD-RAM/R/RW)

There are various types of discs having different standards. Select one for your purpose of use.



When recording on a DVD-R/RW disc you need to set up the recorder due to the restriction by the DVD-Video standard.

For details, see the next page.

Introduction

Recording

Setting for recording on a DVD-R/RW disc in Video mode

This setting is necessary to play the contents on a DVD-R/RW disc with other DVD players.

■ Items to set up

When recording in Video mode, there are some restrictions by DVD-Video standard.

Therefore, it is necessary to set up these items below. Set up the items in advance before copying contents from the HDD to a DVD-R/RW disc.

DVD compatible mode

Only the main sound and SAP sound are available for recording in Video mode under DVD-R/RW standard.

Off: This is not for recording on a DVD-R/RW disc. Depending on Picture/Audio settings, making DVD Video may not be possible. (When recording directly on a DVD-R/RW disc in DVD-Video mode, the recording proceeds with "Main" on even though "Off" is set.)

Main: In multichannel broadcasting, only the main sound is recorded.

SAP: In multichannel broadcasting, only SAP sound is recorded.

Aspect ratio

"4:3" and "16:9" cannot be mixed in one title. Therefore, set the aspect ratio before recording.

4:3: Set the aspect ratio to 4:3

16:9: Set the aspect ratio to 16:9

Chapter dividing ("DVD-Video:CHP Create")

This is the setting to divide a title into some chapters. It is convenient to skip scenes.

Off: Chapter dividing is not available.

5 min, 10 min, 15 min, 20 min:

Select an interval for chapter dividing.

Note

 When the number of chapters reaches a limit, chapters are not divided anymore. The limit number of chapters is dependent on conditions of a DVD-R/RW disc.

How to set up

Press SETUP.



SETUP menu appears.

2 Select "DVD recorder operation" and press ENTER.



C.g.

DVD recorder operation

User record quality
Picture record mode
Input Black level Standard

Aspect ratio(video mode)

DVD recorder operation

User record quality
Picture record mode
Input Black level Standard

Aspect ratio(video mode)

Main

DVD-Video-CHP create

Off
Rec DVR

STORY Separation

On

Relay recording

On

Select "Aspect ratio (Video mode)" and press ENTER.



P. G. DVD recorder operation

User record quality
Picture record mode
Input Black level

Aspect ratio(Video mode)

Aspect ratio(Video mode)

DVD-Video:CHP create

Off
Rec DNR

3D V/C separation

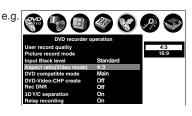
On

Reley recording

On

Press ▲ / ▼ to select an item and press ENTER.





Set up "DVD compatible mode" and "DVD-Video: CHP create" as step 3, 4.

HDD DVD-RAM DVD-RW DVD-R

Recording a TV program

To record a TV program currently being broadcast, follow the procedures of this chapter.

Preparation

- When you record on a DVD-RAM/R/RW disc, load it into the recorder.
 - Load a disc which has sufficient space available to record the program.
 - Make sure the loaded disc is not write-protected.
- If you record on a DVD-R/RW disc, set "DVD compatible mode" (page 162) to "Main" or "SAP." In DVD-R/RW recording, "Off" setting is regarded as "Main."
- If you record on a DVD-R/RW disc, set "Aspect Ratio(Video mode)" (page 162) according to recording sources.



Press HDD or DVD to select a media to record on.



DVD

HDD: To record on the HDD.

DVD : To record on a DVD-RAM/R/RW disc.

Select a channel to record.



4 5 6 7 8 9 Use any of the followings:

- CH/Page buttons (
- Number buttons
- TV Guide On Screen (□ page 23)

Perform either of A or B to select the recording mode.

(If you want to use the default setting of the recording mode, skip to step 4.)

Α

Press REC MODE repeatedly to select the recording mode "SP"/ "LP"/"MN" on the front panel display.

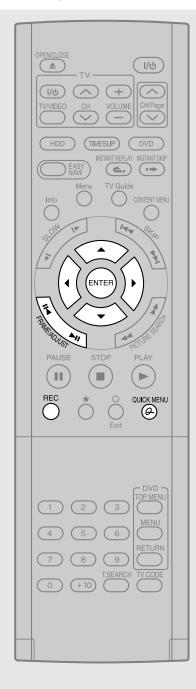
After selecting, go to step 4.



■ Suggestions for the user picture quality setting

- For normal recording or when you cannot decide which mode to choose.
 Select "SP".
- When you need a longer recording time and video quality is not important Select "LP", lower quality than "SP" in picture quality, but it can record longer.
- To record a high quality picture

 Select "MN (Manual)" to set a desired bit rate. (See page 161.) The higher the bit rate, the better the picture quality is, but the shorter the recording length becomes. We recommend that you set this between 6.0 Mbps and 6.8 Mbps.



В

1 Press QUICK MENU.

Quick Menu appears.



2 Press ▲ / ▼ to select "User record quality," then press ENTER.



3 Press **◄/▶** to select a media to be recorded, then press ADJUST to select the setting number.



e.g.



See page 53 for details on "Mode", "Rate" and "Audio Quality".

4 Press ENTER.



The menu disappears.



Press REC.



Recording starts.

Recording a TV program (Continued)

Notes

- During recording, you cannot change the recording parameters, such as modes, channels, etc.
- The number of titles cannot exceed 99 for a DVD-RAM/R/RW disc or 396 for the HDD.
- One continuous recording cannot exceed in any case 9 hours. Recording automatically stops at 9 hours.
- Even during normal recording, you can set the programmed recording.
- You cannot start recording immediately before a programmed recording starts.
- For recorded sound, see page 76.
- During monaural sound recording, the same sound is recorded on both the left and right channels.
- When "Audio" is set to "L-PCM", multi-channel sound is recorded as stereo sound. When playing this recorded sound, you
 will hear MAIN and SAP sounds simultaneously. Press AUDIO button to select a desired sound.
- When "DVD compatible mode" is set to "Main" or "SAP", the unit records the same sounds on both the left and right channels when receiving monaural sound. When receiving the multi-channel sound, the selected sound, Main or SAP, is recorded on both the left and right channels.
- Depending on the disc contents, pressing REC button may take a longer time to start recording.
- When a starting time of a programmed recording comes, a recording in execution is stopped and the programmed recording starts. If you do not want to stop the recording, cancel the timer program before it starts.
- Even if you set "Aspect ratio(Video mode)" (pp page 162) to "16:9", images are recorded in 4:3 aspect ratio when using a DVD-R/RW disc with "Rate" set to "1.0" (Mbps) or "1.4" (Mbps).

■ To stop recording

Press STOP.

■ To pause recording (to omit an unnecessary portion)

During recording, press PAUSE.

To resume recording, press it again.

Note

 Pausing recording automatically creates a new chapter division at that point.

■ To change a TV channel to be recorded

- 1) During recording, press PAUSE. Recording pauses.
- 2) Press CH/Page or the number buttons to change the channel.
- 3) Press PAUSE to resume recording.

■ To view a TV program while recording another

- 1) Start recording on this recorder.
- 2) On a connected TV, select the TV mode.
- Using the channel selector of the TV, select a desired channel on the TV.

■ To reduce noise on recordings (Rec DNR) Before recording, set "Rec DNR" (page 162).

■ To record and play at the same time

- To start recording while playing a disc Stop playback, then select the other disc by pressing HDD or DVD button, and start recording on that disc.
- To play a disc while recording on another disc Select the disc that is not being recorded by pressing HDD or DVD button, and start playback on the disc.

Note

 During a dubbing job, the unoccupied drive is available for recording or playback, however, cannot perform a function which records and plays simultaneously.

■ To play a recorded title while recording another on the same disc (Recorded Title Play)

HDD DVD-RAM

During recording, you can play a title recorded on the same disc.

- 1) While recording, press CONTENT MENU.
- Press ▲ / ▼ / ◄ / ► to select a desired title, then press ENTER.

Playback of the selected title starts.

Pressing STOP button stops playback, and the content currently being recorded returns. If you press PLAY button, playback resumes from the location you last stopped.

Notes

- The playback picture may appear after a delay of several seconds
- While you are using this function, the following operations/ functions are not available.
 - Programmed playback (repeat playback, intro scan etc.)
 - Editing (Playlist programming, dubbing, title/chapter naming, title thumbnail setting, etc.)
- This function is not available during the 10 minutes overlapped portion of the relay recording (page 53).
- Depending on the data condition, playback may pause.
- During a dubbing job, this function is not available.

■ When recording contents which will be copied to a DVD-R/RW disc later on

Before recording, set "DVD compatible mode" (page 162) to "On".

Each timer program must to be set its "DVD compatible mode" from Quick Menu.

Creating chapters while recording

Press CHP DIVIDE button.

The content is divided into two chapters at the point you pressed the button.

Note

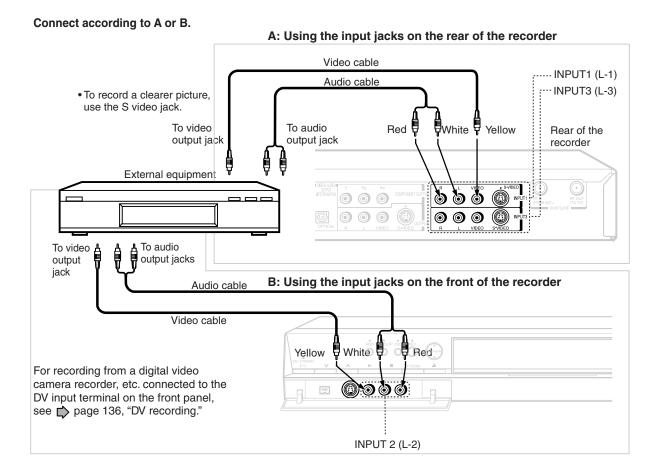
- If you want to divide into chapters at desired points on DVD-R/RW discs, use this method. On those discs, you cannot create chapters after recording.
- Creating chapters automatically at regular intervals

Set "DVD-Video:CHP Create" (page 162).

HDD DVD-RAM DVD-RW DVD-R

Recording an external source

You can record programs from connected equipment on the HDD or a DVD-RAM/R/RW disc.



Preparation

- When you record on a DVD-RAM/R/RW disc, load it into the recorder.
 - Load a disc which has sufficient remaining space to record the program.
 - Make sure the loaded disc is not write-protected.

- If a source of high quality sound track such as DVD audio is recorded with this recorder, the sound quality becomes regular audio CD quality. Refer to the instructions of the connected equipment.
- When you record an external source onto a DVD-R/RW disc or the contents which will be copied to a DVD-R/RW disc later
 on, set the connected equipment to output sound you want to record (if selectable such as multiplex broadcasting), as the
 recorder records sounds of an external source in stereo onto a DVD-R/RW disc, ignoring the setting of "DVD compatible
 mode" (page 162).
- DVD-R/RW discs cannot record contents with copy restriction signal embedded (copy-protected or copy once contents),
 DVD-RAM discs can record copy once contents.
- Some satellite programs via a connected tuner may contain both 4:3 pictures and 16:9 pictures. DVD-R/RW discs cannot
 record such contents under the restriction of the DVD-Video standard. To record these programs, use the HDD or DVD-RAM
 discs.
- Depending on the source recording device used and how that device is set up, the video and sound quality of the recording
 may vary slightly from the video and sound quality of the source device.





Press INPUT SELECT repeatedly so that "L-1," "L-2," or "L-3" appears on the front panel display, corresponding to the input in which the device is connected.



Each time you press the button, the indicator changes.

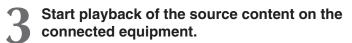
- **L-1:** To record pictures from equipment connected to the INPUT1 jacks on the rear panel.
- **L-2:** To record pictures from equipment connected to the INPUT2 jacks on the front panel.
- L-3: To record pictures from equipment connected to the INPUT3 jacks on the rear panel.
- L-U: To record pictures currently played (□ page 116).

Press HDD or DVD to select a recording media.



HDD: To record on the HDD.

DVD: To record on a DVD-RAM/R/RW disc.



Press REC of this recorder to start recording.



When recording is completed, press STOP.



Recording an external source (Continued)

■ Notes on recording from a connected VCR or camcorder

Check the condition of the source equipment before playing.

Set the equipment in a good condition, e.g. clean the head or adjust the tracking, etc. to obtain optimum playback. Bad conditions may produce noises in playback. These noises may be detected as copy protection signals, resulting in a stoppage of the recording.

Play a source in an usual mode. Avoid using any correcting or enhancing features, as they may add signals which can be detected as copy protection signals.

Source quality or tape condition beyond adjustments on the source equipment may stop a recording on this recorder.

• Do not operate the source equipment during recording on this recorder.

Operations such as pausing, resuming, fast-forwarding (CUE) and fast-reversing (REVIEW), etc. may produce noises, which may be detected as copy protection signals. Therefore, first start playback on the source equipment to confirm that the desired source can be played properly, and then start recording on this recorder. Do not operate the source equipment during recording. After completing the desired scene, stop the recording on the recorder, and then stop the playback on the source equipment. Delete unnecessary scenes using editing functions (page 118). If you want to operate the source equipment during recording, pause or stop the recording. After operating the source equipment, resume the recording as above.

When recording from a camcorder

Follow the above notes. Be sure to power the camcorder with its AC adapter, not batteries. If batteries are run down, the recording may not be finished completely.

HDD DVD-RAM DVD-RW DVD-R

etting a recording

To record TV programs and end them automatically, follow the procedures of this chapter. Before setting recording, see "Before recording" (page 32).

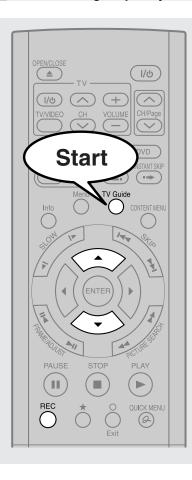
Preparation

- When you record on a DVD-RAM/R/RW disc, load it into the recorder.
 - Load a disc which has sufficient remaining space to record the program.
 - Make sure the loaded disc is not write-protected.
- Make sure that the disc has enough space to record.
- Set "DVD Compatible mode" beforehand. (page 39)
- To record satellite TV programs, set a recording manually (page 50)

If you do not need to change recording options (recording mode or time range), see "With recording frequency selection only" below.

If you want to change these recording options, follow the procedure of "Changing the recording options" procedure page 48) or "Set recording by specifying details manually" (page 50).

With recording frequency selection only



Press TV Guide.

TV Guide On Screen LISTINGS appears.

TV Guide

Press ▲ / ▼ to select a TV program to record.



For searching a TV program, see page 24.

Press REC repeatedly to select the recording frequency.



Each time you press REC button, the icon changes. For the icons, see page 49.

Note

• Recording will be executed on the defaut settings (page 28).

Setting a recording (Continued)

Changing the recording options



Press TV Guide, then press ▲ / ▼ to select a TV program to record.



Or to search for a TV program, see page 24.

Press MENU.



"Episode Options" appears.

Press ▲ / ▼ to select "set recording" then press ENTER.



"Record Options" appears.



Press ▲ / ▼ to shift and press ◀ / ▶ to select.



frequency: See the next page.

start:

Choices are between 120 minutes early and 120 minutes late, to "On time". (Default = "On time")

end:

Choices are between 120 minutes early and 120 minutes late, to "On time". (Default = "On time")

recorder:

HDD: Records onto the HDD. DVD: Records onto a loaded disc.

quality:

See "Recording mode"

When complete, press ▲ / ▼ to select "schedule recording" then ENTER.



"Record Options" is closed. The icon appears on the TV program.

Note

If you cancel the selections, select "cancel" then press ENTER button.

■ Frequency of recordings/reminders and icon

Recording

Ŵ	Re	n	niı	nd	er

Reminder				
Icon	Meaning			
Once (in)	One time execution			
Regularly	For a program on the same channel and at the same start time			
Daily*	For a program on the same channel and at the same start time of Monday through Friday			
Weekly	For a program on the same channel and at the same start time on the selected day of the week.			
Off	Keeps infomation without executing, until the frequency is changed.			

*For "new manual recording" and "new manual reminder" only.

■ Recording quality (recording mode)

Mode	Bit rate	Sound quality	Recording time*	
XP-Audio	8.0	L-PCM	1	
XP	9.2	□ □ D/M2	1	
EXP-Audio	4.8	L-PCM	1.5	
EXP	6.2	□ □ D/M1	1.5	
SP-Audio	3.2	L-PCM	2	
SP	4.6	□ □ D/M1	2	
MP	3.0	□ □ D/M1	3	
LP	2.2	□ □ D/M1	4	
EP	1.4	□ □ D/M1	6	
SEP	1.0	DDD/M1	8	
User	See 🖒 page 161.			

*4.7GB DVD-RAM disc

The recording times listed above are for reference purposes only and are not guaranteed. Recording times may vary. Setting a recording (Continued)

Set recording by specifying details manually

1) Press TV Guide.

TV Guide On Screen LISTINGS appears.

- 2) Press **◄/▶** to select "SCHEDULE".
- 3) Press Menu.

"Schedule Options" appears.

4) Press ▲ / ▼ to select "new manual recording" then press ENTER.

"Record Options" appears.

5) Press ▲ / ▼ to select "date" then press the number buttons to input the date (month, day, year).

To shift the highlight, press ▲ / ▼.

6) Press ▲ / ▼ to select "start" then press the number buttons or ◄ / ▶ to input the start time (hour, minute, am/pm).

To shift the highlight, press ▲ / ▼.

Also set "end" in the same manner.

- 7) Press ▲ / ▼ to select "channel" then press the number buttons to input a channel number.
- 8) Press ▲ / ▼ to select "input" then press ◄ / ▶ to select the input.

Tuner: TV broadcast

Line 1, 2, 3: external device connected to the recorder

- 9) Press ▲ / ▼ to select "recorder" then press ◄ / ▶ to select the recording drive (HDD, DVD).
- 10) Press ENTER.

"Record Options" is closed.

The icon appears on the TV program.

- The disc tray does not close automatically, even when the recording start time arrives. Set the recorder loaded an available DVD-RAM/R/RW disc beforehand.
- It it not possible to record the same contents onto both the HDD and a DVD-RAM/R/RW disc simultaneously.
- When there is little time before a programmed recording starts, you may not be able to start another recording.
- Playback of the DVD drive pauses when a programmed recording onto the HDD starts.
- Do not change TV Guide On Screen settings (e.g., cable input, brand, etc.) while a recording is programmed. After then, make the programing again if necessary.
- Confirm the "DVD compatible mode" (page 162) setting. "Main" or "SAP" records main sound or sub-sound of multiplex broadcasts respectively, and does not record the other. Therefore, select "Main" or "SAP" only when you record onto a DVD-R/RW disc.
- When recording onto a DVD-R/RW disc, set "DVD compatible mode" (page 162) to the desired recording sound for each timer program.
- When recordings conflict, "RECORDINGS CONFLICT!" appears. Read the message, and choose an option by pressing ▲ / ▼
 then press ENTER button.

Deleting a recording

2 ways are available.

On LISTINGS

- 1) Press TV Guide.
- Select a TV program you have set to record (icon displayed).
- 3) Press Menu.

"Episode Options" appears.

- 4) Press ▲ / ▼ to select "delete recording", then press ENTER.
- Read the message, and press ▲ / ▼ to select "yes" (if you want to delete), then press ENTER to exit.

On SCHEDULE

- 1) Press TV Guide.
- 2) Press **◄/▶** to select "SCHEDULE".
- Press ▲ / ▼ to select a TV program you have set to record.
- 4) Press Menu.

"Episode Options" appears.

- 5) Press ▲ / ▼ to select "delete recording", then press ENTER.
- Read the message, and press ▲ / ▼ to select "yes" (if you want to delete), then press ENTER to exit.

Correcting a recording

- 1) Press TV Guide.
- 2) Press **◄/▶** to select "SCHEDULE".
- Press ▲ / ▼ to select a TV program you have set to record.
- 4) Press Menu.

"Episode Options" appears.

 Press ▲ / ▼ to select "edit recording", then press ENTER.

"Record Options" appears.

- 6) Change the selections.
- 7) Press ▲ / ▼ to select "schedule recording", then press ENTER.

■ To stop a scheduled recording

- 1) Press TV Guide.
- Press ▲ / ▼ / ◀ / ► to select the TV program currently being recorded.
- 3) Press REC repeatedly until the recording icon disappears.

■ Turning the power off automatically after completing a scheduled recording

1) While executing a scheduled recording, press QUICK MENU.

Quick Menu appears.

 Press ▲ / ▼ to select "Auto power off" then press ENTER.

Keeping the power on even after the scheduled recording finished

If the recorder turns itself on to execute a scheduled recording, it will turn itself off after finishing the recording. You can restrict this and keep the recorder powered on.

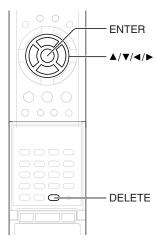
- 1) While executing a scheduled recording, press QUICK MENU.
- Press ▲ / ▼ to select "Continuous power on" then press ENTER.

Others

To delete recorded content

Important note

Any deleted title/chapter (original) cannot be restored. Before deleting, be sure to check contents on the disc.



- 1) Perform steps 1 and 2 in "Playing recorded contents (CONTENT MENU)" (page 57) to select a title (chapter).
- 2) Press DELETE button.

Alternate method:

Press QUICK MENU button, then press the ▲ / ▼ buttons to select "Title delete" ("Chapter delete") and press ENTER button.

3) Read the message and press ◀/▶ buttons to select "Yes," then press ENTER button.

Notes

- Deleting a title (a chapter) decreases the numbers of the succeeding titles (chapters).
- A chapter for under 5 seconds or shorter may not be deleted. Deleting a short chapter may not change the display of the available disc volume.
- Deleting a playlist title/chapter does not affect the original title/chapter.
- Deleting an original title/chapter affects all the corresponding playlist title/chapters.
- Deleting all chapters in a title erases the title itself.
- Titles and chapters which contain still pictures cannot be deleted.
- On a DVD-R/RW disc, deleting is not possible if the disc is finalized (page 132).
- Chapters in a DVD-R/RW disc cannot be deleted.
- On a DVD-RW disc, only the last title recorded can restore the disc capacity by being deleted.
- On a DVD-R disc, deleting cannot restore the disc capacity.

To protect recorded content

You can protect recorded contents of the HDD or a DVD-RAM disc from unexpected deletion. Protection is provided for each title (original).

- Perform steps 1 and 2 in "Playing recorded contents (CONTENT MENU)" (page 57) to select a title.
- Press QUICK MENU button, and press ▲ / ▼ buttons to select "Title information". Then press ENTER button.
- Press QUICK MENU button, and press ▲ / ▼ buttons to select "Lock" and then press ENTER button.

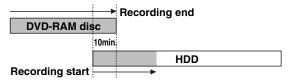
The mark \triangle appears.

- To cancel protection, repeat this procedure.
- Disc initialization erases all titles on a disc even if they are protected.
- Executing "All HDD titles delete" page 164) erases all titles on the HDD even if they are protected.

Relay Recording HDD DVD-RAM

This function automatically diverts a recording to the HDD if a DVD-RAM disc is near capacity.

When the remaining time of the DVD-RAM disc has reached about 10 minutes, the recorder starts recording the same content on the HDD as well as DVD-RAM. The chapter marks are automatically made at the start and end points of the overlapped recording portion. You can delete the unnecessary overlapped portion afterwards by referring to the chapter marks.



To engage the Relay Recording function, set "Relay recording" to "On" (page 163).

Notes

- When the capacity of the HDD is not sufficient, the operation is canceled.
- While recording the overlapped portion, you cannot pause the recording.
- While recording the overlapped portion, you cannot play a recorded title on the same disc.
- When another programmed recording is set just after the relay recording, the relay recording stops about 2 minutes before the next programmed recording starts.

Technical Information

About recording time

The recording time of a typical VCR (Video Cassette Recorder) is determined by the length of a video tape and recording speed (SP, LP, etc.). Video tapes with various recording times are available on the market. On the other hand, the recording time of a DVD-RAM/R/RW depends on the bit rate (Mbps: amount of data transmitted per second), which can be varied in MPEG2 (Moving Picture Experts Group2) compression technology.

As an example, when you pour water into a bucket from a faucet, the faster the water flows, the sooner the bucket is filled with water. On the other hand, the slower the water flows, the more slowly the bucket is filled. A DVD-RAM/R/RW is, so to speak, like a bucket, and the degree you turn the faucet is bit rate, the time required to fill the bucket with water is the recording time available for a disc. The higher you set the bit rate (making much more water flow), the sooner a disc

is filled. Consequently, the recording time becomes shorter. The lower you set the bit rate, the longer time it takes to fill a disc.

About picture quality (SP, LP, Manual mode)

The higher you set the bite rate, the more the volume of information for the picture. The lower the bit rate, the less the volume of picture information.

However a high bit rate does not always mean that the picture quality is high. The difference between the 1.4 Mbps and 9.2 Mbps is obvious, but when comparing similar bit rates, the difference may be insignificant. Generally when you set the bit rate low for a longer recording, the data volume shortage will result in a lack of detail information. As a result, the picture quality is decreased (more noticeable with dynamically moving images). For example, square noises (block noise) may occur in a scene with fast action or a scene with light and shadows, such as a water surface.

This recorder has a two settings, 2 hour recording at "SP" mode or 4 hour recording at "LP" mode (both assume a blank 4.7 GB DVD-RAM). It is recommended to consider the "SP" mode as a standard mode and use the "LP" mode when you want to record for long time regardless of the picture quality. When you want to record a music program or animation with high picture quality, it is recommended that you select the "Manual" mode. If you select more than 6 Mbps, you can usually record with considerably higher picture quality. However the higher you set the bit rate, the shorter the recording time.

● □□ D /M1, □□ D /M2

Sound recording format onto DVD-RAM discs. When recording, sounds are converted into digital signals and compressed. In playback, they are extracted to the original sound. The standard differenciates DD D / M1 and DD D / M2 in data volume to use. DD D / M1 and DD D / M2 are applied the digital recording technology for consumer products of Dolby Laboratories. Dolby Digital 192 kbps is set for DD D / M1 and Dolby Digital 384 kbps for DD D / M2.

L-PCM (Linear PCM)

Sound recording format, like Dolby Digital. However, sounds are converted into digital signals and recorded as they are without compression. This process requires more data than Dolby Digital.

Playback

Play your favorite contents.

- Information on playback
- Playing recorded contents (CONTENT MENU)
- Playing a DVD video disc
- Pausing a TV broadcast to resume later (Pause TV)
- Playing a TV program currently being recorded (Chase Play)
- Playing at various speeds
- Locating by entering the number
- Watching a TV broadcast in the sub window (P in P Playback)
- Selecting the camera angle
- Selecting Subtitles
- Zooming a picture
- Selecting the Sound
- Viewing JPEG files
- Playing MP3/WMA Files
- Checking the current status and settings
- Functions in Quick Menu

Information on playback

The operation procedure depends on the kind of disc. See the respective pages for basic procedures to play the disc.

To play contents recorded onto the HDD or DVD-RAM discs

Playing recorded contents (CONTENT MENU) (page 57)

To play a DVD video disc

Playing a DVD video disc (p page 62)

To play a DVD-R/RW disc

DVD-R/RW discs recorded on this recorder

Playing recorded contents (CONTENT MENU) (page 57)

DVD-R/RW discs recorded on other devices

Playing recorded contents (CONTENT MENU) (page 57)

Playing a DVD video disc (page 62)

■ To switch the drive to play

Press STOP button to stop playback. Then press HDD or DVD button to select the drive.

■ To switch the picture to view TV broadcasts

Press STOP button to stop playback.

■ To start recording

Press STOP button to stop playback.

Then press HDD or DVD button to select a recording media, and press REC button to start recording.

■ Screen Protection

If you pause playback or display a menu and leave it still for about 15 minutes, the recorder switches the output picture source to a TV broadcast or connected equipment.

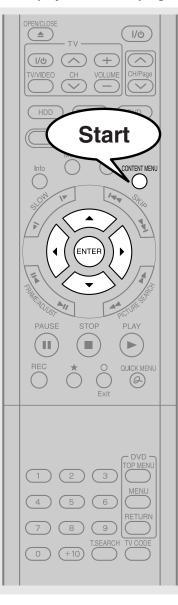
A still picture may be displayed after all titles are played. In this case, the screen protection activates after about 10 seconds.

- Do not move the recorder during playback. It may damage a disc.
- Occasionally the picture may stop at the last scene, or the main menu may appear after playing.
 If you display a still picture such as the main menu on the TV screen for a prolonged period, the TV may be damaged (image burn). To prevent this, press STOP button to stop playback.
- A still picture for about 15 minutes while TIMESLIP indicator illuminates, will return to normal playback. If the playback is completed, a still picture of the title end will continue unless you press TIMESLIP button.

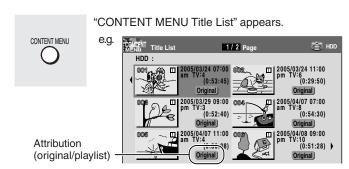
Playing recorded contents (CONTENT MENU)

Titles and chapters recorded on the HDD or a DVD-RAM/R/RW disc are displayed in thumbnail view, so that you can easily locate a desired one.

You can play recorded TV programs also from TV Guide On Screen. See 🖒 page 25.



Press CONTENT MENU.



You can switch between HDD and DVD drives by presing HDD or DVD button.

Press ▲ / ▼ / ◀ / ▶ to select a title (chapter).



You can view succeeding or prior pages by pressing PICTURE SEARCH (◄◄ / ▶►) button.

To select a chapter, select a title and press ★ button. The Chapter List appears.

By pressing ★ button again, you can return to Title List.

Press ENTER.



Playback starts from a selected title (chapter).

- On CONTENT MENU, titles (Original) precede titles (Playlist) in order from the oldest one respectively.
- To turn off CONTENT MENU, press CONTENT MENU button. Absence of operations for longer than about 15 minutes also turns off CONTENT MENU.
- The mark **II** is displayed in every thumbnail when "HDD/RAM title play" (♠ page 160) is set to "Title resume". When set to "Serial playback", it is displayed in a thumbnail last operated.
- You can change a thumbnail picture. See page 100.
- You cannot display CONTENT MENU for DVD-R/RW discs recorded on other devices.
- For playing a recorded title while recording another, see page 43.
- A black thumbnail with "Recording" means that the title is being recorded or its recording will start within 15 seconds. This thumbnail cannot start playback.

Playing recorded contents (CONTENT MENU) (Continued)

■ To stop playback

Press STOP.

STOP



■ To pause playback (still playback) Press PAUSE.



To resume normal playback, press PLAY button or PAUSE button.

Note

· Sound is muted in still mode.

■ Resuming playback from the location last stopped (Title resume)

The recorder memorizes the location you last stopped playback to resume from there.

To use this function, set "HDD/RAM title play" (page 160) to "Title resume." The recorder will memorize the location you last stopped at in each title, so you can resume playback from there. For example, if there are 6 titles, you can start each of them as if you had stored 6 video tapes in the recorder.

- To return to the beginning of the title
 During playback, press QUICK MENU button, then
 press ▲ / ▼ buttons to select "Restart title," then
 press ENTER button.
- To play another title
 Press CONTENT MENU button to display
 "CONTENT MENU Title List," then select a title.

You can make the recorder memorize only the very last point, regardless of the number of titles. Set "HDD/RAM title play" (page 160) to "Serial playback."

- To return to the beginning of the title
 Press SKIP (I◄◄) button repeatedly until the
 beginning of the title appears.
- To play the other title
 Press SKIP (I◄◄ / ▶►I) button repeatedly.

Notes

- Depending on conditions or contents, playback may not start from the location last stopped at, but instead another location. For example, from the beginning of the disc or title
- Depending on a disc, there may be a slight difference between the location the recorder memorizes and the actual location where playback starts.
- This function is not available on DVD-R/RW discs.
- The resuming function will not work if the write-protect tab is set to "PROTECT" (page 8).

■ Playing the digest (Skip Search)

This feature repeats playback of about 5 seconds and skip of 1 minute from the beginning to the end of a recorded title, so that you can view the digest of it.

- Perform steps 1 and 2 on page 57, and select a title that you want to view the digest.
- Press QUICK MENU.Quick Menu is displayed.
- Press ▲ / ▼ to select "Special playback mode", then press ENTER.
- Press ▲ / ▼ to select "Skip search", then press ENTER.

The Skip Search starts.

- This feature can be used for only one title (original) recorded on the HDD or a DVD-RAM disc.
- While using this feature, you cannot use speed-related functions such as fast forward or fast reverse.
- If you press ENTER button while using this feature, the normal playback starts.
- To cancel this feature, press STOP button twice.

■ Viewing the first scene of a title (Original) (Intro scan)

- After step 1 on page 57, press QUICK MENU.
 Quick Menu appears.
- Press ▲ / ▼ to select "Special playback mode", then press ENTER.
- Press ▲ / ▼ to select "Intro scan", then press ENTER.

The recorder plays the first 5 seconds of each title beginning from title 1.

You can go forward or back by pressing SKIP buttons.

▶► : to go to the next title.

: to go back to the current title.
Press twice to go back to the previous title.

4) When you find a desired title, press ENTER. The selected title is played.

Notes

- To stop Intro Scan, press STOP button twice.
- This feature can be used for only titles (Original) recorded on the HDD or a DVD-RAM disc.
- Playing all titles (original/playlist) in a disc
 Set "HDD/RAM title play" (□ page 160) to "Serial
 playback". You can play all titles in the HDD and DVDRAM disc in the order of the thumbnails on CONTENT
 MENU, as if they were recorded in one video tape.

■ Playing all titles (original) in a disc (Play All ORG Titles)

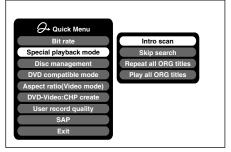
You can play all Original titles in the HDD or a DVD-RAM disc in the order of the thumbnails on CONTENT MENU, as if they were recorded in one video tape.

1) Press QUICK MENU.

Quick Menu appears.

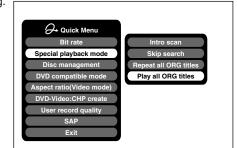
 Press ▲ / ▼ to select "Special playback mode", then press ENTER.

e.g.



 Press ▲ / ▼ to select "Play all ORG titles", then press ENTER.

e.g.



Playback starts from the beginning of title 1.

- To stop "Play all ORG titles", press STOP button twice. (However, do this when you are playing a title recorded in the HDD or a DVD-RAM disc while recording (page 43) will stop the recording.)
 - Alternatively, press QUICK MENU button to display the quick menu, and press ▲ / ▼ buttons to select "Cancel play all ORG titles" and press ENTER button.
- When the last title is complete, All ORG Title Play stops.
- If you select "Repeat all ORG titles" at step 3), "Play all ORG titles" repeats.
- This function is available only for titles recorded on HDD or DVD-RAM discs.

Playing recorded contents (CONTENT MENU) (Continued)

Checking the background information on a selected title

1) At step 2 on page 57, select a title (chapter) then press QUICK MENU.

Quick Menu appears.

2) Press ▲ / ▼ to select "Title information", then press ENTER.

Detail information of a selected title (chapter) appears. You can switch the chapters on the title by pressing PICTURE SEARCH (\blacktriangleleft / \blacktriangleright) buttons.

Notes

 From Quick Menu on "CONTENT MENU Title Information", you can change the details such as names, genres or dates which will help sorting and searching on Library system (pp page 140).

Also you can protect the title from unexpected erasure (pp page 52).

- To return to the previous menu, press O button.
- To cancel the procedure, press CONTENT MENU button.

Changing the order of titles

You can change the order or sort the titles by genres.

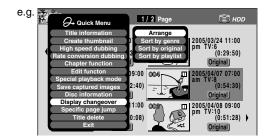
1) Press CONTENT MENU.

CONTENT MENU appears.

2) Press QUICK MENU.

Quick Menu appears.

 Press ▲ / ▼ to select "Display changeover", then press ENTER.



- 4) Press ▲ / ▼ to select the item, then press ENTER.
 - Arrange

Titles are rearranged along with the selected order.

Press ▲ / ▼ buttons to select the order, then press ENTER button.

Sort by genre

Titles of the selected genre are sorted.

Press ▲ / ▼ buttons to select the genre, then press ENTER button.

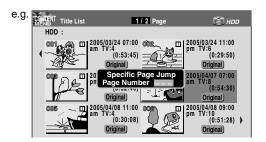
- Sort by original Titles (Original) are sorted.
- Sort by playlist Titles (Playlist) are sorted.

Note

 To cancel, select "Display changeover" then "Cancel Arrange/Narrowing" from Quick Menu.

■ Jumping to a specified page

- Press CONTENT MENU.
 CONTENT MENU appears.
- Press QUICK MENU. Quick Menu appears.
- Press ▲ / ▼ to select "Specific page jump", then press ENTER.
- 4) Enter the page number you want by pressing ADJUST, ▲ / ▼ or the number buttons.



To clear the number, press CLEAR button.

5) Press ENTER.

The specified page appears.

- Some disc's conditions or discs which contain copy once contents may not permit proper playback.
- "Title resume" (page 160) is not available.

DVD-RW DVD-R DVD-VIDEO VCD

vcn cn

Playing a DVD video disc

You can also play VIDEO CDs, audio CDs or finalization processed DVD-R discs in the same manner. To play recorded contents, follow the instructions on

page 57.

■ Preparation

- Turn on a TV or audio system and select the corresponding input source that the recorder is connected to.
- Load a disc you want to play. (page 20)



Press DVD.



The DVD indicator on the front panel will illuminate. This indicates that the recorder is ready to play a disc in the disc tray (DVD mode).

Press PLAY.



Playback starts.

- Depending on a disc, playback starts automatically by loading the disc.
- The recorder may take a short time to start playback.
 This occurs because the recorder is reading the data of a disc.

■ To stop playback Press STOP.



■ To pause playback (still playback)

Press PAUSE.



To resume normal playback, press PLAY button or PAUSE button.

Note

· Sound is muted in still mode.

Note

DVD video discs provide high resolution pictures and a lot of information. Because of this, you may notice some fine picture
noises on TV screen, which you have never seen with regular broadcast TV program. While the amount of noise depends on
the TV you use with the recorder, you should generally reduce the sharpness adjustment on your TV when viewing DVD
video discs.

Resuming playback from the location last stopped at (Resume Play)

DVD-RW DVD-R DVD-VIDEO VCD CD

You can resume playback from the location where you stopped at.

If you press PLAY button after stopping playback, the playback resumes from the location you have stopped.

If you stop playback by pressing STOP button twice, the resume playback feature will be cancelled.

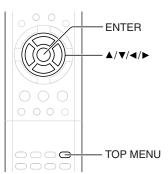
Notes

- · Resume feature cannot function when:
- you select a disc menu language (
 page 154) or change the parental lock setting (
 page 155).
- -you play a PBC-featured VIDEO CD.
- -you open the disc tray.
- There may be a difference in the location where playback resumes depending on the disc.
- While the recorder retains a location in memory, initial setting changes may function only after the memory is cleared.

Locating a title using the top menu

DVD-RW DVD-R DVD-VIDEO

Some DVD video discs may include a top menu, on which you can view the structure of contents or select a scene. Most of the top menus automatically appear in certain scenes, and also are displayed on demand. Actual operation of the top menu depends on a disc. This section explains a general example of how to operate a top menu. Also refer to the instructions of the disc itself.



- 1) Press TOP MENU.
- 2) Press ▲/▼/ ◀/▶ to select the title you want.

 If the titles in the top menu are assigned a number, you can directly locate a specific title by pressing its designated number with the number buttons.
- 3) Press ENTER.

- The instructions above describe basic procedures which may vary depending on the contents of a DVD video disc. If different instructions appear on the TV screen, follow those instructions.
- If you display the top menu during playback and press TOP MENU button again without selecting any title, the recorder may resume playback from the point where you first pressed TOP MENU button. (depending on the actual DVD video disc.)
- This method of locating a title is available only on a disc that contains a top menu.
- Instruction notes of discs may refer to the button that displays the top menu as TITLE button.

HDD

Pausing a TV broadcast to resume later (Pause TV)

This function enables you to pause a TV broadcast and resume viewing at a later, more convenient time, by storing the TV broadcast temporarily on the HDD.



While viewing a TV broadcast via this recorder or immediately before it starts, press TIMESLIP.



When pause TV mode is ready, playback starts automatically.

The recorder begins to store the broadcast on the HDD the moment you press TIMESLIP button.

Locate a scene you want by the following methods.

Fast-forward/fast-reverse:

Press PICTURE SEARCH button.

Forward/reverse Slow-motion:

Press SLOW button.

Forward/reverse frame by frame play:

First press PAUSE button then press FRAME button.

- To resume normal playback, press PLAY button.
- You can play in fast-forward to within 10 seconds prior to the current broadcast.

Press TIMESLIP to exit this mode.



The recorder stops storing the broadcast on the HDD. A message appears and asks you whether you will save the stored data or erase it.

Press **◄/**▶ buttons to select, then press ENTER button.

- This function is not available during recording.
- Pause TV recording stops when the HDD is filled up. It will not begin if the HDD has no remaining space.
- While using this pause TV recording, you cannot program a recording.
- Playback may jump a few seconds back or pause depending on the disc or data condition.

DVD-RAM

laying a TV program currently being recorded (Chase Play)

You can begin playback from the beginning of a program currently being recorded. You will find this function of great advantage on long programs, as you do not have to wait for the end of recording to begin playback.



While recording a TV program on the HDD or a **DVD-RAM disc, press TIMESLIP.**



The recorder displays a TV program as it is being recorded.

Go back to the beginning of the TV program using SKIP.



When you go back to the beginning, playback starts automatically.

You can confirm how far you are from the current broadcast by pressing TIME BAR button.

Locate a scene you want through the following operations if necessary.

Fast-forward/fast-reverse:

Press PICTURE SEARCH button.

Forward/reverse Slow-motion:

Press SLOW buttons.

Forward/reverse frame by frame play:

First press PAUSE button then press FRAME button.

- To resume normal playback, press PLAY button.
- You can play in fast-forward to within 10 seconds prior to the current broadcast.

Press TIMESLIP to exit.



The current broadcast returns.

- Time slip recording/playback stops when the capacity of a disc is filled up. You can play a location where the recorder stopped the recording. The time slip recording/playback cannot begin if the disc has no remaining space.
- The playback picture may appear after a delay of several seconds.
- The playback location will never follow up to the recorded location in the program. It will always trail the recorded location by a few seconds.
- While using time slip recording/playback, you cannot program recording.
- While TIMESLIP indicator is on, you cannot change the setting of the feature, which turns off the recorder after a programmed operation has finished.
- · Even while "Auto power off" is selected, the recorder does not turn off if the recording end time comes during playback of a program being recorded.
- This function is not available on a DVD-RAM disc when "Relay recording" is set to "On."
- Playback may jump a few seconds back or pause depending on the disc or data condition.

DVD-RAM DVD-RW DVD-R DVD-VIDEO VCD

laying at various speeds

Playing in fast reverse or fast forward hdd dvd-ram dvd-ram dvd-r dvd-r dvd-r dvd-r dvd-r dvd-r dvd-r



During normal playback, press PICTURE SEARCH.



- ▶► : Fast forward playback
- ◄ : Fast reverse playback

Each time you press the button, the playback speed changes.

During fast forward playback at "▶▶" speed, sound is reproduced. (Not available on VIDEO CD.)

 This function is not available when you play a title recorded on a DVD-RAM disc while recording another.

Notes

- The playback speed may vary depending on a disc.
- · Depending on a disc or data condition, picture and sound in fast forward playback at "▶▶" speed may be distorted.

■ To resume normal playback Press PLAY.

■ To skip the contents in pre-determined increments

HDD DVD-RAM DVD-R DVD-VIDEO VCD CD

During playback, press INSTANT SKIP.

Each time you press the button, you can skip by a specified time.

You can select the interval per press of the button. See "Instant skip interval" (page 160).

■ To skip by 1/20 of whole

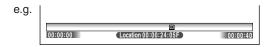
HDD DVD-RAM DVD-R DVD-VIDEO VCD CD

During playback, press **◄/▶**.

Each time you press the button, you can skip by 1/20 of the current title or track if it is longer than 1 minute.

■ Time bar display

Fast-forward or fast-reverse playback automatically displays a time bar.



For details, see page 83.

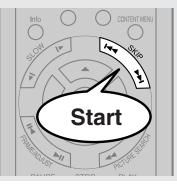
■ To skip back in pre-determined increments During playback, press INSTANT REPLAY.

Each time you press the button, you can go back by the specified time to resume playback.

You can select the interval per press of the button. See "Instant replay interval" (🖒 page 160).

- This operation may not work for some discs.
- · Depending on the structure of a disc, some operations may be limited.
- · Depending on playback conditions, some operations may not work.

Skipping to the next/previous chapter or track | HDD | DVD-RAM | DVD-RW | DVD-R | DVD-VIDEO | VCD | CD |



Press SKIP (I◄◄/►►I) repeatedly until the chapter or track number you want appears.

Playback starts from the selected chapter or track.



▶►I: Playback starts from the beginning of the next chapter or track.

I◄◄: Playback starts from the beginning of the current chapter or track.

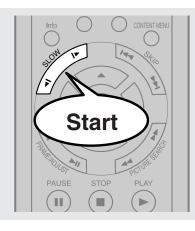
When you press twice, playback starts from the beginning of the previous chapter or track.

Notes

- Some titles may not display chapter numbers.
- When playing a HDD or a DVD-RAM disc, you can access chapters only in the current title if "HDD/RAM title play" (page 160) is set to "Title resume". To access chapters in other titles, set to "Serial playback".
- When playing a DVD video disc or a DVD-R/RW disc, you can locate chapters only in the current title if "DVD title stop" (🖈 page 156) is set "On". To access chapters in other titles, set "Off". However, in this instance even though you press SKIP button (I◄◄) to go back to the previous title, playback will not start from the last chapter of the title but from the first chapter.

Playing in slow-motion

HDD DVD-RAM DVD-RW DVD-R DVD-VIDEO



Press SLOW during playback.



I► : Forward slow-motion ◀ : Reverse slow-motion

Each time you press SLOW button, the slow-motion speed changes.

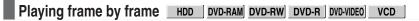
Notes

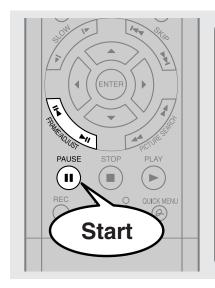
- Slow-motion does not provide smooth playback.
- When playing a VIDEO CD, reverse slow-motion playback is not available.
- The speed level displayed is approximate.

■ To resume normal playback

Press PLAY.

Playing at various speeds (Continued)





During playback, press PAUSE.

PAUSE

A still picture is displayed.

Press FRAME (II◄/►II).



►II : Playback direction
II : Opposite direction

■ To resume normal playback Press PLAY or PAUSE.

Notes

- Sound is muted during frame by frame playback.
- Frame by frame playback cannot provide smooth playback.
- Picture may advance more than 1 frame at a time.
- Depending on scenes, some frames may not be played.
- When playing a VIDEO CD, reverse frame by frame playback is not available.

Viewing still pictures (Playing a disc that contains still pictures) DVD-RAM DVD-VIDEO



Press PLAY.



The first still picture on a disc is displayed.

Some DVD video discs may allow you to change the pictures using PLAY, ENTER or SKIP button.

Press FRAME (II◄/►II).



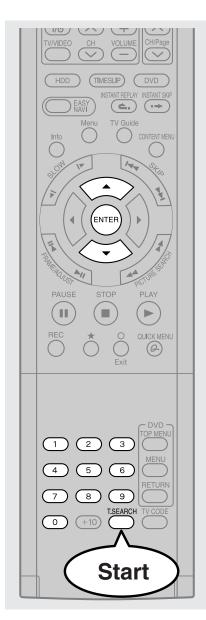
►II : Displays the next still picture.

■ : Displays the previous still picture.

Locating by entering the number

Locating by entering the number of a desired section

Normally titles, chapters, and tracks are numbered. By entering these numbers, you can access a desired section.



Press T.SEARCH.

T.SEARCH

If you are using a VIDEO CD/audio CD, skip step 2. e.g.

Press ▲ / ▼ to select a section (title or chapter) you want to locate.



e.g. When you want to locate a chapter.



Press the number buttons to enter a number of the section.



e.g. To enter 25, press "2", then press "5".



Press ENTER.

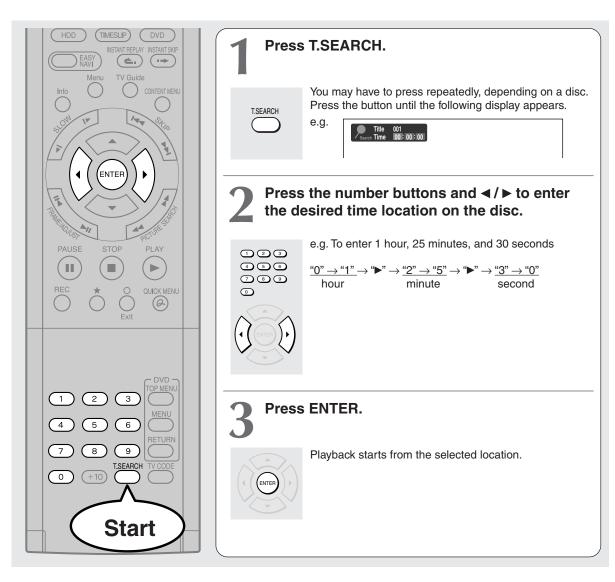


Playback starts from the selected location.

- · Pressing CLEAR button resets the numbers. To clear the display, press T.SEARCH button several times (depending on a
- This method of locating a title is available only on a disc that contains title numbers.
- If a title is erased, the numbers of the following titles decrease respectively.
- · When you record a new title (Original) on the HDD or a DVD-RAM disc, it is added prior to current titles (Playlist), and each following title (Playlist) reference number will advance by a factor of 1.

Locating by entering the number (Continued)

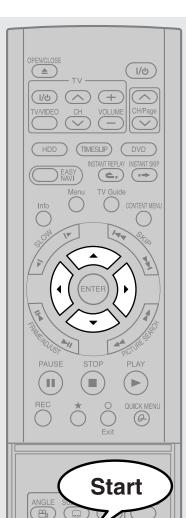
Locating a specific point by entering its elapsed time (Time Search)



- Some discs may not respond to this process.
- Some scenes may not be accessed precisely as you specified.
- This method for accessing specific locations is available only within the current title of the HDD or a DVD-RAM/R/RW/DVD video disc or within a current track of a VIDEO CD/audio CD.
- Pressing CLEAR button resets the numbers.

Watching a TV broadcast in the sub window (P in P Playback)

During playback, you can watch a TV broadcast in the sub window. (P in P: Picture in Picture)

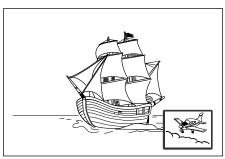


During playback, press P in P.



A sub window (program on the air or on the recording) appears.

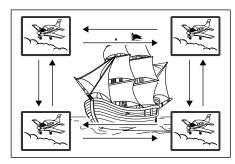
e.g.



Press ▲ / ▼ / ◀ / ▶ to select the position of the sub window.



You can shift the sub window in following 4 directions.



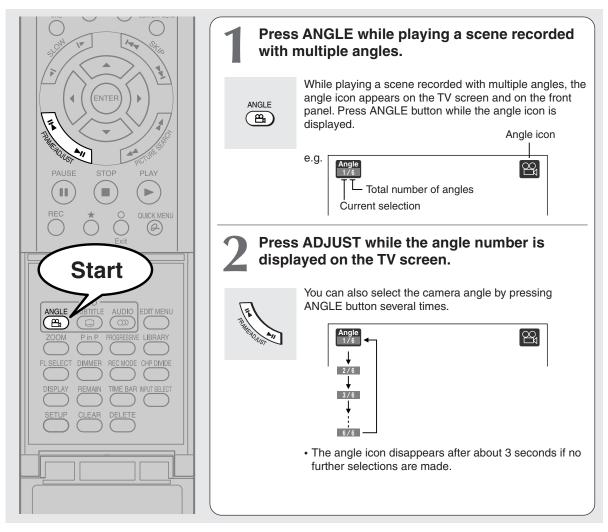
 $\uparrow / \downarrow / \leftarrow / \rightarrow$ is the moving range. To turn off the sub window, press P in P button.

- You can change the channel of the sub window by pressing CH ✓ / button.
- The P in P function is available only during playback.
- You cannot swap the playback picture with the picture within the sub window, or change the audio settings.
- Press P in P button during "Chase Play" or "Pause TV", the actual broadcast appears on the sub window in real time.
- If this function is stopped after shifting the sub window, before you press P in P button again, the sub window will appear in the last position you set.

DVD-VIDEO

Selecting the camera angle

If the scene was recorded with multiple angles, you can easily change the camera angle of the scene you are watching.



Notes

- You can also change the camera angle during still playback. The camera angle changes to the new setting when you resume normal playback.
- If you pause a picture immediately after changing a camera angle, the resumed playback picture may not display the new camera angle.
- Depending on a disc, the camera angle may not change even though the angle number changes.

■ To turn off the angle icon

Set "On screen display" in the setup menu to "Off" (page 159). Most of the on-screen display including the angle icon will not appear. While the angle icon is flashing on the front panel display, you can change the camera angle.

Selecting Subtitles

You can display subtitles on the TV screen and select a subtitle language from those included on the disc.





SUBTITLE

The current subtitle setting appears.

e.g. Subtite 1 -- Setting number and language

The language code appears instead of the language name. Refer to the list of languages and their abbreviations. (page 173)

Press ▼ to select "Status," then press ADJUST to select "On."



Skip to step 3 if "On" is already displayed.

Press ▲ to select "Subtitle," then press ADJUST to select a language.



The subtitles of recorded languages appear.



The display turns off after about 3 seconds if you do not make a selection.

Notes

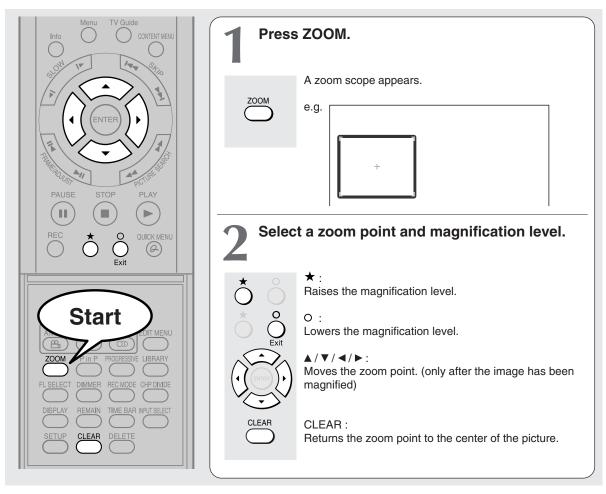
- Some DVD video discs are set to display subtitles automatically.
- Depending on the scene, subtitles may not appear immediately after you set the subtitle function to on.
- Some DVD video discs will allow you to change subtitle languages and turn subtitles on or off only via the disc menu.

■ To turn the subtitles on or off
At step 2, select "Off" by pressing ADJUST button.

HDD DVD-RAM DVD-RW DVD-R DVD-VIDEO VCD

Zooming a picture

You can magnify areas within a picture.



Notes

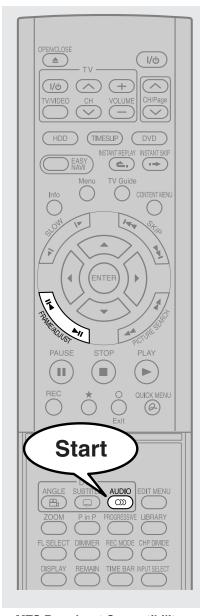
- Some discs may not respond to zoom feature.
- During some scenes, the buttons may not work as described.
- The zoom feature is canceled when the disc menu is operated.
- The magnification level varies depending on the picture size you select (
 page 42, in "INSTALLATION GUIDE").
- The zoom feature is not available while displaying on the screen menu.
- The zoom feature is canceled when you stop playback or start playback.

■ To cancel the zoom

Press ZOOM.

Selecting the sound

You can select a preferred language and a sound format.



Press AUDIO during playback or while receiving a broadcast.

The current audio setting appears.

AUDIO

The language code appears instead of the language name. Refer to the list of languages and their abbreviations. (page 173)

Press ADJUST while the audio setting is displayed on the TV screen.



Variation of channels depends on the disc or the type of TV broadcast.

• HDD DVD-RAM, TV channel signals

Stereo sound

- → "Stereo" (left channel and right channel)
- → "Stereo L" (left channel)
- → "Stereo R" (right channel)
- (→ Back to "Stereo")

SAP sound

"Main" \rightarrow "SAP" \rightarrow "Main + SAP" (\rightarrow Back to "Main")

DVD-R DVD-VIDEO

Language name / sound recording system / No. of channels

Sound 1 English 2ch Output PCM

VCD

"Stereo" → "Stereo L" → "Stereo R" (→ Back to "Stereo")

The display turns off if you do not operate for more than 3 seconds.

If you press ▲ / ▼ buttons to select "Output," you can select the audio output setting (♠ page 158) by using ADJUST buttons.

■ MTS Broadcast Compatibility

This recorder can receive or record MTS (Multichannel TV sound) broadcast. By connecting the recorder to your stereo system or stereo TV, you will try the SAP or stereo sound.

SAP (Second Audio Program broadcast)

A separate audio program, usually broadcast in a second language with the main language.

Sounds in playback

You can play SAP and/or stereo broadcasts with this recorder. Refer to steps 1 and 2 to select a desired audio.

Desired sound	Sound output
SAP sound	SAP
Stereo sound	Stereo Sound

Selecting the sound (Continued)

Recorded sounds

According to your setting of "SAP" on the setup menu screen, (page 158), the sound is recorded onto different channels of the disc below. Set "SAP" to "On" or "Off" appropriately.

Setting on the setup screen		Type of receiving broadcast	eiving broadcast Contents of		Type of record
DVD Compatible Mode	SAP		Lch	Rch	
Off	Off	Stereo + SAP	L	R	Stereo
		Mono + SAP	Mono	Mono	Stereo
		Stereo	L	R	Stereo
		Mono	Mono	Mono	Stereo
	On	Stereo + SAP	L+R	SAP	Dual Mono*
		Mono + SAP	Mono	SAP	Dual Mono*
		Stereo	L	R	Stereo
		Mono	Mono	Mono	Stereo
Main	Off	Stereo + SAP	L	R	Stereo
		Mono + SAP	Mono	Mono	Stereo
		Stereo	L	R	Stereo
		Mono	Mono	Mono	Stereo
	On	Stereo + SAP	L+R	L+R	Stereo
		Mono + SAP	Mono	Mono	Stereo
		Stereo	L	R	Stereo
		Mono	Mono	Mono	Stereo
SAP	Off	Stereo + SAP	L	R	Stereo
		Mono + SAP	Mono	Mono	Stereo
		Stereo	L	R	Stereo
		Mono	Mono	Mono	Stereo
	On	Stereo + SAP	SAP	SAP	Stereo
		Mono + SAP	SAP	SAP	Stereo
		Stereo	L	R	Stereo
		Mono	Mono	Mono	Stereo

^{*} This will be "Stereo" when a recording is made with "L-PCM" selected.

Notes

- Some discs allow you to change audio selections only via the disc menu. If this is the case, press MENU button and choose the appropriate language from the selections on the disc menu.
- When you turn on the recorder or replace a disc, the recorder returns to the initial default setting. (pp page 154)
 Depending on a disc, a specific type of audio the disc has is output.
- Immediately after you have switched sounds, there may be a temporary discrepancy between the display and actual sound.
- The BITSTREAM/PCM jack may not output SAP sound you select. In this instance, set "Audio out select" to "PCM".
 (□ page 158)
- You cannot change SAP sound if recorded with "DVD compatible mode" (pp page 162) set to "Main". Even when "DVD compatible mode" (pp page 162) is set to "Off," the recorder regards it as "Main" when recording to a DVD-R/RW disc.

■ Output sound conversion table

			Audio setting (page 158) and output in the default setting display						
Disc	501	und format	Bitstream		Analog 2ch		PCM		
Disc	30unu loimat		BITSTREAM/ PCM jack	Analog (L/R) jacks	BITSTREAM/ PCM jack	Analog (L/R) jacks	BITSTREAM/ PCM jack	Analog (L/R) jacks	
	Dolby Digital		Bitstream	48 kHz/20 bit	Bitstream	48 kHz/20 bit	48 kHz/16 bit	48 kHz/20 bit	
	- 1 ⊢	48 kHz/16 bit	48 kHz/16 bit	48 kHz/16 bit	48 kHz/16 bit	48 kHz/16 bit	48 kHz/16 bit	48 kHz/16 bit	
		48 kHz/20 bit	48 kHz/16 bit	48 kHz/20 bit	48 kHz/16 bit	48 kHz/20 bit	48 kHz/16 bit	48 kHz/20 bit	
	Linear	48 kHz/24 bit	48 kHz/16 bit	48 kHz/24 bit	48 kHz/16 bit	48 kHz/24 bit	48 kHz/16 bit	48 kHz/24 bit	
DVD- video	PUN	96 kHz/16 bit	48 kHz/16 bit	48 kHz/16 bit	_	96 kHz/16 bit	48 kHz/16 bit	48 kHz/16 bit	
disc*		96 kHz/20 bit	48 kHz/16 bit	48 kHz/20 bit	_	96 kHz/20 bit	48 kHz/16 bit	48 kHz/20 bit	
		96 kHz/24 bit	48 kHz/16 bit	48 kHz/24 bit	_	96 kHz/24 bit	48 kHz/16 bit	48 kHz/24 bit	
		DTS	Bitstream	_	Bitstream	_	_	_	
	ı	MPEG2	Bitstream	48 kHz/16 bit	Bitstream	48 kHz/16 bit	48 kHz/16 bit	48 kHz/16 bit	
VIDEO CD	ı	MPEG1	44.1 kHz/16 bit	44.1 kHz/16 bit	44.1 kHz/16 bit	44.1 kHz/16 bit	44.1 kHz/16 bit	44.1 kHz/16 bit	
Audio	Linear PC	CM 44.1 kHz/16 bit	44.1 kHz/16 bit	44.1 kHz/16 bit	44.1 kHz/16 bit	44.1 kHz/16 bit	44.1 kHz/16 bit	44.1 kHz/16 bit	
CD		DTS	Bitstream	(Noise)	Bitstream	(Noise)	Bitstream	(Noise)	
HDD	Do	lby Digital	Bitstream	48 kHz/20 bit	Bitstream	48 kHz/20 bit	48 kHz/16 bit	48 kHz/20 bit	
1.55	Linear PCM 48 kHz/16 bit		48 kHz/16 bit	48 kHz/16 bit	48 kHz/16 bit	48 kHz/16 bit	48 kHz/16 bit	48 kHz/16 bit	
DVD-RAM/	Do	lby Digital	Bitstream	48 kHz/20 bit	Bitstream	48 kHz/20 bit	48 kHz/16 bit	48 kHz/20 bit	
R/RW	Linear PCM 48 kHz/16 bit		48 kHz/16 bit	48 kHz/16 bit	48 kHz/16 bit	48 kHz/16 bit	48 kHz/16 bit	48 kHz/16 bit	
.,,,,,,,	ı	MPEG2	Bitstream	48 kHz/16 bit	Bitstream	48 kHz/16 bit	48 kHz/16 bit	48 kHz/16 bit	
CD-R/RW	М	P3/WMA			44.1 kHz or 32 kH	z or 48 kHz / 16 bit			

- * "DVD video disc" above does not include DVD-R/RW discs recorded on this recorder.
- Do not select a connection or setting indicated as "Noise" in the above list.

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Viewing JPEG files

You can play JPEG files that have been recorded on a CD-R or CD-ROM on the recorder.

■ Preparations

- Prepare a compatible disc (page 79) that contains JPEG files you want to view.
- Set "Priority contents" (page 160) to "Photo".
- Make your TV shape conform to the 4:3 picture size. Only 4:3 pictures can be played regardless of the function settings via the on-screen displays of the recorder (pp page 42, "INSTALLATION GUIDE"). If the TV is adjusted to other sizes, e.g. "WIDE," images will appear to be horizontally expanded. For details, refer to the owner's manual of your TV.







1 Load a CD that contains JPEG files.



Each photo appears for about 3 seconds (slide show).

If a slide show does not start, press PLAY button.

Depending on the disc, "CONTENT MENU Picture List" appears. See "On "CONTENT MENU Picture List"" (

page 79) to operate.

Notes

- Some files may not display their own entire images depending on the size.
- JPEG picture playback is not available during recording on the HDD.
- Operation to JPEG file will be disabled at about 2 minutes before a programmed recording starts.

■ To stop playback (slide show)

Press STOP.

If you press PLAY button after pressing STOP button, playback will start from the photo you stopped at.

■ To pause playback (slide show)

Press PAUSE.

To resume, press PAUSE button again or press PLAY button.

■ To skip photos

During playback, press SKIP button repeatedly.

►►I : To skip forward.I◄ : To skip backward.

■ To rotate a picture

Press ANGLE repeatedly.

Each time you press the button, the picture rotates by 90° degree.

Note

 The rotated image is displayed after its original posture appears momentarily.

■ To magnify a picture

Follow the procedure on page 74.

- The magnified image is displayed after its original posture appears momentarily.
- For small pictures, the reduction level may be limited.

Viewing a specified photo (single view)

Full screen still view.

2 ways are available:

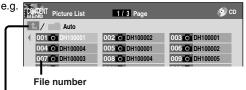
On "CONTENT MENU Picture List"

1) Press CONTENT MENU.

"CONTENT MENU Picture List" appears.

Depending on the disc, the recorder creates either temporary folder, "Auto" or "All".

"Auto": For CD of which compatibility confirmed by TOSHIBA. Only playable files are listed.



If you select this icon and press the ENTER button, upper folders appear.

"All": For CD other than above. All files are listed.



- Some CDs may not comply with the above.
- 2) Press ▲ / ▼ / ◄ / ▶ to select a folder or photo.

Pressing PICTURE SEARCH (◀◀/▶▶) button turns the pages.

If you press ★ button, the list changes to thumbnail view ("CONTENT MENU Pictures").



Pressing ANGLE button rotates the picture. The rotation of pictures is kept until the CD is ejected.

To return to the previous list, press \star button again.

3) Press ENTER.

If you select a folder at step 2), repeat steps 2) and 3) until your favorite file appears.

The selected photo appears in full screen.

Notes

- "CONTENT MENU Picture List" cannot show all the files in a disc, but only ones regarded as objects of regular play of the disc.
- The larger the file size is, the longer the thumbnail takes time to appear.
- Letters of a file/folder name overflowing the given space are not displayed.

Direct input of a photo number

1) Press T.SEARCH.

An input window appears.



- Input a photo number using the number buttons or ADJUST.
- 3) Press ENTER.

The selected photo appears in full screen.

■ To change the playback order

- 1) Press QUICK MENU.
- 2) Press \blacktriangle / \blacktriangledown to select an item, then press ENTER.

To shift the cursor, press ▲ / ▼ buttons.



: To reverse the order.

Repeat : To repeat the current folder.

Press ENTER.

Playback in the selected mode starts.

JPEG files compatibility

Discs whose compatibility with this recorder has been confirmed by TOSHIBA are as follows.

CANON QuickCD FUJICOLOR CD Kodak Picture CD NORITSU QSS CD

JPEG disc compatibility with this recorder is limited as follows:

Playable discs:

CD-ROM, CD-R

CD-RW is not recommendable.

• CD physical format:

Mode 1, Mode 2 XA Form 1

• File system:

ISO9660 Level 1, 2 or Joliet

• File name:

A file name should be in alphabet and numerals only, and must incorporate "JPG" extension.

e.g."******.JPG"

• Total number of folders:

Less than 256

• Total number of files:

Less than 1000

Some files may not display their own entire image depending on the size.

Some discs may not permit this operation. Especially, the following conditions of included files will increase the disc's disability.

- 1. Pixels over 5000 x 5000 in height and/or width
- 2. File format except Exif

Playing MP3/WMA files

You can play MP3/WMA files that have been recorded on a CD-R or CD-ROM on this recorder.

■ Preparations

- Make sure that a disc you want to play is compatible with this recorder. See page 81.
- Set "Priority contents" (page 160) to "Audio".





Notes

- WMA tracks copy-protected cannot be played.
- The DIGITAL AUDIO OUT BITSTREAM/PCM jack outputs MP3/WMA sounds in the linear PCM format regardless of the current "Audio out select" (page 158) selection.
- You cannot change the playback speed of MP3/WMA playback.

■ To stop playback

Press STOP.

If you press PLAY button after pressing STOP button, playback will start from the beginning of the track.

■ To pause playback

Press PAUSE.

To resume, press PAUSE button again or press PLAY button.

■ To skip tracks

During playback, press SKIP repeatedly.

►►I : To skip forward.

I◄ : To skip backward.

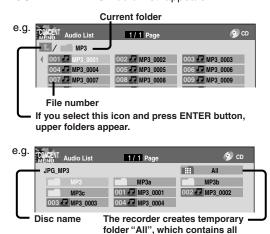
Selecting a track in the disc

2 ways are available:

On "CONTENT MENU Audio List"

1) Press CONTENT MENU button.

"CONTENT MENU Audio List" appears.



playable files.

Press ▲/▼/ ◄/► to select a track or folder.
 Pressing PICTURE SEARCH (◄◄/►►) button turns the pages.

3) Press ENTER.

If you select a folder at step 2), repeat steps 2) and 3) until your favorite file appears.

Notes

- "CONTENT MENU Audio List" cannot show all the tracks in a disc, but only ones regarded as objects of proper play of the disc.
- Letters of a file/folder name overflowing the given space are not displayed.

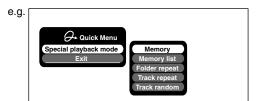
Direct input of a track number

1) Press T.SEARCH.

An input window appears.



- 2) Input a track number using the number buttons or ADJUST button.
- 3) Press ENTER.
- To change the playback order
 - 1) Press QUICK MENU.
 - Press ▲ / ▼ to select "Special playback mode", then press ENTER.



3) Press ▲ / ▼ to select an item, then press ENTER.
 Memory list : To play favorite tracks only in a favorite order.

Input a track number by using the number buttons or ADJUST button.

To shift the cursor, press ▲ / ▼ buttons.

Folder repeat : To repeat the current folder.

Track repeat : To repeat the current file.

Track random : To play files in the current folder in a random order.

Note

 To cancel these modes, stop the playback or select the cancel command from Quick Menu.

Playable files

MP3/WMA disc compatibility with this recorder is limited as follows:

• Playable discs:

CD-ROM, CD-R

CD-RW is not recommendable.

• Sampling Frequency / Bitrate:

WMA: 32 kHz / 48 kbps (CBR), VBR 44.1 kHz / 48-192 kbps (CBR), VBR 48 kHz / 128-192 kbps (CBR), VBR

MP3: 8 kHz, 11.025 kHz, 12kHz, 16 kHz, 22.05 kHz, 24 kHz / 8-160 kbps (CBR), VBR 32 kHz, 44.1 kHz, 48 kHz / 32-320 kbps

(CBR), VBR • CD physical format:

Mode 1, Mode 2 XA Form 1

• File system:

ÍSO9660 Level 1, 2 or Joliet

File name:

A file name should be in alphabet and numerals only, and must incorporate "MP3" or "WMA" extension.

e.g."******.MP3", "******.WMA"

• Total number of folders: Less than 256

• Total number of files:

Less than 1000 /MA codec version:

 WMA codec version: V7, V8, V9

* This recorder supports ID3v2 (ID3 Tag Version 2) of MP3, to display text data such as names of title and artist. Some characters may be displayed properly.

This recorder requires discs/recordings to meet certain technical standards in order to achieve optimal playback quality. Pre-recorded DVDs are automatically set to these standards. There are many different types of recordable disc formats (including CD-R containing MP3/WMA files). Because this area of technology is still evolving, Toshiba cannot guarantee that all recordable discs will produce optimal playback quality. The technical criteria set forth in this owner's manual are meant only as a quide.

Please be advised that you must obtain permission from the applicable copyright owners to download copyrighted content, including music files, in any format, including the MP3 and WMA formats, prior to the downloading thereof. Toshiba has no right to grant and does not grant permission to download any copyrighted content.

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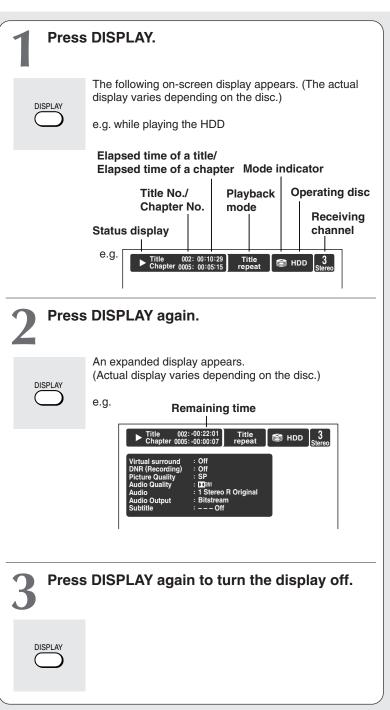
HDD DVD-RAM DVD-RW DVD-R DVD-VIDEO VCD CD

Checking the current status and settings

You can confirm operational status and setting details.

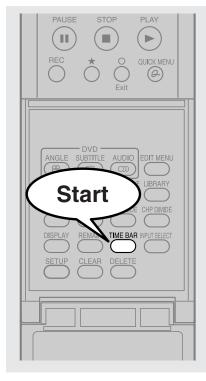
Operational status and setting details

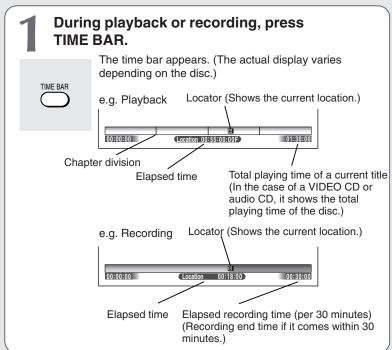




Using the time bar

The time bar shows the current progress in playback or recording.





Note

• Time display is an approximation.

- Changing the location of the time bar
 While the time bar is displayed, press ▲ / ▼.
 The time bar shifts up and down.
- Turning off the time bar Press TIME BAR.

Functions in Quick Menu

Besides these examples, various other ones are introduced on respective pages for your convenience. See 🖒 page 30 on how to operate Quick Menu.

■ To play repeatedly (Repeat playback)

HDD DVD-RAM DVD-RW DVD-R DVD-VIDEO VCD CD You can repeat a desired section.

- 1) During playback, press QUICK MENU.
- 2) Press ▲ / ▼ to select "Special playback mode", then press ENTER.

Special playback mode

The sub menu appears. Select the next item by pressing ▲ / ▼ buttons and ENTER button.

A-B repeat

You can designate a portion in a title or track to repeat continuously.

If you select "A-B repeat" and press ENTER button, the following display appears. Perform steps 1 and 2 below.



To cancel the procedure, press O button.

1) Press ENTER at the beginning of the segment (point A) you want to repeat.

The location of point A is memorized. The display changes to "Set B".

2) Press ENTER at the end of the segment (point B).

The location of point B is memorized, and repeat playback begins between point A and B.

Title repeat

To repeat the same title.

Chapter repeat

To repeat the same chapter.

Track repeat

To repeat the same track.

Disc repeat

To repeat the entire disc.

Repeat all ORG titles

To repeat all original titles in a disc.

Repeat all PL titles

To repeat all playlist titles in a disc.

Cancel repeat (in Repeat playback

mode)

To resume normal playback.

Playback of the HDD or a DVD-RAM disc stops.

Notes

- · Some discs may not permit repeat operation.
- · You cannot use the repeat playback function in conjunction with the random playback function.
- · If you press STOP button during repeat playback, this operation is canceled.
- While you are performing repeat playback on the HDD or a DVD-RAM disc, other operations (pages 66 to 68) except stopping this operation are not available.

■ To play in random order (Random play)

DVD-RW DVD-R DVD-VIDEO VCD CD You can play sections in random order.

- 1) Press QUICK MENU.
- Press ▲ / ▼ to select "Special playback mode", then press ENTER.

Special playback mode

The sub menu appears. Select the next item by pressing ▲ / ▼ buttons and ENTER button.

Title random

Plays all titles in a loaded disc in random order. Each title is played beginning from chapter 1.

Chapter random

Plays all chapters in a current title in random order.

Track random

Plays all tracks on a loaded disc in random order.

Cancel random

(in Random play mode)

Resumes normal playback.

Notes

- Some discs may not permit random playback operation.
- You cannot use the random playback function in conjunction with the memory playback function.
- You cannot use the random playback function in conjunction with the repeat playback function.
- Pressing STOP button during operation cancels random playback.

■ To play in favorite order (Memory playback)

DVD-RW DVD-R DVD-VIDEO VCD CD

You can select 30 titles, chapters, or tracks and play them in favorite order.

(To play contents in the HDD or a DVD-RAM disc in favorite order, make a playlist. For details, see "Editing" on

page 88.)

- 1) Press QUICK MENU.
- Press ▲ / ▼ to select "Special playback mode", then press ENTER.

Special playback mode

The sub menu appears. Select the next item by pressing ▲ / ▼ buttons and ENTER button.

Memory list

If you select this and press ENTER button, the following display appears. Perform the steps below.

e.g.

01 T	СТ		СТ	21 T	CT
02 T	СТ	12 T	СТ	22 T	СТ
03 T	СТ	13 T	СТ	23 T	СТ
04 T	СТ	14 T	СТ	24 T	СТ
05 T	СТ	15 T	СТ	25 T	СТ
06 T	СТ	16 T	СТ	26 T	СТ
07 T	СТ	17 T	СТ	27 T	СТ
08 T	СТ	18 T	СТ	28 T	СТ
09 T	СТ	19 T	СТ	29 T	СТ
10 T	СТ	20 T	СТ	30 T	CT

1) Input numbers of titles, chapters, or tracks by using the number buttons, in favorite order.

Input each 3-digit number.

To input a 1- or 2-digit number, first input 0. (e.g. "0", "0", "3".)

To cancel the numbers, press CLEAR button.

To input a chapter number, press ◀/▶ buttons to shift the cursor.

Press ▲ / ▼ to select the next box, then perform step 1).

To select another chapter in the same title, you do not need to select the title number.

Repeat these steps if necessary.

You can program up to 30 selections into memory.

3) Press ENTER.

Memory playback starts.

Memory (in normal playback mode)

To display an entry box for one program selection.

Memory release (in memory playback mode)

To resume normal playback.

Memory repeat (in memory playback mode)

To repeat a current memory playback.

- Some discs may not permit memory playback operation.
- Inputting numbers of titles, chapters or tracks that a disc does not contain will result in error.
- You cannot program/change selections during memory playback. To change selections, cancel memory playback by pressing STOP button.
- When you disconnect the power cord, the selected memory is erased.
- You can exit the memory playback display by pressing O button.

Functions in Quick Menu (Continued)

■ To display the current bit rate

HDD DVD-RAM DVD-RW DVD-R DVD-VIDEO

- 1) During playback, press QUICK MENU.
- 2) Press ▲ / ▼ to select "Bit rate", then press ENTER.

Bit rate

Note

- To turn off the bit rate display, select this item again.
- To check information on a title

HDD DVD-RAM DVD-RW DVD-R

- 1) During playback, press QUICK MENU.
- 2) Press ▲ / ▼ to select "Title information", then press ENTER.

Title information

■ To exit Quick Menu

HDD DVD-RAM DVD-RW DVD-R DVD-VIDEO VCD CD

Press QUICK MENU again.

or

Press ▲ / ▼ to select "Exit", then press ENTER.

Exit

Editing

You can create your own movie from your assembled scenes. Save your favorite videos in DVD discs.

- Before editing
- Creating chapters
- Playlist editing
- Creating thumbnails
- Before dubbing
- High speed Library dubbing
- Dubbing selected items
- Rate conversion dubbing
- Line-U dubbing
- Deleting selected items
- Combine Original titles
- Creating a DVD-Video using DVD-R/RW
- DVD-Video finalizing process
- DV recording

Before editing

About use of the HDD (internal hard disc)

It is not recommended that you delete many chapters from titles recorded on the HDD to remove unnecessary parts of the titles and copy those contents on a DVD-RAM disc. The reason is that discontinuous space inside the HDD expands and recorded contents are stored in gaps between used locations. Operating this repeatedly makes a recording area inside the HDD broken down into small and complicated spaces. (It is called fragmentation.) Even normal operations may get slow. Moreover, available space may not be restored by deleting or the HDD may have protection disabling playback or recording.

When you want to delete unnecessary parts from titles, collect necessary parts of chapters to make a playlist. Then copy the playlist and delete the original title or the playlist. For example, make a playlist and copy it to a DVD-RAM. Then delete original titles on the HDD. It can save time and effort and retain continuity in the HDD space. However, when moving a copy once program from the HDD to a DVD-RAM disc, delete unnecessary chapters from original titles. For details (page 104). Running "All HDD titles delete" regularly prevents fragmentation from occurring.

In addition, if you select and run "HDD format", all data on the HDD will be erased. Copy TV programs you want to save recorded on the HDD from the HDD to a DVD-RAM or DVD-R/RW disc.

When it comes to library data, back it up to a DVD-RAM disc before initializing the HDD. Then rewrite the data on the HDD.

Process of editing

You can edit recorded contents and create your own library.

Basic editing procedure

Record a TV program
(An original title is created automatically)



(Chapter Editing)

Create chapters by dividing an original title.



(Playlist Editing)

Collect necessary chapters

 A playlist has a fictitious title that is different from an original title.



(Dubbing)

Copy the playlist

• Copy the playlist and it becomes an original title.

Outline of basic editing

Recording a TV program

Record a TV program and it becomes a original title.

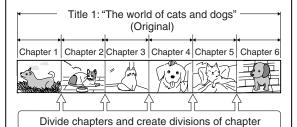


Title: The world of cats and dogs.



Chapter editing

Divide the original title into chapters.



- You can play desired scenes from the top by "Chapter Divide".
- Divide chapters to edit a playlist.

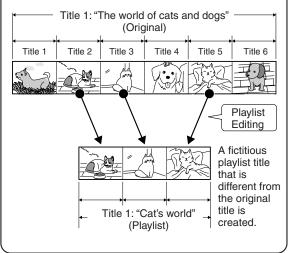


Playlist editing

Collect your favorite chapters to make them as one title. (Playlist)

If an original title is deleted, a playlist will be also deleted because playlists are fictitious titles.

e.g. Making a playlist by collecting scenes of cats from title 1 "The world of cats and dogs".





Dubbing

Copy the playlist and it becomes an original title.

Using these editing functions to modify copyrighted content for any purpose other than your private viewing may be prohibited under the Copyright Laws of the United States and other countries, and may subject you to civil and criminal liability.

Creating chapters

1 title is created by recording at a time, which includes 1 chapter. By dividing it into several chapters, it will be easier to access a desired scene, and your editing or playback will be much easier.

To create chapters in a title, insert a chapter mark. Playback the contents, locate a point where you want to divide, then press **CHP DIVIDE** button. You can insert a chapter mark also while recording, by pressing **CHP DIVIDE** button. (A chapter will also be placed in the recording when you pause.)

The point divides the chapter (into two). You can create multiple chapters by repeating the above operation.

Notes

- Chapters cannot be created in the following modes: Dubbing / Fast-reverse, Fast-forward / Slow-motion
- You cannot divide a title of a DVD-R/RW disc into chapters. It is possible to create chapters in a DVD-R/RW disc by pressing CHP DIVIDE button while recording at the desired points, or by selecting an option that inserts chapter marks automatically while recording at regular intervals. (page 162)

If you want to modify the chapter division, or want to place a chapter mark more precisely monitoring the frame counter, follow the procedures below.



During playback or recording, press CONTENT MENU.



"CONTENT MENU Title List" appears.

Pressing HDD or DVD button can switch the drives.

Press ▲ / ▼ / ◀ / ▶ to select a title.



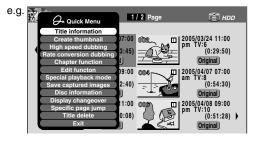
- To go to the next or previous page, press PICTURE SEARCH (◄◄/▶►) button.
- To select a chapter, first highlight the title that contains the chapter you want, then press ★ button.
 The display changes to "CONTENT MENU Chapter List".

To go back to the title display, press ★ button again.

Press QUICK MENU.



Quick Menu appears.

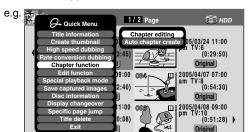




Press ▲ / ▼ to select "Chapter function", then press ENTER.



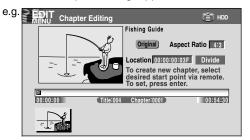
The submenu appears.



Press ▲ / ▼ to select "Chapter editing", then press ENTER.



"EDIT MENU Chapter Editing" appears.



Press PLAY to start playback.



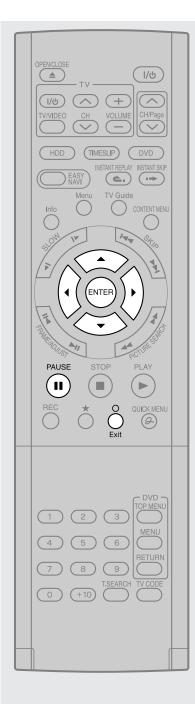
Locate a scene where you want to insert a chapter mark.

You can use the following buttons. PICTURE SEARCH, SLOW, SKIP, PAUSE, FRAME/ADJUST, etc.

The locator shows the current position on the time bar. And the live video plays in the upper left.

- To access other chapters:
 Press ▲ / ▼ buttons to move to the thumbnail display,
 then press ◄ / ▶ buttons to select a desired thumbnail.
 To go to the next page, press PICTURE SEARCH
 button.
- You can confirm the first and last scenes of a chapter.
 Select a thumbnail and press ENTER button.
 3 seconds of the first and last scenes are played.

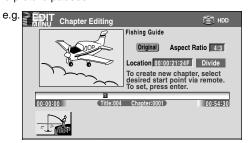
Creating chapters (Continued)



At a point where you want to make a chapter division, press PAUSE.



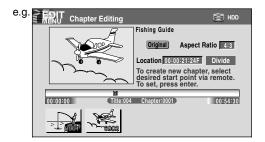
The picture pauses.



Press ▲ / ▼ / ◀ / ▶ to select "Divide," then press ENTER.



A chapter division is created at the selected location, and the first scene of the new chapter is registered as a chapter thumbnail.



Repeat steps 6 to 8.

Locations of chapter division are indicated by the markers on the time bar.

To erase a chapter division, see "Merging chapters" (page 94).

When all chapter divisions have been made, press O.

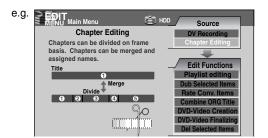


The recorder displays a message, and starts saving the chapter divisions on the time bar.

When complete, CONTENT MENU is displayed.

Notes

- This recorder supports a limited number of chapters on a disc. If exceeded, a message appears. In this event, reduce the number of chapters by merging chapters. (
 page 94)
- "EDIT MENU Chapter Editing" can also be viewed by selecting "Chapter Editing" from "EDIT MENU Main Menu".



- To exit "EDIT MENU Main Menu", press EDIT MENU button
- Making chapters in a title (Original) does not affect the related titles (Playlist).
- There may be a small difference between a location you marked and a chapter division actually played.
- Pausing a recording automatically creates a chapter division.
- During relay recording (pp page 53), a chapter division is automatically created at the start point of relay record.
- If you create chapters in a title which is stored in the HDD and copy the title to a DVD-R/RW, the chapter divisions may shift.

Creating chapters automatically when recording

You can create chapter marks from the beginning of a title at regular intervals automatically. (Chapter marks are added to those already existing.) This is convenient for long programs, such as live sports games.

- 1) Perform steps 1 to 4 on pages 90 to 91.
- 2) Press ▲ / ▼ to select "Auto chapter create", then press ENTER.
- Press ▲ / ▼ to select a chapter division interval, then press ENTER.

Chapter divisions are automatically marked at the selected intervals.

Editing chapter break

You can adjust positions of chapter marks. You can shift the beginning of a chapter currently selected.

- 1) Perform steps 1 to 5 on page 90 to 91.
- 2) Press QUICK MENU.
- Press ▲ / ▼ to select "Chapter break edit mode", then press ENTER.
- Press ▲ / ▼ to select the item, then press ENTER.

"by frame (VR mode)"

The chapter mark shifts by one frame. For contents which will be copied to DVD-RAM discs.

"by GOP (Video mode)"

The chapter mark shifts by a GOP (about 0.5 second), which is a unit of editing in DVD-Video format.

For contents which will be copied to DVD-R/RW.

- 5) Press **◄/▶** to select a chapter whose beginning you want to shift.
- 6) Press FRAME (II < / ►II) repeatedly until a desired scene appears.

Select a point while monitoring the thumbnail, which changes as you press the button. To operate other chapters, press ◀/▶ buttons to select another, then follow the above steps.

 When complete, press QUICK MENU, and select "Chapter break edit mode off (by frame)" or "Chapter Break Edit Mode off (by GOP)" then press ENTER.

The recorder exits the adjusting mode.

- You cannot shift a chapter mark beyond the adjacent chapter marks or a logical gap on recorded data within a chapter.
- Shifting a chapter mark restores a thumbnail to the beginning of a chapter. This may occur also on the previous chapter depending on the data condition.

Creating chapters (Continued)

Merging chapters

- 1) Perform steps 1 to 5 on pages 90 to 91, to view the EDIT MENU Chapter Editing display.
- Press ▲/▼/◄/► to highlight a chapter.
 Pressing PICTURE SEARCH button can access preceding or following pages.
- 3) Press QUICK MENU.



4) Press ▲ / ▼ to select an item.

Merge with previous cptr:

To delete the chapter division between the selected chapter and the previous one.

Merge with following cptr:

To delete the chapter division between the selected chapter and the succeeding one.

Merge all chapters:

To merge all chapters in the title.

5) Press ENTER.

e.g. When "Merge with previous cptr" is selected: The selected chapter is merged into the previous chapter and its thumbnail is erased.

Chapter Editing

2005/03/30 05:09pm CH:3

Original Aspect Ratio 4:3

Location 00:00:00:08F Divide

To create new chapter, select desired start point via remote. To set, press enter.

Title: 002 Chapter: 0004

00:54:30

Notes

- To turn off "EDIT MENU Main Menu", press EDIT MENU button.
- When chapters are merged, the numerical value of following chapters will decrease correspondingly.
- Merging chapters does not affect the related titles (Playlist). You can also merge chapters in the title (Playlist). In this case, the title (Original) is not affected.
- You can access the feature of merging chapters also from Quick Menu on CONTENT MENU Chapter List.

Naming a chapter

- 1) From EDIT MENU Chapter Editing, select a chapter which you want to name.
- 2) Press QUICK MENU.
- Press ▲ / ▼ / ◀ / ► to select "Edit Chapter Name", then press ENTER.

A keyboard appears.

Enter a name following the on-screen icon guides.

- There is a limit to the number of chapters which can be named. If exceeded, a message appears.
- You can also access the keyboard to enter a chapter name by selecting a chapter with PICTURE SEARCH button on CONTENT MENU Title Information, and by selecting "Edit chapter name" from the Quick Menu on CONTENT MENU Chapter List.
- You can change chapter names also on a DVD-R/RW disc, if the disc is not finalized yet.

Introduction

Playlist editing (Collecting desired scenes)

Create a "Playlist" to omit unnecessary scenes for dubbing, or compile desired scenes.





CONTENT MENU

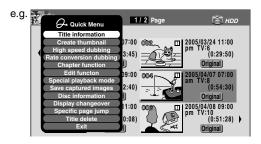
"CONTENT MENU Title List" appears.

Pressing the HDD or DVD button can switch the drives.

Press QUICK MENU.

QUICK MENU

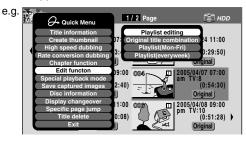
Quick Menu appears.



Press ▲ / ▼ to select "Edit function", then press ENTER.

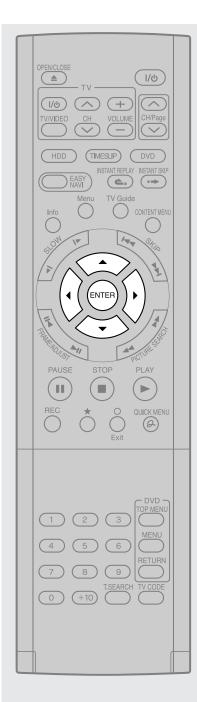


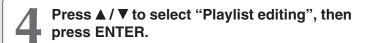
Submenu appears.



(Continued)

Playlist editing (Continued)







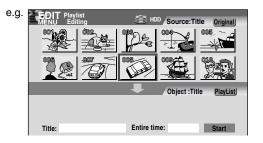
"EDIT MENU Playlist editing" appears.



Press ▲ / ▼ / ◀ / ▶ to select a title or chapter.



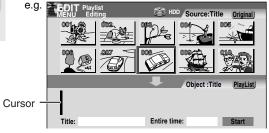
To select between titles and chapters, press ★ button.



Press ENTER.



A cursor appears, indicating the point where the selected item will be inserted.





Press ◀/▶ to select a point where you want to insert the item, then press ENTER.



If there are no parts in the lower area, leave the cursor to the left and press ENTER button.

The selected part is inserted at the location of the cursor.



Repeat steps 5 to 7 to insert items.

To cancel the selection, see "Canceling selection of a part" (page 98).

When all items have been inserted, press O.



The recorder displays a message, and starts saving the Playlist.

When completed, CONTENT MENU is displayed.

- You can access "EDIT MENU Playlist Editing" also by selecting "Playlist editing" on EDIT MENU.
- If you delete titles and chapters (Original), the corresponding titles and chapters (Playlist) are also deleted. Contrarily, if you delete titles and chapters (Playlist), the corresponding titles and chapters (Original) are not deleted.
- Playback may pause if a gap between the content is played.
- There may be a small difference between the chapter boundary and the actual playback picture.
- A title or chapter which is being edited cannot be selected as an item.
- You cannot add a title of still pictures, or a title or a chapter which contains both still and moving pictures, to a playlist.
- By copying (dubbing) a Playlist, a title (Original) of the same contents is created.
- You cannot program a Playlist of contents recorded on a DVD-R/RW disc.
- Down arrow on the thumbnails means: Orange: This title already selected. Green trimmed: Some chapters in this title already selected. Green: This chapter already selected.
- A black thumbnail with "Recording" means that the title is being recorded or its recording will start within 10 seconds. This thumbnail cannot start playback.

Playlist editing (Continued)

Canceling selection of a part

- From EDIT MENU Playlist editing, press
 ▲/▼/ ◄/► to select a part to cancel.
- 2) Press QUICK MENU.

Quick Menu appears.

 Press ▲ / ▼ to select "Cancel selected title", then press ENTER.

The part you have selected is canceled.

Confirming the first and last scenes of a part or a Playlist

You can play the first and last 3 seconds of a scene (Preview). (If a title contains several chapters, the first and last scenes of the chapters are also played.)

Preview of a part:

- At step 5 on page 96, select a title or a chapter, then press QUICK MENU.
- Press ▲ / ▼ to select "Preview", then press ENTER.

Preview of all parts:

- Move the cursor to an any part (in the lower area), then press QUICK MENU button.
- 2) Press ▲ / ▼ to select "Preview all playlists", then press ENTER.

■ Confirming the title information

- At step 5 on page 96, select a title or a chapter, then press QUICK MENU.
- Press ▲ / ▼ to select "Title information" then press ENTER.

■ Correcting a Playlist

You can add or delete parts to correct a Playlist.

- From CONTENT MENU, select a playlist to correct.
- 2) Press QUICK MENU.
- Press ▲ / ▼ to select "Playlist re-editing" and then press ENTER.

"EDIT MENU Playlist editing" appears.

Follow the procedure from steps 5 on page 96, add or delete parts as necessary.

Note

 You cannot edit a title (Playlist) of still pictures, or a title (Playlist) which contains both still and moving pictures.

■ Using a part in a Playlist also in another Playlist

- 1) Press EDIT MENU.
 - "EDIT MENU Main Menu" appears.
- Press ▲/▼/◄/▶ to select "Playlist editing," then press ENTER.

"EDIT MENU Playlist editing" appears.

 Press ▲/▼/ ◄/► to select "Start" then press ENTER.

The areas of title name and part selection become blank.

 Following the procedures outlined on page 96, make a Playlist.

■ Naming a title (Playlist)

- 1) From EDIT MENU Playlist editing, move a cursor to the lower side (selected parts) then press QUICK MENU.
- 2) Press ▲ / ▼ to select "Edit title name," then press ENTER.

A keyboard appears.

 Following the procedures outlined on page 36, enter a title name.

Note

You can name a title also while viewing its information.
 From "CONTENT MENU Title List", select a title and press QUICK MENU button then select "Title Information" by ▲ / ▼ buttons and ENTER button. Further press QUICK MENU button, and select "Edit title name" by ▲ / ▼ buttons and ENTER button.

Making a Playlist of recorded contents where starting times are the same (i.e. daily or weekly recordings)

This will help to sort serials.

- 1) From "CONTENT MENU Title List", press QUICK MENU.
- 2) Press ▲ / ▼ to select "Edit function", then press ENTER.
- 3) Press ▲ / ▼ to select the item.

"Playlist(Mon-Fri)"

To sort out programs recorded on the same time on Monday to Friday to make a Playlist.

"Playlist(every week)"

To sort out programs recorded on the same time of the same day of the week to make a Playlist.

4) Press ENTER.

- Only titles (Original) can be sorted.
- The maximum number of sorted titles on a DVD-RAM disc
- If you modify the recording start time or date of one of the recorded serials, the title will not be sorted out. Contrarily, any program can be sorted if its channel, recording start time and date are modified as the same as others.
- "Playlist(Mon-Fri)" can sort titles even if they are not complete 5 collections of Monday to Friday, on the condition that they have the same channel and recording start time, and exclude Saturday and Sunday.

HDD DVD-RAM DVD-RW DVD-R

Creating thumbnails (Changing the picture on CONTENT MENU)

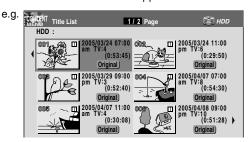
You can register your favorite scene as a thumbnail displayed on CONTENT MENU. On a finalized DVD-R/RW disc, this feature is not available.



Press CONTENT MENU.



"CONTENT MENU Title List" appears.



Pressing HDD or DVD button can switch the drives.

Press ▲ / ▼ / ◀ / ▶ to select a title whose thumbnail you want to change.



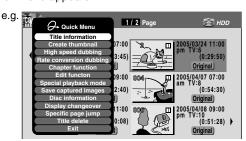
- To go to the next or previous page, press PICTURE SEARCH (◄◄/►►) button.
- To select a chapter, select a title and press ★ button. "Chapter List" appears.

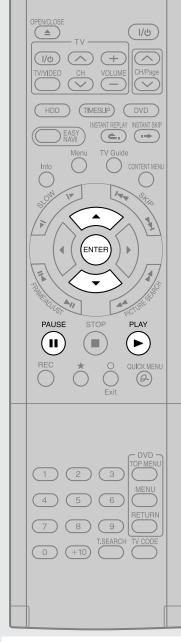
By pressing \bigstar button again, you can return to the Title List.

Press QUICK MENU.



Quick Menu appears.



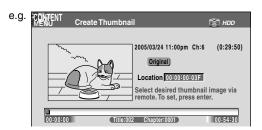


Note

 There may be a small difference between a thumbnail made on the Create Thumbnail display and that displayed in CONTENT MENU. Operation with PICTURE SEARCH button may extend the difference. Press ▲ / ▼ to select "Create thumbnail" (or "Create CHP thumbnail" if selected a chapter at step 2), then press ENTER.



"CONTENT MENU Create Thumbnail" appears.



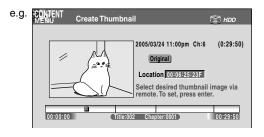
Press PLAY to start playback.



Locate a scene you want to capture as a thumbnail. You can use the following buttons. PICTURE SEARCH, FRAME, SLOW, SKIP, PAUSE, etc.

At the point where you want to capture a thumbnail image, press PAUSE.

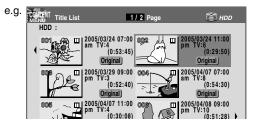




Press ENTER.



CONTENT MENU returns. The selected scene is displayed as a thumbnail.



Creating thumbnails (Continued)

- You cannot create thumbnails of chapters in a title that contains a still picture.
- If you create a chapter thumbnail, and then shift the chapter mark (page 93) or record or edit the disc on other devices, the chapter thumbnail may return to the top of the chapter.

Before dubbing

You can dub (copy or move) contents recorded in the HDD or DVD-RAM/R/RW, between HDD and DVD-RAM drive or within the same drives.

The following contains information and notes about dubbing. Read carefully before dubbing.

■ Dubbing operations

This recorder has the following dubbing functions.

High speed dubbing

You can copy recorded contents without changing the picture and sound quality.

"High speed" means the dubbing time is shorter than the actual time of the content.

Use this function on the purposes such as the followings:

- when you copy a whole title to a DVD-RAM/R/ RW disc.
- when you convert a Playlist into an Original title (produce an Original title from a Playlist)

High speed dubbing of several contents - "Dub selected items"

You can select titles and chapters and copy them all at once.

Rate conversion dubbing

You can copy content and change its data size from the original recording.

Use this function on the purposes such as the followings:

 When you have recorded a content on the HDD at a high rate, and you cannot copy it to a DVD-RAM disc because the data size is too large. (→ Reduce the data size.) – When you recorded a content while "DVD compatible mode" (☐ page 162) was set to "Off", and you cannot copy it to a DVD-R/RW in the DVD-Video format; or when a DVD-RAM disc was recorded with the other equipment which is not compatible with this recorder's recording format, and you want to copy it to a DVD-R/RW (→ Set "DVD compatible mode" to "Main" or "SAP".)

Rate conversion dubbing of several parts

You can select titles and chapters and change the data size and copy them all at once.

Use this function when you unify the compatibility of several titles and contents all at once.

Line-U dubbing

You can record pictures recorded which is being played.

Use this function when you want to copy contents in DVD-R/RW recorded on other device, which cannot show thumbnails in "CONTENT MENU Title List", to the HDD.

All the above functions can copy data as original digital signals. "Rate conversion dubbing" and "Line-U dubbing", however, needs data processing and may deteriorate the original picture and sound quality. Also, it is not possible to improve the picture and sound quality by the Rate conversion dubbing at increased bit rate.

From	То	High speed Library dubbing	High speed Library dubbing of several parts	Rate conversion dubbing	Rate conversion dubbing of several parts	Line-U dubbing
	HDD	Yes	Yes	Yes	Yes	Yes
HDD	DVD-RAM	Yes	Yes	Yes	Yes	Yes
	DVD-R/RW (Not finalized yet)	Yes	Yes	Yes	Yes	Yes
DVD-RAM	HDD	Yes	Yes	Yes	Yes	Yes
	DVD-RAM	Yes	Yes	No	No	No
DVD-R/RW	HDD	Yes	Yes	Yes	Yes	Yes
	DVD-R/RW	No	No	No	No	No

- It is not possible to copy to a DVD-RW disc of DVD-VR mode.
- "High speed dubbing" between the HDD and a DVD-R/RW recorded on other equipment is not possible.
- "High speed dubbing" to a finalized DVD-R/RW is not possible.
- "Line-U dubbing" using a DVD-R/RW which was recorded on other equipment and is not finalized yet is not possible.

Before dubbing (Continued)

"Copy" and "Move"

This recorder's "Dubbing" has the following two definitions:

Copy:

The original program remains after the operation is completed.

Move:

The moved program will be erased from the original location after the operation is completed.

Whether or not you select either command depends entirely on the given situation. The command may be predetermined in some situations.

You cannot "move" contents in the following situations. (Instead, you will want to "copy" them.)

- The content is protected (page 52).
- A specified portion of the title (chapter) is copyprotected, in which case, you cannot move from DVD-RAM to the HDD.
- You cannot move a Playlist. Only copying is permitted. When you copy a Playlist to a disc, it will be treated an Original on the disc. The original Playlist does not change to an Original.

Also, you cannot "move" or "copy" contents in the following situations:

- The recorded content contains a program that permits a single copy only.
- The title (Playlist) contains a portion that prohibits copying. Edit the title from the Original and create a new Playlist.

Notes

- If either the HDD or DVD-RAM is not in optimum physical condition, an error may occur when you execute "Move" and some titles or chapters may be lost. If you want to "Move" non-copy-protected titles and chapters, it is recommended for safety that you first "Copy" them to the opposite drive and confirm they have been copied properly. Then delete the titles and chapters to which you have executed "Move".
- The recorder cannot copy/move the following discs:

DVD-VIDEO VIDEO CD Audio CD CD-R CD-RW

- If you cannot copy/move for some other reason, such as insufficient disc capacity, etc., a message will appear on screen. In such a case, follow the instructions in the message.
- Depending on the content, associated information such as data management may not be copied/moved.
- You cannot copy/move titles containing still pictures.
- Dubbing to DVD-R/RW may divide the original title depending on the contents. Also, the DVD-Video format recording
 - (page 122) may shift thumbnails.
- A part with aspect ratio 16:9 recorded at bit rate 1.0Mbps or 1.4Mbps cannot be dubbed to a DVD-R/RW. Change the aspect ratio to 4:3.
- "High speed dubbing" (page 106) and "Dub selected items" (page 108) procedures always comply with "Aspect ratio(Video mode)" setting (page 162).

■ Recording and playback while dubbing

Dubbing process by "High speed dubbing" and "Dub selected items" procedures will allow you to make a recording or playback of other titles.

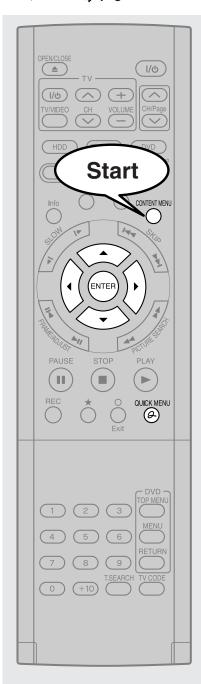
	HDD Playback	HDD Recording	DVD Playback	DVD Recording
HDD → Ø DVD	Available	Available	Not available	Not available
DVD →	Not available	Not available	Not available	Not available
₩ HDD → ₩ HDD	Not available	Not available	Available	Available
\bigcirc DVD \rightarrow \bigcirc DVD	Available	Available	Not available	Not available

- Timer programmed recording have priority over other operations. Dubbing may be stopped if a timer program recording starts.
- While recording and dubbing are in progress at the same time, CONTENT MENU and LIBRARY MENU will not appear.
- Playing a recorded title while recording another on the same disc (page 43), is not possible while dubbing.

HDD DVD-RAM DVD-RW DVD-R

High speed Library dubbing (Dubbing only a specified part)

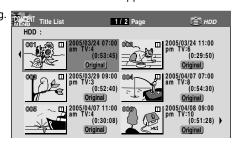
This section explains how to dub a spefific title or chapter. To select several parts and dub them all at once, refer to page 108.



■ Press CONTENT MENU.



"CONTENT MENU Title List" appears.



Press ▲ / ▼ / ◀ / ▶ to select a part (a title or chapter) to copy or move.



- You can go forward/back to pages by pressing PICTURE SEARCH (◄◄ /►►) button.
 - You can jump to a page by specifying the page number.

Press QUICK MENU button, select "Specific page jump". Use ADJUST button to change the page number.

- To select a chapter, highlight a title and press *
 button. If you press the button again, the title list reappears.
- Press QUICK MENU then select "High speed dubbing" by pressing ▲ / ▼ from the Quick Menu, then press ENTER.



"CONTENT MENU High Speed Library Dubbing" appears.





4

Press ▲ / ▼ to select "Copy", "Move" or "Same Disc".



Copy:

After the operation is completed, a specified part will remain on the disc where it was previously located.

Move:

A part will move to the opposite disc and will be erased from the disc where it was previously located.

Same Disc:

A part will be copied to the same disc and the copied part will become another title.

This operation is useful to change a Playlist to Original.

"Copy" or "Move" is automatically selected in the following cases.

Copy:

When a specified title (or chapter) is a Playlist.

When a specified title (or chapter) is locked (page 52).

When a specified title (or chapter) is copy-protected.

5

Press ENTER.



Copying starts.

The job progress is displayed on the screen and the front panel display.

When the job finishes, the graph disappears and the buzzer sounds.

You can set the recorder to turn off automatically when the job finishes.

- (1) During the operation, press QUICK MENU button.
- (2) Press ▲ / ▼ buttons to select "Auto power off".
- (3) Press ENTER button.

Notes

- A title or a chapter becomes a title by being copied.
- "Same Disc" job using a DVD-RAM disc will take a longer time.
- "Same Disc" is not available on DVD-R/RW.
- "Move" is not available between the HDD and DVD-R/RW.
- Some parts in DVD-R/RW may be divided if dubbed.
- For a copy-once permitted content, only moving from the HDD to a DVD-RAM disc is available. Executing this will delete the original content in the HDD, and the one moved to a DVD-RAM will not be able to moved or copied.
- "High speed dubbing" is not available between the HDD and DVD-R/RW recorded on other equipment.
- If you record a title directly onto a DVD-R/RW in the DVD-Video mode on this recorder and execute "High speed dubbing" on the title to the HDD, the recorder may display a message to initialize the HDD. In this case, delete the title or execute "All HDD titles delete" (> page 164).

To cancel copying halfway through the operation

- While copying, press QUICK MENU. Quick Menu appears.
- Press ▲ / ▼ to select "Cancel dubbing", then press ENTER.

- Cancellation of a copying operation will result in deletion of a portion of the title or chapter already copied.
- Cancellation of a copying to a DVD-R cannot restore the disc space in the DVD-R.

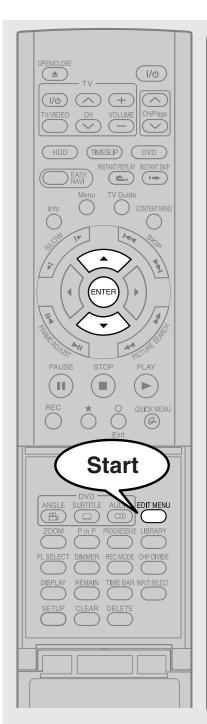
HDD DVD-RAM DVD-RW DVD-R

Dubbing selected items (Dubbing specified parts together)

This section explains how to copy several specific titles or chapters. Assigned names of titles/chapters or other information can also be copied. A title or chapter becomes a title by being copied.

Preparation

• Press the HDD or DVD button to select a disc that contains titles or chapters you want to copy.



Press EDIT MENU.

"EDIT MENU Main Menu" appears.

Press ▲ / ▼ to select "Dub Selected Items".



EDIT MENU

Press ENTER.



"EDIT MENU Dub Selected Items" appears.



Thumbnails of the parts in the disc are displayed in the upper area.

To change the dubbing destination:

- 1) Press QUICK MENU button.
- Press ▲ / ▼ buttons to select "Change media to HDD" or "Change Media to DVD".
- 3) Press ENTER button.



Press ▲ / ▼ / ◀ / ▶ to select a part (a title or chapter) to copy.



- To go to the next or previous page, press PICTURE SEARCH (◄◄ / ▶►) button.
- To select a chapter, first select the title that contains the chapter you want, then press ★ button.
 To go back to the title display, press ★ button again.



Press ENTER.



A cursor appears in the lower area (destination media).

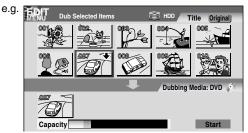


Press ◀/▶ to select a location to place the selected part, then press ENTER.



If there are no parts in the lower area, leave the cursor to the left and press ENTER button.

The selected part is inserted into the location of the cursor.



(Continued)

Dubbing selected items (Dubbing specified parts together) (Continued)



Repeat steps 4 to 6.

You can confirm the available space of the destination media via the bar at the bottom of the display.

Each of the collected parts is recorded on the destination media as a title.

To cancel selection of an individual part, see page 111.

Press ▲ / ▼ to select "Start", press ENTER, and select "Yes", then press ENTER.



The broadcast picture appears and dubbing starts. The progress for each title is displayed on the screen and in the front panel display on the recorder. The buzzer sounds when the operation is completed.

You can set the recorder to turn off automatically when the job is completed.

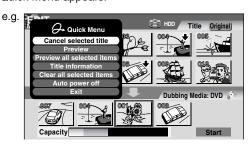
- 1) During the job, press QUICK MENU button.
- 2) Press ▲ / ▼ buttons to select "Auto power off".
- 3) Press ENTER button.

- This procedure of "Dub Selected Items" of specified parts does not move them. If you do not want to leave the items on the original disc, delete them in the procedure for "Deleting selected items" (page 118).
- To confirm the contents of an item, first select the item by using ▲ / ▼ / ▼ / ▶ buttons and press QUICK MENU button to display Quick Menu. Press ▲ / ▼ buttons to select "Preview" (or "Title information") then press ENTER button.
- Each part, when selected, shows its name at the bottom of the menu for about 2 seconds.
- "High speed dubbing" is not available between the HDD and DVD-R/RW recorded on other equipment.
- Dubbing procedures to DVD-R/RW always comply with "Aspect ratio(Video mode)" setting (page 162).
- Some parts in DVD-R/RW may be divided if dubbed.
- If you record a title directly onto a DVD-R/RW in the DVD-Video mode on this recorder and execute "High speed dubbing" on the title to the HDD, the recorder may display a message to initialize the HDD. In this case, delete the title or execute "All HDD titles delete" (page 164).

■ Cancelling selection of an item

 Press ▲/▼/ ◄/► to select an item then press QUICK MENU.

Quick Menu appears.



- Press ▲/▼ to select "Cancel selected title" (or "All clear" for cancelling selection of multiple items at a time).
- 3) Press ENTER.
- Changing the position of an item

Follow the procedure above to cancel selection of the item, then repeat steps 4 to 6 on page 109 to insert the item into its desired location.

Note

 This procedure copies items according to their order indicated in the lower area. Therefore, there may be a case that some items have already been copied at the time you cancel dubbing. HDD DVD-RAM DVD-RW DVD-R

Rate conversion dubbing (Dubbing at a modified bit rate)

You can reduce the recorded picture or sound rate when copying. This procedure enables content originally recorded onto the HDD at high rate setting to be dubbed onto a DVD-RAM disc at a reduced bit rate.

Use the Rate conversion dubbing when

- you recorded a lengthy content on the HDD using the manual high rate, and it is too large to dub onto the DVD-RAM disc.
- you recorded a title with setting the "DVD compatible mode" (page 162) to "Off", and you want to make a DVD-R/RW disc for that title, or you used another recorder to record a title on a DVD-RAM disc, and you want to create a DVD-R/RW disc for that title (Set "DVD compatible mode" to "Main" or "SAP" then execute this procedure).

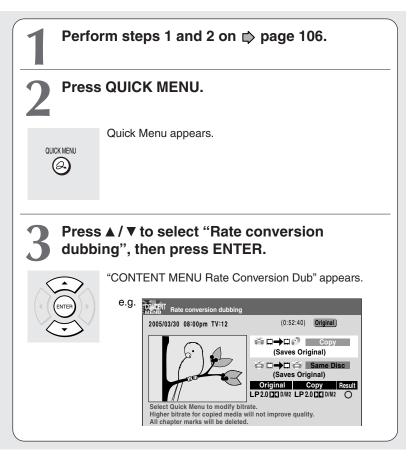
The Rate conversion dubbing can be performed in two different ways: **part by part** or **multiple parts in one time**. (To dub multiple parts in one time, the same rate is applied to all parts. You cannot set a different rate to each part.)

Preparation

• Press HDD or DVD button to select a disc containing the parts that you want to dub.

Rate Conversion Dubbing for Part by Part







Press ▲ / ▼ to select "Copy" or "Same Disc".



QUICK MENU

Copv:

After the operation is completed, a specified part will remain on the disc where it was previously located.

Same Disc:

A part will be copied to the same disc and the copied part will become another title.

Confirm picture and sound rates.

To make changes, follow the procedure below.





(Saves Original)

2) Press ▲ / ▼ buttons to select an item then press ENTER button.

User record quality:

The current settings you have made (page 161) are listed. Press ADJUST (II◄ / ►II) button to select a desired setting.

Auto rate selection:

The recorder automatically selects the highest possible rate, calculating from current unoccupied volume on the disc. (This operation does not insure full recording of any length program or whole use of unoccupied volume.)



Press ENTER.



Copying starts.

To confirm the job progress, press TIME BAR button to display the time bar. (The time bar cannot be copied.) When copying is completed, the buzzer sounds and the current broadcast picture appears.

Pictures and sounds displayed during copying are for monitoring purposes only. Recorded picture quality may Rate conversion dubbing (Dubbing at a modified bit rate) (Continued)

Rate Conversion Dubbing for multiple parts



Press EDIT MENU.



"EDIT MENU Main Menu" appears.

Press ▲ / ▼ to select "Rate Conv. Items", then press ENTER.



"EDIT MENU Rate Conv. Items" appears.



Collect parts to be dubbed, using steps 4 to 6 on page 109.

Each of the collected parts is recorded on the destination media as a title.

You can cancel selection of an individual part.

- Press ▲ / ▼ / ◀ / ▶ buttons to select an item then press QUICK MENU button.
 - Quick Menu appears.
- Press ▲ / ▼ buttons to select "Cancel selected title" (or "All clear" for cancelling selection of multiple items at a time).
- 3) Press ENTER button.

Check the rate for picture and sound quality.

To change the setting, perform the following steps.

- 1) Press QUICK MENU button to display Quick Menu.
- Press ▲ / ▼ buttons to select "User record quality" and press ENTER button.
- Press ADJUST (II◄ / ►II) button to select the setting number and press ENTER button.

When "Copy" on the bottom shows "X", the selected parts are beyond the disc capacity. Change the rate for picture and sound quality or reduce parts to dub.



Press ▲ / ▼ to select "Start", and select "Yes", then press ENTER.

Copying starts.

To confirm the job progress, press TIME BAR button to display the time bar. (The time bar cannot be copied.) When copying is completed, the buzzer sounds and the current broadcast picture appears.

Pictures and sounds displayed during copying are for monitoring purposes only. Recorded picture quality may vary.

■ Cancelling dubbing during rate conversion dubbing

- 1) Press QUICK MENU.
- 2) Press ▲ / ▼ to select "Cancel dubbing".
- 3) Press ENTER.

Note

- A portion of content from the start of recording to the moment you cancel dubbing will be copied.
- Turning off the power automatically after dubbing
 - 1) While dubbing, press QUICK MENU.
 - 2) Press ▲ / ▼ to select "Auto power off".
 - 3) Press ENTER.

- Unlike High speed dubbing, Rate conversion dubbing may cause slight deterioration in picture and sound quality of recorded content. The time required for dubbing is about the same as the playback time of the content.
- Quality will not be improved even if you select a rate higher than original content.
- In Rate conversion dubbing from the HDD to a DVD-RAM disc (a DVD-RAM disc to the HDD), the positions of chapter marks copied on the DVD-RAM disc (the HDD) may be slightly different in frame from the original positions.
- In Rate conversion dubbing from the HDD to a DVD-R/RW disc, the positions of chapter marks copied on the DVD-R/ RW disc may be slightly different by the GOP (Groups Of Pictures) from the original positions.
- In Rate conversion dubbing from a DVD-R/RW disc to the HDD, the positions of chapter marks are not copied on the HDD.
- Rate conversion dubbing to the same DVD-RAM/R/RW disc is not possible.
- The recorder automatically inserts a black picture for a moment before and after the new title produced by this recording process.

- You cannot use the Rate Conversion Dubbing for copying from a DVD-RAM disc to another DVD-RAM disc.
- During Rate conversion dubbing, the relay recording function (pp page 163) is disabled even if "Relay Recording" is set to "On".
- During Rate conversion dubbing, switching the audio channel is not possible.
- Audio processed under the Rate conversion dubbing is recorded in stereo.
- When you record an SAP program and play it back, the main and sub sound are output at the same time. Select the sound by pressing AUDIO button.
- When you set "DVD compatible Mode" to "Main" or "SAP" (page 162), only a selected sound (the main or sub sound) of the SAP program is recorded. (Stereo broadcasting is recorded as stereo).
- If you perform the Rate conversion dubbing for a Playlist, containing a chapter that is the beginning of the Original title at recording, one frame at the beginning will be removed.
- During Rate conversion dubbing, P in P function (
 page 71) is disabled.
- Rate conversion dubbing to DVD-R/RW selects aspect ratio according to the first title of dubbed items.
- Each part, when selected, shows its name at the bottom of the menu for about 2 seconds.

HDD DVD-RAM DVD-RW DVD-R

Line-U dubbing (Recording pictures while viewing them)

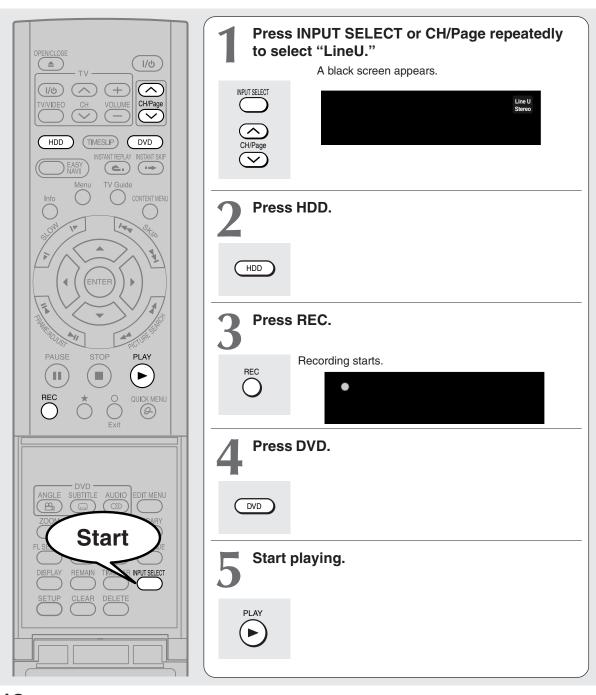
You can record the picture being played back in either disc, or to the other disc, if the content is not copy-protected. This procedure can be used also to copy contents of a DVD-R/RW you created (

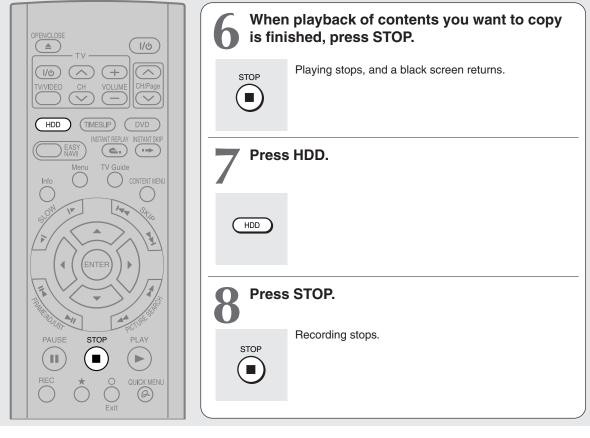
page 122), back to the HDD.

■ Preparation

- Make sure that the destination disc has adequate available remaining space.
- When you want to copy to the HDD, load a disc you want to play.

Example: To copy from a DVD-RAM disc to the HDD





- The following combinations of a source and a destination disc are possible.
 HDD to HDD, HDD to DVD-RAM, HDD to DVD-R/RW, DVD-RAM to HDD, DVD-R/RW to HDD
- A title dubbed by this procedure has black pictures at both the beginning and the end of the title. Therefore thumbnails in CONTENT MENU may be black. If you change the thumbnail, see page 100.
- You can record still pictures and slow pictures during playback.
- Contents of DVD VIDEO, VIDEO CD and audio CD cannot be recorded with "Line-U dubbing".
- "Line-U dubbing" may cause slight deterioration in picture and sound quality of contents.
- Screen menus such as CONTENT MENU or EDIT MENU cannot be recorded by "Line-U dubbing".
- "Line-U dubbing" cannot be set as programme recording.
- When doing this procedure, programmed recording must not be initiated. If you display TV Guide On Screen, playback is automatically canceled.
- When setting the input to Line-U, audio output is set to stereo automatically. You cannot switch the audio channel. During "Line-U dubbing", you can change the audio output.
- Accompanying audio content to be recorded with "Line-U dubbing" is always in stereo.
- During "Line-U dubbing", the virtual surround function (page 158) is disabled.
- Even if "Relay recording" is set to "On" (page 163), the relay recording function is disabled during "Line-U dubbing".
- For "Line-U dubbing", a scene permitting copy-once cannot be copied.
- During Line-U dubbing, P in P function (page 71) is disabled.

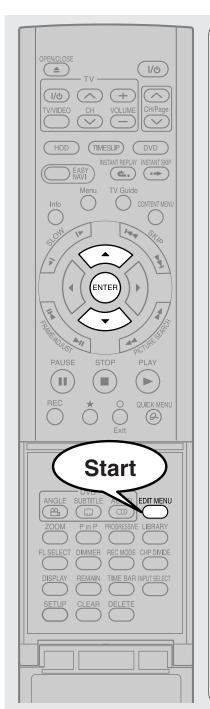
HDD DVD-RAM DVD-RW DVD-R

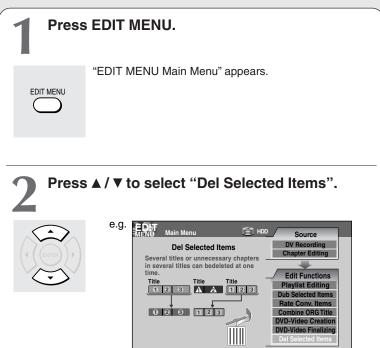
Deleting selected items (Deleting multiple specified parts)

This section explains how to simultaneously delete unnecessary titles and chapters. On a finalized DVD-R/RW disc, this feature is not possible.

■ Preparation

• Press HDD or DVD button to select a disc that contains titles or chapters you want to delete.

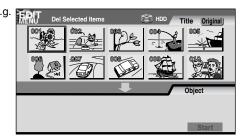




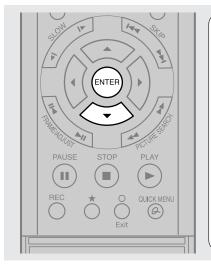
3 Press ENTER.



"EDIT MENU Del Selected Items" appears.



Thumbnails of the parts in the disc are displayed in the upper area.



4

Press ▼ repeatedly to select "Start", then press ENTER.



The recorder begins the deletion process. To cancel deleting, press ◀/▶ buttons to select "No", then press ENTER button.

When the process is finished, "EDIT MENU Main Menu" returns.

- To confirm the first and last scenes of an item, first select an item then press QUICK MENU button. Press ▲ / ▼ buttons to select "Preview" (or "Title information") then press ENTER button. This is available only on contents recorded on the HDD or DVD-RAM discs.
- Titles and chapters show their names for about 2 seconds at the bottom of the screen when they are selected.
- On a DVD-RW disc, deleting can restore the disc space only by deleting the last recorded title.
- Deleting cannot be canceled once started. Be careful when executing the deletion process.
- If you select a title for the part to be removed, you cannot select chapters in that title.
- Chapters on DVD-R/RW discs cannot be selected to deleted.

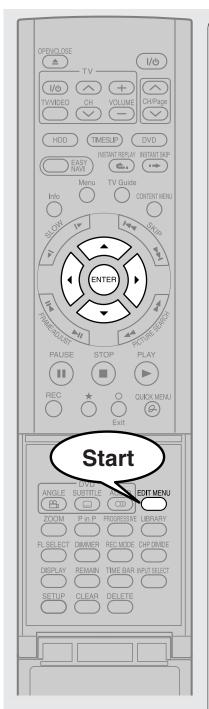
HDD DVD-RAM

Combine Original titles (Combine two titles into one)

Use this feature to combine two titles into one. The second title is deleted as the second title is added to the end of the first title.

Preparation

• Press HDD or DVD button to select a disc that contains titles or chapters you want to merge.





Press ▲ / ▼ to select "Combine ORG Title", then press ENTER.



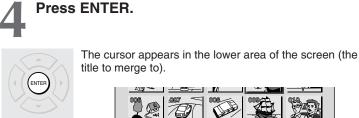
"EDIT MENU Combine ORG Title" appears.

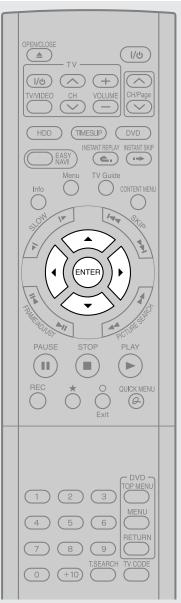


Press </ ▶ to select the first title to merge.



Press PICTURE SEARCH button to move to the previous or next page.





Press ◀/► to select the location to put the part and press ENTER.



It is fixed at the left side at the beginning. Press ENTER button. The selected part moved into the location of the cursor.



Perform steps 3 to 5 and select the second title.

You cannot select the same title.

To cancel the registered part:

- Select the part that you want to cancel, and press QUICK MENU button to display the Quick Menu.
- Press ▲ / ▼ buttons to select "Cancel selected title" (or "Clear all selected items" for cancelling the selection of multiple items at a time).
- 3) Press ENTER button.
- Press ▲ / ▼ to select "Start combining"and press ENTER, then select "Yes" and press ENTER.



The combining process starts.

- You cannot stop the combining process after it has started.
- You cannot combine titles if their length will exceed 9 hours.
- You cannot combine a protected title or a title containing still pictures.
- The title name of the first title is given to the title after combining.
- The second title is combined into the first title, maintaining the chapter divisions and chapter names.
- Titles and chapters show their names for about 2 seconds at the bottom of the screen when they are selected.

DVD-RW DVD-R

Creating a DVD-Video using DVD-R/RW

Content stored on the HDD of the recorder can be edited and copied to a DVD-R/RW, a popular media for distribution, and played on a compatible DVD video player.

Notice

· Beforehand confirm the contents of a disc.

If you use a DVD-R disc, prepare a new one. This DVD-Video creation procedure is possible only once per disc on this recorder. Once you have copied to a DVD-R, you cannot redo, add, delete, or correct the copied contents in the disc. If you start copying then cancel the job, you cannot re-use the DVD-R.

If you use a DVD-RW, be sure to confirm the contents in it. This procedure overwrites a whole disc, and all of the contents in a DVD-RW will be lost. If you want to add contents to a DVD-RW, do not use this procedure. Record directly or make a dubbing to the DVD-RW, then execute the finalization (page 132). This procedure includes the finalizing process, and you will not be able to add, delete, or correct contents to a DVD-RW later, as it will have been finalized. If a finalized DVD-RW has remaining space, you can add contents there if you cancel the finalizing process of the DVD-RW (page 135).

• Do not start copying to a DVD-R/RW when programmed recording is scheduled to begin shortly.

Copying entirely to a DVD-R/RW will take 1 hour and a half (variable depending on the contents). (This does not include time for "Writing Test". This option requires more time. Actual time for "Writing Test" depends on the contents to test, and may be longer than the playing time of the contents if the disc contains too little contents or too many quality and picture settings, etc.)

If a start time of a programmed recording comes during this procedure, the recording is made onto the HDD. However, while making a menu theme, the recording is not executed. Also, programmed recordings to DVD media with "Off" setting of "Relay recording" (page 163) are not executed.

If a programmed recording starts during this procedure, you cannot continue to make another disc after completion of the first disc.

• Ensure the compatibility of a disc.

Refer to the page 9.

* Discs made by this procedure will comply with the DVD-Video standard. However, it is not guaranteed to play properly on all DVD video players (including TOSHIBA products).

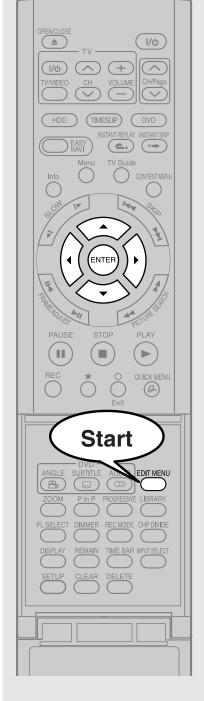
Depending on the disc, there may be a difference of data capacity between DVD-R and DVD-RW. It may be possible that contents you have just recorded onto a DVD-R cannot be recorded onto a DVD-RW. (DVD-RW capacity may be smaller.)

Follow the instructions on handling of the disc.

Preparation

- Record contents which you want to copy to DVD-R/RW disc to make DVD-Video, to the HDD with the following settings:
 - "DVD compatible mode" (page 162): "Main" or "SAP".
 - Bit rate of 4.0 or more.
- Load a new DVD-R/RW disc. (Follow the instructions on handling of the disc.)
- Press HDD button to select the HDD mode.

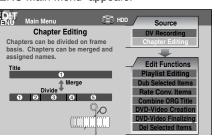
- If you recorded a title while setting "DVD compatible mode" (page 162) to "Off" or you used another recorder to record a title in a DVD-RAM disc, and you want to copy such a title to a DVD-R/RW to create a DVD-Video, first set "DVD compatible mode" to "Main" or "SAP" then execute the procedure of "Rate conversion dubbing (page 112).
- Depending on the disc, DVD-R 4x speed compatibility may be disabled.



Press EDIT MENU.



"EDIT MENU Main Menu" appears.



Press ▲ / ▼ to select "DVD-Video Creation", then press ENTER.



"EDIT MENU DVD-Video Create (Selected Items)" appears.



Thumbnails of titles on the HDD are displayed in the upper area.

Press ▲ / ▼ / ◀ / ▶ to select a part (a title or chapter) to copy to a DVD-R/RW disc.



- To go to the preceding or following page, press PICTURE SEARCH button.
- To select a chapter, first select the title that contains the chapter you want, then press ★ button. To return to the title display, press ★ button again.



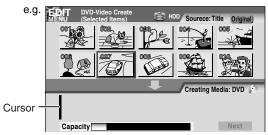


1 Pres

Press ENTER.



A cursor appears in the lower area (destination media).



Press ◀/▶ to select a location to place the selected part, then press ENTER.



If there are no parts in the lower area, leave the cursor to the left and press ENTER button.

The selected part is inserted into the location of the cursor.

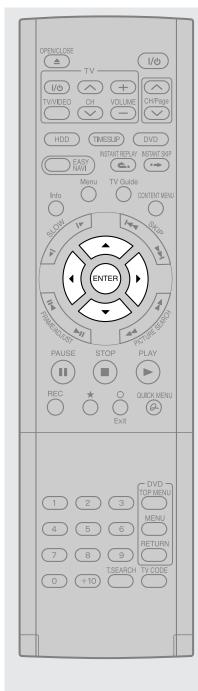


Repeat steps 3 to 5.

You can check the available volume of a DVD-R/RW on the bar at the bottom of the menu.

Each of the assembled parts is recorded onto the destination media as a title.

- To cancel selected parts see page 130.
- To change the title/chapter name or thumbnail before selecting:
- Select the part that you want to change, and press QUICK MENU button.
- 2) Press the ▲ / ▼ buttons to select "Edit title name" or "Modify title thumbnail" to change the title, or "Edit chapter name" or "Modify chapter thumbnail" to change the chapter, and press ENTER button.



Press ▲ / ▼ to select "Next", then press ENTER.



A screen is displayed to select options.



Press ▲ / ▼ / ◀ / ▶ to set the items.



For the instruction of setting, see the description shown at selection.

 When you have selected "Parts Test" or "All Test" for "Writing Test", extra time is required for pre-writing test. "All Test" requires more time than "Parts Test".

If you select "None" for "Menu Create": The setting of "Start Play" and "Start after playing one title" is skipped automatically.

Press ▲ / ▼ to select "Next", then press ENTER.



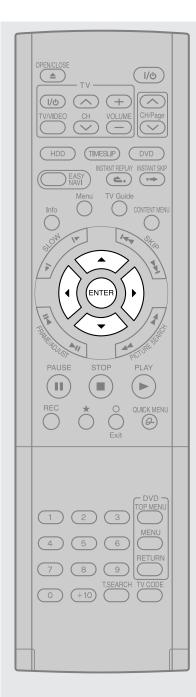
A screen is displayed to confirm the information you are going to write.



Press ▲ button to select "Edit Name" and press ENTER button to go to the character entry screen. The number of characters is limited for the disc name you can enter.

If you selected "None" for "Menu Create" at step 8, select "Writing" on the bottom right corner, and press ENTER button. Skip to step 14.

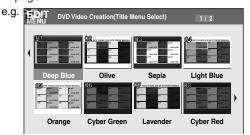
Creating a DVD-Video using DVD-R/RW (Continued)



Press ▼ to select "Next", then press ENTER.



A display of title menu selection appears if "Menu Create" is set to "Title+Chapter" or "Title" at step 7.



If you press ★ button, you can preview the selected menu. To return, press O button.

While displaying a preview screen of your captured image, you can access the other menu to correct color (

page 129) by pressing ★ button.

Press ▲ / ▼ / ◀ / ▶ to select the menu, then press ENTER.



If you have set "Menu Create" to "Title+Chapter" or "Chapter" at step 7, a screen is displayed to select a chapter menu.

Press ▲ / ▼ / ◀ / ▶ to select the chapter menu.



The selected menu is set for all chapters. You cannot set it for each chapter individually.

If you press ★ button, you can preview the selected menu. To return, press O button.

If you press ▼ button to select "Return" while previewing and press ENTER button, you will return to the preview of the title menu. To go back to the chapter menu, press ▲ / ▼ / ◀ / ▶ button to select a number next to "Chapter Menu" on the bottom center.



Press ENTER on "EDIT MENU DVD-Video Creation (Chapter Menu Select)" display.



A confirmation message is displayed.

Press ◀/▶ to select "Yes", then press ENTER.



The current broadcast picture appears and dubbing starts. The progress is displayed on the screen and in the front panel display on the recorder.

When copying is completed, a finalizing process follows. This enables the disc to be played on a DVD video player.

When the process is completed, a message "Create another DVD-Video now?" appears (except when "Auto power off" (see below) is set). If you select "Yes", you can make one more DVD-R/RW of the same content. If you select "No", you can complete creating the DVD-Video.

- You can set the recorder to turn off automatically when the job finishes.
 - 1) During the job, press QUICK MENU button.
- 2) Press ▲ / ▼ buttons to select "Auto power off".
- 3) Press ENTER button.

Creating a DVD-Video using DVD-R/RW (Continued)

Notes

- The number of titles that you can write on a DVD-R/RW disc is limited (99 titles. Each title should have 99 chapters or less). If you have a large number of titles or chapters, you may not be able to write due to the limitation of the DVD specifications. Also, even if the number of titles and chapters is within the limit, you may not be able to write if you have a large number of menu items.
- Due to standard differences, the number of chapters and their position may change slightly after DVD-Video creation. (For chapters generated on a DVD-R/RW disc, the same thumbnail for the Original chapter is displayed.)
- Due to standard limitation, a DVD-R/RW disc may contain unnecessary scenes after creation.
- If you select items of various types of video outputs, aspect ratios or other properties, or if you select an item recorded with different settings, they may be divided into titles. (For titles generated on a DVD-R/RW disc the same thumbnail for the Original title is displayed).
- Content based on a complicated PlayList or composed of too many items may not be copied properly.
- Copy-once permitted contents cannot be copied to a DVD-R/RW disc, even if they are recorded onto the HDD while "DVD compatible mode" is set to "Main" or "SAP" (page 162).
- Content recorded on a recorder other than this recorder (including TOSHIBA products) cannot be copied to a DVD-R/RW disc using High Speed Dubbing. First set "DVD compatible mode" to "Main" or "SAP" and record them onto the HDD. Then perform "Rate conversion dubbing" (page 112) to copy to the HDD.
- When a content is recorded with manual rate 1.0 Mbps or 1.4 Mbps and is including a 16:9 picture shape scene, the DVD creation of the content may fail. In this case, set "Set Aspect Ratio" to "4:3 fixed" on the menu "(Option Settings)".
- Even if the title is recorded with "DVD compatible mode" set to "Main" or "SAP", using a recorder other than this may cause failure when recording to a DVD-R/RW disc.
- If the DVD-Video creating fails to be completed, most of the discs cannot be used again.
- If an error occurs while a DVD-Video is created, the error code "ERR-**" (** indicates the error code) is shown in the front panel display of the recorder. (pp page 171) To clear this display, press DISPLAY button.
- There may be a difference between a specified thumbnail of menu in the DVD-Video creation procedure and the one on displayed in CONTENT MENU.

Selecting the items displayed on the menu

You can hide items on the menu if necessary.

To hide a disc name

Leave "Disc Name" blank. Display the on-screen keyboard and press CLEAR button to delete letters, then press ★ button to save.

To hide a page number

Leave "Disc Name" blank. Follow the above method.

To hide a disc name and show a page number Enter one more space in "Disc Name".

To hide a title/chapter name

On CONTENT MENU or a display of item selection, select a title/chapter and display the on-screen keyboard from Quick Menu. Erase all characters of the name.

You can hide a time also using the same manner.

- "Chapter 0001"... on CONTENT MENU means that the chapter is given no characters as its name. Such a chapter does not show the name on the menu.
- A chapter menu shows the title name at the top right corner. If you hide the title name, no character appears in this area.

To hide a title/chapter name and show a time Enter one more space and save it as the title/ chapter name.

Note

• You cannot hide items other than above.

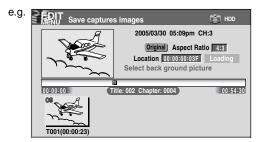
■ Using a favorite scene as a menu

You can select favorite scenes from the recorded contents and use them as menus of DVD-Video Created (♠ page 126) DVD-R/RW.

- 1) Press CONTENT MENU.
- Press ▲ / ▼ / ◄ / ► to select a title which contains a scene to use as menus.
- 3) Press QUICK MENU.
- 4) Press ▲ / ▼ to select "Save captured images".
- 5) Select a scene.

Locate a scene using the buttons such as PLAY, SLOW, FRAME or PAUSE, etc.

 Press ▲ / ▼ to select "Loading" and press ENTER.

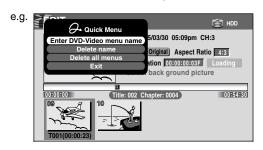


Notes

- · You cannot capture copy-protected contents.
- The maximum number of pictures which can be saved varies depending on the data size.

To name a captured image

Press ▲ / ▼ / ◀ / ▶ to select an image to name then press QUICK MENU. Press ▲ / ▼ to select "Enter DVD-Video menu name" then press ENTER.



The on-screen keyboard appears. Enter a name.

To delete a captured image

Press ▲ / ▼ / ◀ / ► to select an image to delete then press QUICK MENU. Press ▲ / ▼ to select "Delete menu" then press ENTER. Follow the message to operate.

To delete all captured images, select "Delete all menus".

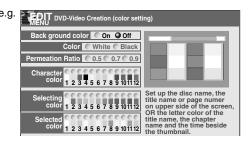
Selecting color options on menus

Several options are available: a translucent background for better legibility, character color and cursor color selections.

The preview screen appears.

2) Press ★.

A color setting display appears.



 Set each item by ▲ / ▼ / ▼ / ►, referring to the guidance on the right half of the display, finally press ○ to exit.

The preview screen returns.

Creating a DVD-Video using DVD-R/RW (Continued)

To improve legibility of characters on menus Press ▲ / ▼ / ◄ / ► to set "Back ground color" to "On". Then select "Color" ("White" or "Black") according to the menu's tone, and set "Permeation Ratio", which sets the how translucent the selected Back ground color is. The higher the ratio, the Back ground color will be more translucent but the lower legibility of characters.

To change the character color

Press ▲ / ▼ / ◀ / ▶ to select from 12 colors. When you select "White" back ground color, dark color should be a better choice.

To change the cursor color

"Selecting Color" is a color for the moving cursor. "Selected Color" is one for the press of ENTER button.

To preview your selections

Press O button to return to the preview screen. If you correct your selections, repeat steps 2) and 3) (page 129).

Canceling selection of an item

 Press ▲ / ▼ / ◀ / ▶ to selectan item then press QUICK MENU.

Quick Menu appears.



- Press ▲ / ▼ to select "Cancel selected title" (or "Clear all selected items" for canceling selection of all items at a time).
- 3) Press ENTER.

The selected item disappears.

■ Changing the location of an item

Follow the procedure above to cancel selection of the item, then repeat steps 3 to 5 to re-insert the item in a desired location (page 123, 124).

■ Confirming the content in the lower area

Select an item and press QUICK MENU. Then press

▲ / ▼ to select "Preview" and press ENTER.

Notes

- Each time an item is selected, its name appears at the bottom of the screen.
- You can also confirm the content by selecting "Title information" from Quick Menu.

Canceling dubbing process

Press QUICK MENU to display the Quick Menu. Press ▲ / ▼ to select "Stop creating DVD video", then press ENTER.

- If you cancel creating DVD-Video on a DVD-R disc, the disc will become unusable in most cases.
- · Canceling is not always possible.

■ If a message appears while selecting a part

You may receive a message, such as "Selection of Writing Test in the next option setting is recommended to check whether Aspect Ratio coexists". If a copyprohibited content is included, or if the aspect ratio is changed meanwhile, cancel the selection. If you are not sure, select Writing Test ("Parts Test" or "All Test").

Note

 Depending on selection or condition of items, copying may result in failure. If a message appears, be sure to, prior to step 7, press QUICK MENU button. Then press ▲ / ▼ buttons to select "Cancel selected title", and press ENTER button. If you do not do this and continue the copying process, an error may occur and the disc will be rendered useless.

Playing a created DVD-Video

You can play the DVD-R/RW in the same manner as you would play a DVD video disc.
See

page 62.

■ If you want to correct the contents of a DVD-RW after the DVD-Video creation procedure

Cancel the finalization of the DVD-RW (page 135). It is possible only on DVD-RW recorded on this recorder.

After canceling, you can delete titles. However, you cannot re-use the whole disc, since only the last title can restore the disc space.

■ If you want to delete all contents of a DVD-RW after the DVD-Video creation procedure

Load the DVD-RW into the recorder and initialize it, then execute the procedure of DVD-Video creation (page 122).

DVD-RW DVD-R

DVD-Video finalizing process

The recorder processes recorded data in a DVD-R/RW disc so that it can be played on other compatible devices.

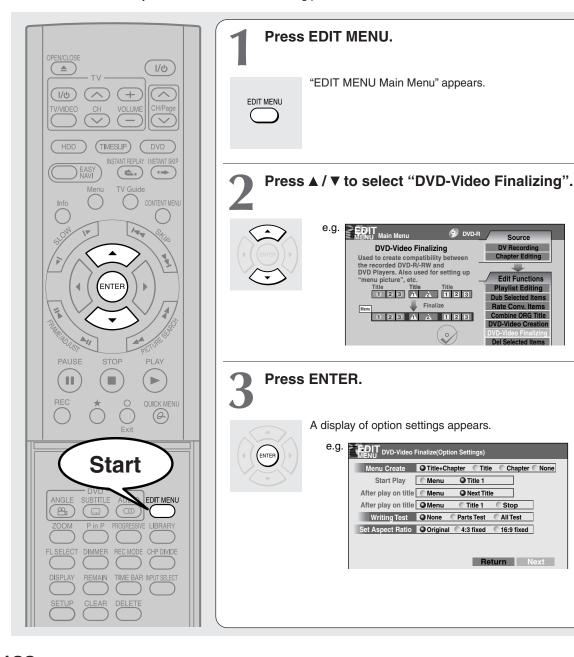
Important

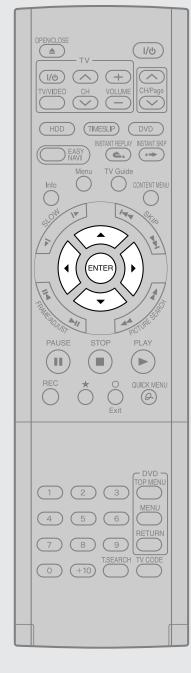
• You cannot rewrite data onto a disc after you execute the DVD-Video finalizing process. However, the disabled rewritability of a DVD-RW disc can be restored by canceling the process of the disc (page 135). On DVD-R discs, canceling of the DVD-Video finalizing process is not available.

Canceling of the DVD-Video finalizing process is available only on DVD-RW recorded or copied contents on this recorder.

■ Preparation

- Press DVD button to select the DVD mode.
- Load a DVD-R/RW disc you want to execute the finalizing process.





4

Press ▲ / ▼ / ◀ / ▶ to select.



As you select each item, its function is explained.

When "Menu Create" is set to "None":

"Start play" and "After play one title" are automatically omitted.

Press ▲ / ▼ to select "Next", then press ENTER.



Information on data to be processed appears.



If you press ▲ button to select "Edit Name" then press ENTER button, a keyboard appears so that you can enter a title name.

When "Menu Create" is set to "None": Select "Writing" at the right bottom by ▲ / ▼ / ◀ / ► buttons and press ENTER button. Skip to step 10.

6

Press ▼ to select "Next", then press ENTER.



When "Menu Create" is set to "Title+Chapter" or "Title", a display of title menu selection appears.

To view your captured images (page 129), go to the next page.



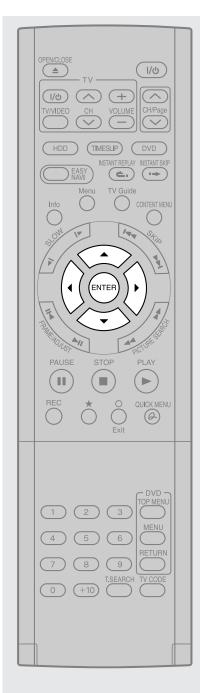
If you press ★ button, you can preview the selected menu. To return, press O button.

While displaying a preview screen of your captured image, you can access the other menu to correct color (

page 129) by pressing ★ button.

(Continued)

DVD-Video finalize process (Continued)



Press ▲ / ▼ / ◀ / ▶ to select the title menu, then press ENTER.



A display of chapter menu selection appears if "Menu Create" is set to "Tltle+Chapter" or `Chapter" at step 3.

Press ▲ / ▼ / ◄ / ▶ to select the chapter menu.



A selected menu is applied to all chapters. You cannot allocate a menu to each chapter.

If you press ★ button, you can preview the selected menu. To return, press O button.

If you press ▼ button during preview, to select "Return" then press ENTER button, you can go to the preview of the selected title menu. To return to the preview of chapter menu, press ▲ / ▼ / ◄ / ▶ buttons to select a number next to "Chapter Menu" then press ENTER button.

Press ENTER on "EDIT MENU DVD-Video Finalize (Chapter Menu Select)" display, and select "Yes" by ◀/▶, then press ENTER.



A message appears to ask you if you want the power to turn off automatically or not when the process is completed.

Press </br> Press | The press of the press of



A message disappears and the finalize process starts. The progress is displayed on the screen and in the front panel display on the recorder.

Notes

- DVD-R/RW discs recorded on this recorder may not be recognized on other devices unless you execute DVD-Video finalizing process to them.
- You can record onto a DVD-R disc additionally to the limit of the disc capacity, unless you execute the DVD-Video finalizing process to it. Deleting of recorded titles is also possible, however, the disc space cannot be restored.
- You can record additional content onto a DVD-RW disc additionally to the limit of the disc capacity unless you execute the DVD-Video finalizing process to it. Deleting of recorded titles is also possible, however, the disc space can be restored only by the volume of the title last recorded.
- On DVD-RW discs, it is possible to cancel the DVD-Video finalizing process or to initialize for a new use.
- If a start time of a programmed recording comes during a finalizing process, the recording is made onto the HDD. However, while making a menu, the recording is not executed. Also, when "Relay recording" is set to "Off" the recording will not start.

■ To cancel the finalize process DVD-RW

You can cancel the DVD-Video finalizing process executed to a DVD-RW disc so that the disc can be recordable again.

- 1) During stop, press QUICK MENU.
 A quick menu appears.
- 2) Press ▲ / ▼ to select "Disc management" then press ENTER.
- Press ▲ / ▼ to select "Cancel finalization" then press ENTER.
- Read the message, and press
 fo select "Yes", then press ENTER.

The process starts.

- While the recorder is ready to start a programmed recording, you cannot cancel the DVD-Video finalizing process.
- You cannot cancel the DVD-Video finalizing process executed on a DVD-RW disc recorded on other device.
- You cannot cancel the DVD-Video finalizing process executed on a DVD-RW disc if the disc is protected.
- Canceling the DVD-Video finalizing process may shift the thumbnails of titles/chapters.

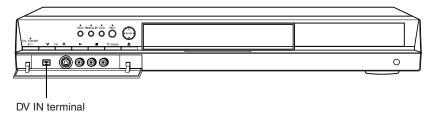
HDD DVD-RAM DVD-RW DVD-R

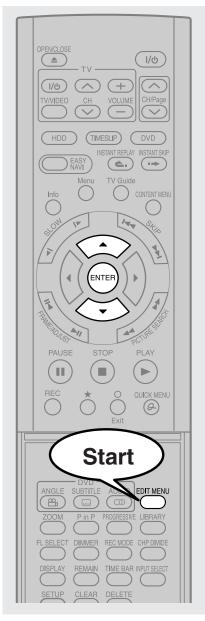
DV recording (Recording from a digital video camera)

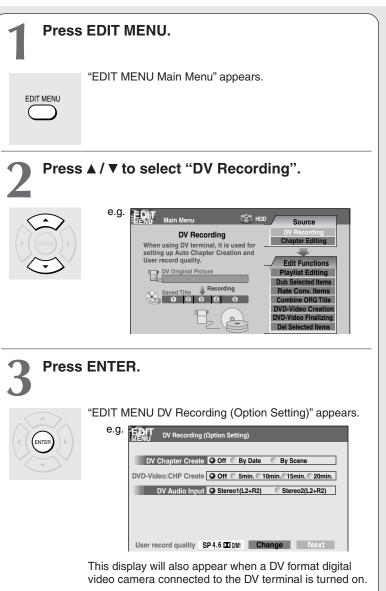
You can connect a DV format digital video camera to the DV terminal to record from it.

Preparation

- Press HDD or DVD button to select a recording media
- Connect a DV format digital video camera to the DV terminal on the front panel.









4

Press $\blacktriangle/\blacktriangledown/\blacktriangleleft/\blacktriangleright$ to make the settings.



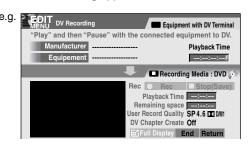
As you select each item, an explanation is provided.

To change the picture and sound rates:

- Press ▲ / ▼ buttons to select "Change" then press ENTER button.
- On the "User record quality" display, press ADJUST button to select a setting number.
- 3) Press ENTER button.
- Press ▲ / ▼ / ◀ / ▶ to select "Next", then press ENTER.



Details of the recording appears.



- Play a connected DV format digital video camera and pause the playback at a desired scene.
- Press ▲ / ▼ / ◀ / ▶ to select "Rec", then press ENTER.



Recording starts.

- To pause the recording, select "Pause" by
 ▲/▼/◄/► buttons then press ENTER button.
- To stop the recording, select "Stop (Save)" by
 ▲ / ▼ / ◀ / ▶ buttons then press ENTER button.

DV Recording (Recording from a digital video camera) (Continued)

- The DV terminal of this recorder supports only input from a DV format digital video camera. It cannot output to a connected device. Some models of DV format digital video cameras may be not compatible.
- At step 5, you can enlarge the video image by selecting "Full Display", then pressing ENTER button.
- If "DV Chapter Create" is set to "Off" and you record onto a DVD-R/RW disc, chapters are automatically made according to "DVD-Video:CHP create" setting
 (p) page 162). The number of chapters has the limit. Chapters are divided with a margin of about 0.5 second or less according to the DVD-Video standard.
- DV recording does not start in the following cases:
- While recording or in the time slip mode.
- While operating TV Guide On Screen, CONTENT MENU or LIBRARY MENU.
- If the recorder's clock is not set yet.
- Within 2 minutes before programmed recording starts, or during programmed recording.
- If DV recording overlaps with programmed recording, the DV recording will stop 2 minutes before the programmed recording starts, and the programmed recording will be executed.
- DV recording does not work if the DV terminal is connected to equipment other than DV format digital video camera, such as a PC.
- Depending on the connected DV format digital video camera, the display at step 5 may not show "Manufacturer" or "Equipment".
- If the DV terminal is connected to more than one DV format digital video camera, DV recording may not work properly.
 For proper functioning of DV recording, connect only one device to the DV terminal.
- DV recording is not compatible with Relay recording.
- Do not keep the DV terminal connected unless you record from a DV format digital video camera, as it may give influence on the recorder if operated.
- If you leave "EDIT MENU DV Recording" unoperated for about 15 minutes, it switches to the full mode if "Screen protector" (page 159) is set to "On."
- When you want to record both stereo 1 and stereo 2 sounds from a DV format digital video camera, additionally make a connection to the audio input jacks on this recorder using cables such as audio/video cables supplied with the DV format digital video camera. (pp page 44)
- If a DV format digital video camera is not recognized, pull out the plug and connect it again.
- Some models of DV format digital video cameras may support a different compression format. From such equipment, recording is not possible.
- Depending on the models of DV format digital video cameras, recording may not work properly or some functions may be disabled.
- On an input source from a DV tape which is partly recorded over, chapters may not be made properly.

Library

To facilitate your collecting.

- Using Library data
- Searching for a desired title
- Viewing Library data
- Checking remaining space

HDD DVD-RAM

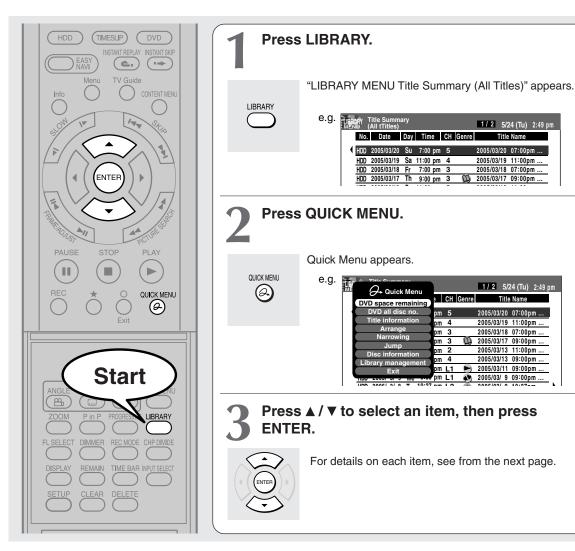
Using Library data

The recorder has a "Library Management" database which memorizes various properties of recordings made on this recorder, including date, media, title, genre, etc. Using this database, you can search for desired or available discs.

You can utilize Library data as follows.

- To search for a DVD-RAM disc that contains a desired title.
- To check or change information of a title or disc.
- To check the remaining space of a DVD-RAM disc.

Basic operation of the Library system



- To cancel this procedure, press LIBRARY button.
- The Library system does not support DVD-R/RW discs.
- Selecting a title on "LIBRARY MENU Title Summary (All Titles)", and pressing ENTER button begins playback of the title if
 the disc containing the title is loaded.
- For proper function of the Library system, use DVD-RAM discs that shows a statement on its package such as "This disc can copy images that permit copying once." If you use a DVD-RAM disc without such a statement, and then operate it on other device, the library data of the disc may not function properly.
- LIBRARY MENU may not display all characters of a registered name of a disc.

Introduction

Searching for a desired title

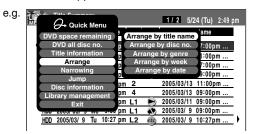
From the "LIBRARY MENU Title Summary (All Titles)", you can select a title by using ▲ / ▼ buttons. If you change the listing order or sort the titles, search may be easier.

Changing the listing order

Arrange

 From Quick Menu, select "Arrange" by ▲ / ▼ then press ENTER.

The submenu appears.



 Press ▲ / ▼ to select the listing order, then press ENTER.

Titles are arranged in selected order.

Note

 If you repeat the selection of different types of the listing order, the old one precedes the new one. For example, when you select "Arrange by genre" then "Arrange by disc no.", the order of genre is produced in the order of disc number.

Searching

Narrowing

From the Quick Menu, select "Narrowing" by ▲/
▼ then press ENTER.

The sub menu appears.



 Press ▲ / ▼ to select a narrowing condition, then press ENTER.

Sort by genre

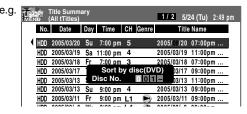
The submenu appears.

Press ▲ / ▼ buttons to select a genre, then press ENTER button.

Titles within the selected genre are sorted.

Sort by disc(DVD)

An input window appears.



Follow steps 1) and 2) below.

- Press ◄/► to select a location, then press ADJUST or ▲/▼ to enter the disc number.
- 2) Press ENTER.

Titles in the specified disc are sorted. For example, if you enter "001-", titles in discs 001, 001A and 001B are listed.

Sort by disc(HDD)

Titles in the HDD are sorted.

Sort by day

The submenu appears.

Press ▲ / ▼ buttons to select the day, then press ENTER button.

Titles recorded on the selected day are listed.

- Press O button to go back to the display for the previous narrowing condition.
- If you want to display all titles, press QUICK MENU button, then press ▲ / ▼ buttons to select "Cancel narrowings" and press ENTER button.

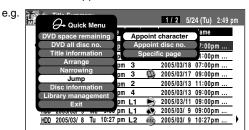
Searching for a desired title (Continued)

Jumping

Jump

 From the Quick Menu, select "Jump" by ▲/▼ then press ENTER.

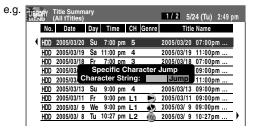
The submenu appears.



 Press ▲ / ▼ to select the jump method , then press ENTER.

Appoint character

An input window appears.



Perform steps 1) to 3) below.

 Put the cursor on the input area and press ENTER.

The on-screen keyboard appears.

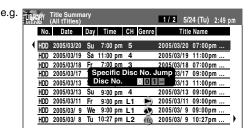
- Enter the first characters (up to three characters) of the title you are looking for.
- Press ►to select "Jump" and press ENTER.
 The title that starts with the specified characters is selected.

Note

 The input window of "Specific Character Jump" can be shifted by pressing ▲ / ▼ buttons.

Appoint disc no.

The on-screen keyboard appears.



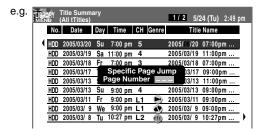
Perform steps 1) and 2) below.

- 1) Press ◄/► to select the position to enter and press ADJUST or ▲/▼ to enter the disc number. Input 3 digits, and, if necessary A or B of disc. If you input "–", you can leave the digit and the lower unspecified to search. For example, when "1 0 —" is input, titles of disc number such as 100, 100A, 102 are searched, and a title list starting from the first found one appears. It is recommended that you execute "Arrange by disc no." beforehand.
- 2) Press ENTER.

The titles of the selected number disc are displayed.

Specific page

An input window appears.



Perform steps 1) and 2) below.

- Press ▲ / ▼ or ADJUST to enter the page number.
- 2) Press ENTER.

The selected page is displayed.

Viewing Library data

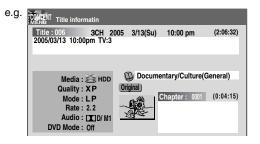
This section explains how to check and maintain the Library data.

Viewing title information

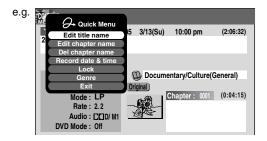
Title information

From Quick Menu, select "Title information" by
 ▲ / ▼ then press ENTER.

You can view information about the selected title.



You can do the following operations with Quick Menu. (Press QUICK MENU button to display Quick Menu. Press ▲ / ▼ buttons to select an item and press ENTER.)



"Edit title name":

The on-screen keyboard appears.

Following the procedure on page 36, enter a new name for the title.

"Edit chapter name":

(Press PICTURE SEARCH (◄◄/►►) button to display the chapter that you want to put a name for, and select the chapter.)

The on-screen keyboard appears.

Following the procedure on page 36, enter a new name for the chapter.

"Del chapter name":

(Press PICTURE SEARCH (◄◄/►►) button to display the chapter that you want to put a name for, and select the chapter.)

"Record date & time":

The cursor moves to the date so that you can correct it.

"Lock"

Set the protection for the currently selected title. The protection icon "A" appears.

"Genre":

The submenu appears.

Press ▲ / ▼ buttons to select a genre, then press ENTER button.

A name of the selected genre and the icon appear.

Note

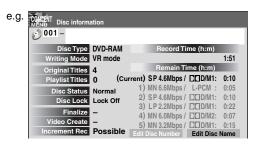
 When you change settings of a DVD-RAM disc, load the DVD-RAM disc.

Viewing disc information

Disc information

From Quick Menu, select "Disc information" by
 ▲ / ▼ then press ENTER.

You can view information about the loaded disc.



To change the number or name of the DVD-RAM disc:

- Press ◄/► to select "Edit Disc Number" or "Edit Disc Name", then press ENTER button.
- 2) Following the procedure on

 page 36, enter a new name for the disc.

To change the disc number, press ADJUST button.

Viewing Library data (Continued)

Maintenance of Library data

The recorder usually controls the Library database system automatically. However, in the following cases, you must maintain and create data manually.

- When you want to add information about a title, (for example when you use a DVD-RAM disc recorded on another device, etc.), to the Library system of the recorder.
 - → "Registering a disc manually" (□ page 144).
- When the Library database memory is full. (Up to 3000 entries can be registered. When you reach this limit, a message will appear and further additions to the Library database will be rejected. Erase unnecessary data to make space.)
 - → "Erasing unnecessary data" (page 145).
- When you want to rearrange the whole Library information from the beginning.
 - \rightarrow "Deleting all the Library information only" (\triangleright page 145).
- When you save the Library data in another DVD-RAM disc.
 - \rightarrow "Saving the Library data in a DVD-RAM disc" (\triangleright page 146).
- When you import saved Library data back into the recorder.
 - → "Re-installing the backup data" (page 146).

Note

 Save your Library data on a DVD-RAM disc. Importing Library data replaces all current database information in the recorder, including any data added after you saved the data onto a DVD-RAM disc.

■ Registering a disc manually

- Load a DVD-RAM disc that contains information you want to add.
- 2) Press LIBRARY.
- 3) Press QUICK MENU.
- Press ▲ / ▼ to select "Library management", then press ENTER.

A submenu appears.



- Press ▲ / ▼ to select "Add disc", then press ENTER.
- 6) Press ◀/► to select "Yes", then press ENTER. To cancel, select "No".

All title information is registered.

- To use title information in a DVD-RAM disc recorded on another device, as the Library data of the recorder, be sure to follow the procedure of "Registering a disc manually" to add saved data to the Library system. This information cannot be added automatically.
- If you record content on a DVD-RAM disc on the recorder and edit the content on the other device, Library data of the disc may be lost or the disc may not function properly.
- Unless a DVD-RAM disc is registered to the recorder, information of current or future titles recorded on the disc, will not registered.
- By registering a disc manually, several discs in same number consequently may be registered. In this case, the remaining time is displayed per disc or page. Execution of "Edit Disc Number" (ppage 143) is recommended.

■ Erasing unnecessary data

When the Library database is full (3000 entries).→ Select "Del title information".

- 1) Press LIBRARY.
- 2) Press ▲ / ▼ to select a title.
- 3) Press QUICK MENU.
- Press ▲ / ▼ to select "Library management" then press ENTER.
- Press ▲/▼ to select "Del title information", then press ENTER.
- 6) Press ◀/► to select "Yes", then press ENTER. Library data of the title selected in step 2) is erased.

To cancel, select "No".

To delete information of all titles in the specified data → Select "Del title information by disc".

- 1) Press LIBRARY.
- 2) Press ▲ / ▼ to select a title.
- 3) Press QUICK MENU.
- Press ▲ / ▼ to select "Library management" then press ENTER.
- Press ▲ / ▼ to select "Del title information by disc", then press ENTER.
- 6) Press ◀/▶ to select "Yes", then press ENTER. Library data of all titles in the disc you selected in step 2) is erased.

To cancel, select "No".

■ Deleting all the Library information only

Use this feature when you want to rearrange the whole Library information from the beginning.

- 1) Press LIBRARY.
- 2) Press QUICK MENU.
- Press ▲/▼ to select "Library management" and press ENTER.
- Press ▲ / ▼ to select "Delete All DVD-RAM information" or "Delete all library information". Delete all DVD-RAM information:

Deletes all Library information from a DVD-RAM disc, leaving the Library information on the HDD. **Delete all library information:**

Deletes all Library information from the HDD and a DVD-RAM disc.

- 5) Press ENTER.
- 6) Press **◄/▶** to select "Yes" and press ENTER.

Forced deletion of disc numbers

A number of an inactive disc can be deleted from the Library Management, so that it can be assigned to a new disc.

- 1) Press LIBRARY.
- 2) Press QUICK MENU.
- Press ▲ / ▼ to select "Library management", then press ENTER.
- Press ▲ / ▼ to select "Del disc no. from Library", then press ENTER.
- 5) Press ADJUST to select a number to delete, then press ENTER.

Note

 Deleting a disc number also deletes data of all titles in the disc. Viewing Library data (Continued)

■ Saving the Library data in a DVD-RAM disc

- 1) Load a DVD-RAM disc to save the Library data.
- 2) Press LIBRARY.
- 3) Press QUICK MENU.
- Press ▲ / ▼ to select "Library management", then press ENTER.
- Press ▲ / ▼ to select "Create backup", then press ENTER.
- 6) Press ◀/► to select "Yes", then press ENTER. To cancel, select "No".

■ Re-installing the backup data

- Load the DVD-RAM disc containing the Library database.
- 2) Press LIBRARY.
- 3) Press QUICK MENU.
- 4) Press ▲ / ▼ to select "Library management", then press ENTER.
- Press ▲ / ▼ to select "Re-inst all backup", then press ENTER.
- 6) Press
 / ▶ to select "Yes", then press ENTER.
 To cancel, select "No".

Note

Do not use a DVD-RAM disc which contains Library
Management data registered to another recorder for
backup data storage. Library Management format may vary
depending on the model. Adding data of a new format onto
the saved disc may prevent the data of the older format
from being re-installed.

Introduction

Recordir

Checking remaining space

You can check the remaining space of each disc prior to recording.

Viewing a number and space of a disc

DVD all disc no.

 From the Quick Menu, select "DVD all disc no." by ▲ / ▼ then press ENTER.

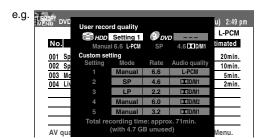
You can view numbers, names and estimated remaining spaces about all the registered discs.

To recheck the remaining space for a different "User record quality" setting

1) Press QUICK MENU.

Quick Menu appears.

 Press ▲ / ▼ to select "User record quality" then press ENTER.



- Press ADJUST and select the setting (
 page 161).
- 4) Press ENTER.

Note

 It is recommended that beforehand you select a desired title or disc by "arrange" selection then execute "DVD space remaining", because the recorder lists the remaining space from the specified disc or the one which contains the specified title.

Viewing remaining space

DVD space remaining

1) From the Quick Menu, select "DVD space remaining" by ▲ / ▼ then press ENTER.

You can view the recording titles and the estimated space remaining per disc.

Note

 You can rearrange the list by selecting "Arrange", "Narrowing" or "Jump" from Quick Menu.

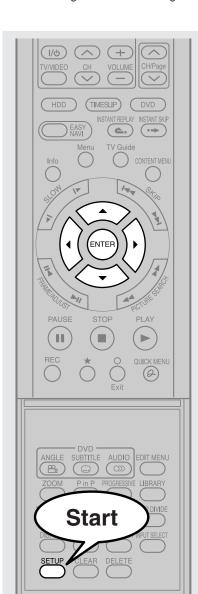
Function Setup

You can change the default settings to customize performance to your preference.

Customizing the Function Settings HDD DVD-RAM DVD-RW DVD-R DVD-VIDEO VCD

Customizing the Function Settings

You can change the default settings to customize performance to your preference.



Notes

- · SETUP button is available even during normal playback. However some items may be grayed out and they cannot be selected. In this case, try again after playback is stopped.
- SETUP button is not available during recording, Recorded Title Play, Chase Play or Pause TV modes.

Press SETUP.

SETUP

The following setup display appears.

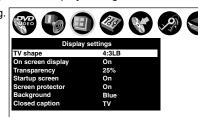
e.g.

Press **◄/** ► to select the icon of a group that contains a desired item, then press ENTER.



For details on each setting, see the next page.

e.g. When "Display settings" is selected:



Press ▲ / ▼ to select a desired item, then press ENTER.



Refer to the explanations on pages beginning from 154, to change the selection by ▲ / ▼ or other buttons, then press ENTER.



- To select another item in the same group, repeat steps 3 to 4.
- To shift to another group, press O button then repeat steps 2 to 4.

Press SETUP.



The setup display disappears and the setting is completed.

Setting	Details	Page
DVD player settings		
DVD disc menu language DVD-VIDE0	To select a preferred language for disc menus.	154
DVD audio language DVD-VIDE0	To select a preferred language for the sound track.	154
DVD subtitle language DVD-VIDE0	To select a preferred language for subtitles.	154
DVD dynamic range control HDD DVD-RAM DVD-RW DVD-R DVD-VIDEO	To turn on or off a function that makes faint sounds easier to hear even if you lower the volume during late-hour playback.	155
Karaoke vocal DVD-VIDE0	To turn on or off the vocal output during DVD KARAOKE disc playback.	155
DVD parental lock DVD-VIDE0	To turn the parental lock function on or off.	155
DVD title stop DVD-RW DVD-R DVD-VIDE0	To turn on or off a feature that automatically stops playback after a title has been viewed.	156

Picture/audio settings		
Pause/still HDD DVD-RAM DVD-RW DVD-R DVD-VIDEO	To select the resolution of still pictures. (Field/Frame)	157
Output Black level HDD DVD-RAM DVD-RW DVD-R DVD-VIDEO VCD	To select the black level of playback pictures.	157
Custom picture select HDD DVD-RAM DVD-RW DVD-R DVD-VIDE0 VCD	To select from standard or three customized picture settings.	157
Custom picture setting HDD DVD-RAM DVD-RW DVD-R DVD-VIDE0 VCD	To customize picture quality settings and store them.	157
Progressive conversion	To select the system of output signal. (Only when connected to a PROGRESSIVE TV.)	157
Play DNR HDD DVD-RAM DVD-RW DVD-R DVD-VIDE0 VCD	To select a setting for playback at a reduced noise level.	158
Audio out select HDD DVD-RAM DVD-RW DVD-R DVD-VIDEO VCD CD	To select an output sound format corresponding to your system connection.	158
Virtual surround HDD DVD-RAM DVD-RW DVD-R DVD-VIDEO	To turn on or off expansive virtual surround sound effects from just two speakers.	158
SAP	To monitor and record SAP broadcast.	158

(Continued)

Setting	Details	Page
Display settings		
TV shape HDD DVD-RAM DVD-RW DVD-R DVD-VIDEO	To select a picture size according to the aspect ratio of your TV.	159
On screen display HDD DVD-RAM DVD-RW DVD-R DVD-VIDEO VCD CD	To activate or deactivate the operational status display (e.g., ▶) on the TV screen.	159
Transparency HDD DVD-RAM DVD-RW DVD-R DVD-VIDEO VCD CD	To select the transparency of the on-screen menus relative to background pictures.	159
Startup screen	To turn on or off the start-up screen setting that makes the background picture appear automatically when turning on the power.	159
Screen protector HDD DVD-RAM DVD-RW DVD-R DVD-VIDEO VCD CD	To turn the screen saver on or off.	159
Background	To select a display status when no video signals are present.	159
Closed caption	To select where you turn on or off closed caption.	159

Operational settings		
Operation beep HDD DVD-RAM DVD-RW DVD-R DVD-VIDEO VCD CD	To turn on or off the confirmation beeper announcing when each remote command is received.	160
Recording complete beep HDD DVD-RAM DVD-RW DVD-R	To select whether or not a buzzer sounds when dubbing and certain functions are finished.	160
IR code	To switch the remote control codes that operate the recorder.	160
Instant skip interval HDD DVD-RAM DVD-RW DVD-R DVD-VIDE0 VCD CD	To set the time interval to skip when INSTANT SKIP button is pressed once.	160
Instant replay interval HDD DVD-RAM DVD-RW DVD-R DVD-VIDEO VCD CD	To set the time interval to go back when INSTANT REPLAY button is pressed once.	160
Title thumbnail point HDD DVD-RAM DVD-RW DVD-R	To select the position of the thumbnail image counting from the beginning of the title that has been recorded.	160
HDD/RAM title play HDD DVD-RAM	To activate resume play per title or continuous play.	160
Still group interval DVD-RAM	To select an interval of still picture display.	160
Priority contents	To select the playback priority between JPEG (picture) files and MP3/WMA (audio) files.	160

Setting	Details	Page
DVD recorder operation		
User record quality HDD DVD-RAM DVD-RW DVD-R	To select picture and sound quality settings for a manual program recording.	161
Picture record mode HDD DVD-RAM DVD-RW DVD-R	To make further settings when you cannot adjust the image quality with "Custom picture setting" of the "Picture/audio settings".	161
Input Black level HDD DVD-RAM DVD-RW DVD-R	To select the black level of recording pictures.	161
Aspect ratio (Video mode) DVD-RW DVD-R	To set the aspect ratio for DVD-R recording.	162
DVD compatible mode HDD DVD-RAM DVD-RW DVD-R	To set the audio for DVD-R recording.	162
DVD-Video:CHP create DVD-RW DVD-R	To set whether or not chapters are to be automatically created at a specified interval for DVD-R recording.	162
Rec DNR HDD DVD-RAM DVD-RW DVD-R	To activate or deactivate the 3D digital noise reduction.	162
3D Y/C separation HDD DVD-RAM DVD-RW DVD-R	To activate or deactivate the 3D digital filter to execute Y/C (Brightness/Color) separation.	162
Relay recording HDD DVD-RAM	To turn on or off a function that will automatically switch recording from a DVD-RAM disc to the HDD when there is less than 10 minutes of space available on the DVD-RAM disc or when there is no disc loaded.	163

Management settings		
Genre setting HDD DVD-RAM DVD-RW DVD-R	To register the frequently used genre on the menu.	163
Front Display	To set the front panel display to turn on/off in the standby mode.	163
HDD auto stop	To turn on or off a power saving function that stops the HDD after a certain period of inactivity.	163
All HDD titles delete	To delete all the titles recorded on the HDD, leaving the Library information on a DVD-RAM disc.	164
HDD format	To initialize the HDD.	164
DVD-RAM physical format DVD-RAM	To perform physical formatting of a DVD-RAM disc.	35
Software version	To display the version of the software. The version is only displayed and cannot be set.	
DVD drive software	To display the version of the DVD drive software. The version is only displayed and it cannot be set.	

Initial settings		
Language	To select a preferred language for on-screen displays (except TV Guide On Screen).	165
Time & Data setting	To set the clock of the recorder.	165

DVD player settings

DVD disc menu language

DVD-VIDEO

English:

To display disc menus in English.

French:

To display disc menus in French.

Spanish:

To display disc menus in Spanish.

Others:

To make a further language choice. After pressing ENTER button, follow steps 1) - 4) below.



- Obtain the language code of the preferred language from Language Code List (page 173).
- 2) Select the first character by pressing ▲/▼ buttons (or ADJUST button).
- Press
 buttons to shift. Select second character by pressing
 ✓ buttons (or ADJUST button).
- 4) Press ENTER button.

Note

 Some DVD video discs may not include your preset language. In this case, the recorder automatically displays disc menus consistent with the disc's initial language setting.

DVD audio language

DVD-VIDEO

English:

To play sound tracks recorded in English.

French:

To play sound tracks recorded in French.

Spanish:

To play sound tracks recorded in Spanish.

Others:

To make further choices.

After pressing ENTER button, follow steps 1) - 4) below.



- 2) Select the first character by pressing ▲ / ▼ buttons (or ADJUST button).
- Press ◀/► buttons to shift. Select second character by pressing ▲/▼ buttons (or ADJUST button).
- 4) Press ENTER button.

Note

 Some DVD video discs may be played in a different language from that you selected. A prior language may be programmed by the disc.

DVD Subtitle Language

DVD-VIDEO

English:

To display subtitles in English.

French:

To display subtitles in French.

Spanish:

To display subtitles in Spanish.

No Subtitle:

To disable subtitles.

Others:

To make a further choice.

After pressing ENTER button, follow steps 1) - 4) below.



- Obtain the language code of the preferred language from Language Code List (□ page 173).
- Select the first character by pressing ▲ / ▼ buttons (or ADJUST button).

- Press
 buttons to shift. Select the proceeding character by pressing ▲ / ▼ buttons (or ADJUST button).
- 4) Press ENTER button.

Notes

- Some DVD video discs may be set to display subtitles in a different language from that you selected. A prior subtitle language may be programmed by the disc.
- Some DVD video discs allow you to change subtitle selections only via the disc menu. In this case, press MENU button and choose the appropriate subtitle language from the selection on the disc menu.

DVD dynamic range control

HDD DVD-RAM DVD-RW DVD-R DVD-VIDEO

Turns on or off a function that makes faint sounds easier to hear even if you lower the volume during late-hour playback.

Off:

The DVD Dynamic Range Control does not function.

On:

The DVD Dynamic Range Control functions.

Notes

- This function is available only for a disc recorded in Dolby Digital format.
- Depending on the disc you play back, the actual effect of this function differs.

Karaoke vocal

DVD-VIDEO

Off:

The main vocal sound is not output.

On:

The main vocal sound is output.

Notes

- This function is available only for a DVD KARAOKE disc recorded in Dolby Digital Multi Channel format.
- If you want to enjoy KARAOKE function, connect an amplifier or other such device to this recorder.

DVD parental lock

DVD-VIDEO

DVD video discs equipped with the Parental Lock function have a predetermined limitation level. The limitation level or limitation method may differ depending on the disc. For example the whole contents of a disc may not be played back, or an extreme violent scene maybe cut or replaced automatically by another scene.

Important

 Depending on discs, it may not be evident whether the disc is compatible with Parental Lock function. Make sure that Parental Lock function you set is activated correctly.

On:

Select this to activate Parental Lock function or to change the setting.

After pressing ENTER button, follow steps 1) - 3) below.

Off:

Deactivate the Parental Lock function.

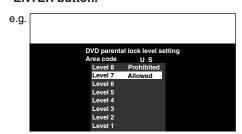
After pressing ENTER button, follow steps 1) below.

- 1) Enter a 4-digit password by using the number buttons, then press ENTER button.
 - If you make a mistake entering your password, press CLEAR button before pressing ENTER button, and re-enter the correct password.
- Press ▲/▼/◄/► buttons to move the cursor. Then press ADJUST button to enter the code of a country/area whose standards were used to rate a DVD video disc, referring to the list below.

(Continued)

Country/Area	Code
AUSTRALIA	AU
BELGIUM	BE
CANADA	CA
CHINA	CN
CHINA HONG KONG	HK
DENMARK	DK
FINLAND	FI
FRANCE	FR
GERMANY	DE
INDONESIA	ID
ITALY	ΙΤ
JAPAN	JP
MALAYSIA	MY
NETHERLANDS	NL
NORWAY	NO
PHILIPPINES	PH
RUSSIAN FEDERATION	RU
SINGAPORE	SG
SPAIN	ES
SWEDEN	SE
SWITZERLAND	CH
TAIWAN	TW
THAILAND	TH
UNITED KINGDOM	GB
UNITED STATES	US

 Select the desired limitation level by pressing ▲ / ▼ buttons, and then press ENTER button.



Unless the Parental Lock function is set to "Off", a disc that has a higher limitation level than your selected limitation level cannot be played back. For example, if you select level 7, discs exceeding level 8 are locked and cannot be played back.

When "US" is selected, its limitation level corresponds to the following settings.

Level 7: NC-17 Level 3: PG Level 6: R Level 1: G

Level 4: PG13

■ To change the limitation level of Parental Lock function

Follow step 1) - 3) above.

■ To change the password

1) Press STOP button 4 times after selecting "On" and "Off" in order, and then press ENTER button.

The password is cleared.

- Enter a new 4-digit password by using the number buttons.
- 3) Press ENTER button.

DVD title stop

DVD-RW	DVD-R	DVD-VIDEO

Off:

Plays back all following titles on the disc after the current title has been viewed.

On

Recorder is stopped after playback of current title being viewed is completed.

Picture/Audio settings

Pause/Still

HDD DVD-RAM DVD-RW DVD-R DVD-VIDEO

Auto:

Normal setting. Pause the moving image without blurring.

Frame:

Displays high resolution still image.

Output Black level

HDD DVD-RAM DVD-RW DVD-R DVD-VIDEO VCD

You can adjust the black level of the output signal.

Standard:

Normal black level.

Enhanced:

To display deeper, richer black than in "Standard" setting.

Note

• This function is not available for the progressive format.

Custom picture select

HDD DVD-RAM DVD-RW DVD-R DVD-VIDEO VCD

Select from between 4 picture settings (Normal, Setting 1-3) you stored in the memory.

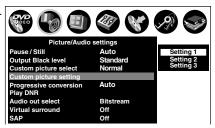
Custom picture setting

HDD DVD-RAM DVD-RW DVD-R DVD-VIDEO VCD

You can adjust fine picture quality and store up to 3 custom picture settings in the memory of the recorder.

 Press ▲ / ▼ button to select a desired setting from 3 settings, and then press ENTER button.

e.g.



 Press ▲ / ▼ buttons to select adjustable items, and then press ◄ / ▶ buttons to select each parameter.

Brightness

(0) Darker ⇔ Brighter (14)

Contrast

(-7) Lower \Leftrightarrow Higher (7)

Color

(-7) Duller \Leftrightarrow Brighter (7)

Tint

(-7) Red \Leftrightarrow Green (7)

Edge Enhance

SOFT/OFF/SHARP

Gamma

OFF/1/2

3) After adjusting the items, press ENTER button.

Progressive conversion

HDD DVD-RAM DVD-RW DVD-R DVD-VIDEO VCD

There are two types of source content in pictures recorded in DVD video discs: film content (pictures recorded from films at 24 frames per second) and video content (video signals recorded at 30 frames per second). Make this selection according to the type of content being viewed.

Auto:

Select this position normally.

The DVD player automatically detects source content, film or video, of playback source, and converts that signal in the progressive output format in an appropriate method.

Video:

The DVD player filters video signal, and converts it in the progressive output format appropriately. Suitable for playback of video content pictures.

Film:

The DVD player converts film content pictures in the progressive output format appropriately. Suitable for playback of film content pictures. The progressive output feature will be most effective under this selection.

Note

• Depending on a disc, pictures may be cut off or doubled.

Play DNR

HDD DVD-RAM DVD-RW DVD-R DVD-VIDEO VCD

Selects a setting for playback at a reduced noise level. Press ▲ / ▼ buttons to select an item then select "On" or "Off" using ◀ / ▶ buttons.

3D-DNR:

Off:

Not activated.

On:

Reduces the noise levels of brightness signals and color signals present in the video signal during playback.

Mosquito NR:

Off:

Not activated.

On:

Reduces mosquito (flicker) noise occurring in the contour sections of images.

Block NR:

Off:

Not activated.

On:

Reduces noise that appears in the form of blocks (block noise) in a portion of the screen during playback of images with rapid movement.

DNR is the abbreviation for Digital Noise Reduction.

Notes

- DNR effects vary depending on the disc.
- Detailed images may no longer be visible depending on the scene due to the effects of DNR.
- Depending on the disc or scene, "On" may produce undesirable picture artifacts or increase noises on contours. In this instance, select "Off."

Audio out select

HDD DVD-RAM DVD-RW DVD-R DVD-VIDEO VCD CD

Selects an output sound format corresponding to your audio system connection.

For details about output sound selection, see page 77.

Bitstream:

Select this when an amplifier equipped with built-in Dolby Digital, DTS or MPEG1 decoder is connected to this recorder.

When you play back a disc recorded in Dolby Digital, DTS or MPEG1 format, digital audio signal is output.

Analog 2ch:

Select this when a TV or other audio device is connected to this recorder via the ANALOG output connectors.

PCM:

Select this when a 2ch digital stereo amplifier is connected to this recorder. When you play back a disc recorded in Dolby Digital, MPEG1 or MPEG2 format, the sound is converted to the PCM (2ch) format and output.

Virtual surround

HDD DVD-RAM DVD-RW DVD-R DVD-VIDEO

This lets you playback discs with acoustic effects having greater depth and presence even when using only two speakers.

Off:

Virtual surround effect not activated.

On:

Virtual surround effect activated.

Notes

- This function is only activated when playing back a disc recorded with Dolby Digital.
- This function is only activated when "Audio Out Select" is set to "PCM" if the BITSTREAM/PCM jack of this DVD recorder is connected to an amplifier or similar device.
- When the virtual surround effect is activated, Dolby Progressive Sound may be deactivated or sound differently than usual.
- When the virtual surround effect is activated, the volume may sound differently than usual.
- Set "Virtual surround" to "Off" if the audio sounds distorted.

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SAP

SAP (Second Audio Program broadcast) is separate audio program, usually broadcast in a second language with the main language.

Off:

The main sound is received.

On:

SAP sound (second language) is received.

Display settings

TV Shape

HDD DVD-RAM DVD-RW DVD-R DVD-VIDEO

Select a picture size according to the aspect ratio of your TV.

For details on this setting, see "TV shape setting" (page 42, "INSTALLATION GUIDE").

On screen display

HDD DVD-RAM DVD-RW DVD-R DVD-VIDEO VCD CD

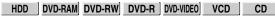
Off:

Deactivates the operational status display (e.g., \blacktriangleright) on the TV screen.

On:

Activates the operational status display (e.g., \blacktriangleright) on the TV screen.

Transparency



Selects the transparency of the recorder's on-screen menus and its relationship to the background image.

0%:25%:50%

Startup screen

Off:

The startup screen is not displayed.

On:

The startup screen appears automatically when turning on the power.

Screen protector

HDD DVD-RAM DVD-RW DVD-R DVD-VIDEO VCD CD

To reduce TV screen damage (image burn), this function disengages the pause mode of a playback image. The display returns to the normal TV screen when the recorder remains idle for more than 15 minutes. In time slip mode, the playback pause is released.

If this function is set to "On", the recorder, if freezes, may return to the normal by leaving it for about 15 minutes or longer.

Off:

Deactivates the screen protector function.

On:

Activates the screen protector function.

Note

 Toshiba does not guarantee that this function protects the TV screen by all means.

Background

Selects a screen color when receiving no video signals such as selecting a non-broadcasting channel.

Off:

No color.

Black:

Black is displayed.

Rlua.

Blue is displayed.

Important

 Depending on signal reception, the Background setting may be cleared. To prevent this, set this function to "Off".

Closed caption

To select where you turn on or off closed captioning.

Off-

To disable closed caption.

ΤV

Closed caption data is decoded on the connected TV. To turn on or off closed caption, operate the connected TV.

Recorder:

Closed caption data is decoded on this recorder. You cannot turn off closed caption on the connected TV.

Votes

- While the recorder is sending signals in the progressive output format, closed caption is disabled regardless of this setting
- Depending on the signal condition, closed caption may not be displayed properly. In this case, select "Off."

Operational settings

Operation beep

HDD DVD-RAM DVD-RW DVD-R DVD-VIDEO VCD CD

Turn on or off a confirmation beeper announcing when a command is received.

Off:

Turns off the beep sound.

On:

Turns on the beep sound.

Note

 You cannot turn off beeps for alerts irrespective of this setting.

Recording complete beep

HDD DVD-RAM DVD-RW DVD-R

This is used to set whether or not a buzzer sounds when dubbing and certain functions are finished.

Off:

Buzzer does not sound.

On:

Buzzer sounds.

Note

 You cannot turn off beeps for alerts irrespective of this setting.

IR Code

Switches the remote control codes to operate the recorder. If you use the second and third TOSHIBA HDD/DVD video recorders, set the different remote codes for each recorder to avoid confusion in the response of the recorders.

For details about this setting, refer to "Operating the second and third TOSHIBA HDD/DVD video recorders with the remote control of this recorder" (page 46, "INSTALLATION GUIDE").

DR 1: DR 2: DR 3

Instant skip interval

HDD DVD-RAM DVD-RW DVD-R DVD-VIDEO VCD CD

Sets how much time is skipped when INSTANT SKIP button is pressed.

5 sec.: 10 sec.: 30 sec.: 5 min.

Instant replay interval

HDD DVD-RAM DVD-RW DVD-R DVD-VIDEO VCD CD

Sets how far back is replayed when INSTANT REPLAY button is pressed.

5 sec.: 10 sec.: 30 sec.: 5 min.

Title thumbnail point

HDD DVD-RAM DVD-RW DVD-R

For recorded titles, sets how far a scene from the start is set as the title thumbnail.

0 sec. : 3 sec. : 10 sec. : 35 sec. : 1 min. : 5 min.

Note

Thumbnails can also be changed to other scenes.
 See page 100.

HDD/RAM title play

HDD DVD-RAM

Sets the resume play per title.

Title resume:

Remembers the point where you stop playback. Allows you to resume the playback from that point.

Serial playback:

You can play back titles (Original, Playlist) stored in the HDD or a DVD-RAM continuously. Because there is no division between titles, the recorder remembers only the last point where you stopped playback.

Still group interval

DVD-RAM

Sets an interval for display of still pictures (in seconds) when playing back a collection of still images.

1 sec. : 2 sec. : 3 sec. : 5 sec. : 10 sec. : Default

Priority Contents

To select the playback priority between JPEG (picture) files and MP3/WMA (audio) files.

Photo: JPEG files take priority over MP3/WMA files. **Audio**: MP3/WMA files take priority over JPEG files.

Note

 If this selection does not correspond to disc contents, the recorder will take a longer time to start playback of the disc.

DVD recorder operation

User record quality

HDD DVD-RAM DVD-RW DVD-R

You can select from 5 combined picture and sound quality recording settings prior to actual recording. Actual selection applied becomes the default setting for normal recording or programmed recording.

e.g.

User recor	d quality Setting 1	₽ DVI	0	
Manual	6.6 L-PCM	SP	4.6 DCID/M1	
Custom sett	ing			
Setting	Mode	Rate	Audio quality	
1	Manual	6.6	L-PCM	
2	SP	4.6	DXI D/M1	
3	LP	2.2	□x □D/M1	
4	Manual	6.0	DXID/M2	
5	Manual	3.2	DXI D/M1	
Total recording time: approx. 71min. (with 4.7 GB unused)				

- To make a combination of picture and sound quality settings.
 - Press ▲ / ▼ / ▼ / buttons to select the desired item ("Mode", "Rate", or "Audio quality").
 - 2) Press ADJUST button to change the setting of each item.
- To apply the combination of picture and sound quality settings.
 - Press ▲/▼/◄/▶ buttons to select a media to record on (HDD or DVD).
 - Press ADJUST button to change the setting.
 You can confirm the available recording time for the selected setting on the bottom screen.
 - 3) Press ENTER button.

Notes

- A combination of picture and sound quality settings can be set for the HDD and a DVD-RAM disc respectively.
- You can change the combination of picture and sound quality settings also by displaying Quick Menu on LIBRARY MENU or in stop mode, then selecting "User record quality". Either of the above methods updates the setting of this recorder.
- If you set "SP" or "LP", you cannot select "L-PCM".
- Depending on the sound quality settings, the upper limit for the picture quality setting differs.
- You can adjust the manual rate for picture quality by 0.2 Mbps from 2.0 to 9.2. (You cannot set the rate from 1.0 to 2.0.)

Picture record mode

HDD DVD-RAM DVD-RW DVD-R

Adjusts problems with the brightness of video signals of TV broadcasts or other external input.

Press ▲ / ▼ buttons to select the source, and ◀ / ▶ buttons to select the mode.

(Only use this setting when you cannot adjust the brightness satisfactorily with the Custom picture setting in Picture/Audio settings (Page 157) of this recorder.)

Important:

 This setting changes the video signal to record and the recorded signal is not returned to the original state even when this setting is changed after recording. When duplicating from a VHS tape, if you can check the video recording state beforehand, we recommend first playing back for a while and checking the overall brightness tendency, then setting an appropriate mode.

Standard:

The brightness of signals received with this recorder and external input signals are adjusted automatically. This is normally the setting to use.

Mode 1:

This setting is used to record the signals darker when the screen is too bright.

Mode 2, 3, 4:

As the number rises, the signals are recorded brighter. Use these modes to adjust the brightness.

Input Black level

HDD DVD-RAM DVD-RW DVD-R

You can adjust the black level of the input signal.

Standard:

Normal black level.

Enhanced:

Brighter black level than in "Standard" setting.

Aspect ratio(Video mode)

DVD-RW DVD-R

To set the aspect ratio when recording onto a DVD-R/RW disc.

4:3:

Fixes the aspect ratio at 4:3.

16:9:

Fixes the aspect ratio at 16:9.

Note

 When the bit rate on "User record quality" is set to "1.0(Mbps)" and "1.4(Mbps)", pictures are recorded in 4:3 aspect ratio even if "16:9" is selected.

DVD compatible mode

HDD DVD-RAM DVD-RW DVD-R

To set whether or not recording is to be performed in the format for which recording is allowed by the DVD-Video standard (video, audio and other data) during recording.

This selection is important for contents when recorded on this recorder, if they will be copied to DVD-R/RW.

Off:

For recording of contents which will not be copied to a DVD-R/RW disc.

Both the main and SAP sounds are recorded. When recording directly on a DVD-R/RW disc, this is ineffective. The recorder will automatically regard this as "Main," and record sound of the main channel only in stereo. Select "Main" or "SAP" for DVD-R/RW recording.

Main:

Records sound of the main channel only in stereo.

SAP

Records sound of the SAP channel only in stereo.

Notes

- When you select the manual rate of the picture quality between 3.0 and 3.8 and set this mode to "Main" or "SAP", the picture quality may become lower than when you set this mode to "Off".
- You can change the setting from Quick Menu.
- It is no use to make this selection when dubbing. Select when recording.

DVD-Video:CHP create

DVD-RW DVD-R

To set whether chapters are to be automatically created at a selected interval during DVD-R/RW recording.

Off-

Chapters are not set.

5 min.: 10 min.: 15 min.: 20 min.

To set the interval at which chapters are automatically created to 5, 10, 15 or 20 minutes.

Note

 The number of chapters has the upper limit, which varies depending on the disc condition. If the number reaches it, no more chapters are created.

Rec DNR

HDD DVD-RAM DVD-RW DVD-R

Selects the level of 3D digital noise reduction that can reduce picture noise depending on the scene.

Off:

Deactivates the 3D digital noise reduction.

On:

Sets the normal level.

Expanded:

Increases digital noise reduction.

Notes

- When you set "Rec DNR" to "On" or "Expanded" and set "3D Y/C Separation" to "On", the priority changes depending on the input selection if you select the S-video input. "Rec DNR" has priority, when you select the built-in tuner or composite input, "3D Y/C Separation" has priority.
- · If you want to avoid an afterimage, set this setting to "Off".

3D Y/C separation

HDD DVD-RAM DVD-RW DVD-R

The 3D digital comb filter executes Y/C (Brightness/Color) separation to reduce the color irregularity or cross color interference.

Off

Deactivates this function.

In an area where the broadcast reception is poor, select this mode.

On:

Activates this function.

In normal conditions, select this.

Note

• Refer to the "Notes" in the above "Rec DNR".

Management settings

Relay recording

HDD DVD-RAM

Turn on or off a function that makes a recording automatically onto the HDD when the remaining space of a DVD-RAM disc is reduced to less than 10 minutes or when a disc is not loaded.

Off:

Deactivates this function.

On:

Activates this function.

Notes

- The Relay recording does not function during Rate Conversion Dubbing or Line-U Dubbing.
- During playback of the HDD when you start Relay recording and CONTENT MENU is displayed, playback stops.
- During Relay recording, HDD Title Playback is not available.
- When the remaining space on the HDD is small, Relay recording does not function.
- Time slip function (page 65) is not possible while "On" is selected.

Genre setting

HDD DVD-RAM DVD-RW DVD-R

This registers a frequently used genre name onto the menu. Genre names registered here are displayed in the "Genre" on Quick Menu.

 Press ▲ / ▼ buttons to select a position in the "Current Genre List" you want to change, then press ENTER button.

A list of genres appears.

You can turn the pages using ▶ button.

2) Press ▲ / ▼ buttons to select a genre, then press ENTER button.

A list of genre names appears.

 Press ▲ / ▼ buttons to select a genre name, then press ENTER button.

The selected genre name replaces the previous one of the position you selected at step 1).

- Repeat steps 1) to 3) to register genre names.
- 5) When genre names are registered, press O button to return to "Management Settings" menu.

Front Display

To set the front panel display to turn on/off in the standby mode.

Off:

Sets the front panel display to turn off in the standby mode.

On:

Sets the front panel display to turn on in the standby mode.

HDD auto stop

HDD

Off:

Turns off the HDD auto stop mode.

On

Turns HDD drive off after recorder is idle for approximately 5 minutes.

When PLAY or REC button is pressed for the HDD while the HDD drive is turned off, it takes a little longer time to play or record.

All HDD titles delete

HDD

This deletes all the titles on the HDD. Only the recorded contents are deleted, so a DVD-RAM disc Library information and reservation history are left as is and can continue to be used.



- Press ◀/▶ buttons to select "Yes", then press ENTER button.
- Confirm the message, press </▶ buttons to select "Yes" and then press ENTER button.

Deletion of all titles starts.

If you want to cancel the deleting, select "No".

Note

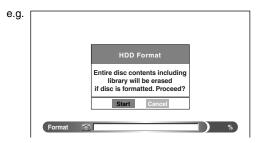
 If you periodically execute All HDD titles delete, this holds down fragmentation (increased complexity) of the disc and maintains good operability.

HDD Format

HDD

Initializes the HDD.

Normally it is not required to initialize the HDD. However when the HDD does not function correctly, initializing the HDD may solve the situation. If you initialize the HDD, all titles and library information stored in the HDD are permanently deleted.



- Press
 buttons to select "Start", then press ENTER button.
- Confirm the message, press ◄/► buttons to select "Start", and then press ENTER button

Initialization of the HDD starts.

If you want to cancel the initializing, select "Cancel".

DVD-RAM Physical Format

DVD-RAM

See 🖒 page 35.

Initial settings

Language

To set a preferred language for on-screen displays.

English:

To view on-screen display in English.

French:

To view on-screen display in French.

Time & Date setting

To set the clock manually if it is not set correctly.

1) Press ◀/► and ADJUST (II◄/►II) to set the clock.

√ buttons:

To select "Year", "Date", "Time", or "am/pm".

ADJUST (II◄/►II) buttons:

To change the date.

(▲ / ▼ buttons can also be used in addition to ADJUST (II◄/►II) buttons.

- 2) After setting all the items, press ENTER.
- Press
 to select "Yes", then press ENTER.

Note

 If the clock is set with TV Guide On Screen[™], this setting is not available.

Setting of picture and sound quality for recording

		Sound setting				
	□□ D/M1 □□ D/M2			L-P	СМ	
Picture quality setting	DVD	HDD	DVD	HDD	DVD	HDD
SP	Yes	Yes	Yes	Yes	No	No
LP	Yes	Yes	Yes	Yes	No	No
MN	Yes	Yes	Yes	Yes	Yes	Yes

Others

- Before calling service personnel
- Error codes on the display window
- Recording duration
- Language Code List
- Specification

Before calling service personnel

If you experience any of the following difficulties while using this unit, check the list below before consulting your nearest Toshiba dealer.

Power

■ The power is not turned on.

- The power cord is not connected securely.
 - → Connect the power cord securely.

Connection to your TV

■ There is no TV picture.

- The video cable to this recorder and your TV is not connected securely.
 - → Connect the video cable to this recorder and your TV securely.
- The input select on your TV is not set property.
 - → Select the input to which this recorder is connected.

TV reception

■ There is no picture.

- The antenna cable is not connected securely.
 - → Reconnect the antenna cable securely.

■ There is poor reception.

- Channel settings are not completed.
 - → Set the channel settings.
- The antenna cable is not connected securely.
 - → Reconnect the antenna cable securely.
- · Antenna signal is poor.
 - $\rightarrow\!$ Consult your dealer for adjustment.

Playback

A DVD or CD does not play.

- The format of the recorded data does not correspond to this recorder, or the region number is neither "1" nor "ALL".
 - \rightarrow Check the disc.
- A defective or dirty disc is inside.
 - → Change the disc.
- The HDD mode is selected.
 - \rightarrow Press DVD button.

■ The HDD does not play.

- The DVD mode is selected.
 - \rightarrow Press HDD button.

■ During playback, picture noise appears.

- Picture noise may appear in the following cases. It is not a malfunction.
 - → There is picture noise in the original recording.
 - → Weather, reception conditions may cause noise.
 - → The data transmission rate is set to low.
 - → The image data processing of this recorder cannot follow dynamic movement on the screen. (High video data rate)
 - ightarrow A physical error has occured on the DVD disc.

If an error occurs while reading data of a disc, blocknoises may be produced there. Repeated reading of this location where the error occurred (retry) can decrease the generation of block noise. However, it can also raise the possibility of unintended delays or stops of playback. In order to prevent them, the recorder limits the number of times of retry.

Recording

Cannot be recorded on a DVD-RAM disc.

- The disc is protected from deleting data.
 - → Set the write-protect tab to the opposite of "PROTECT" (□ page 8).
- The disc is protected by a PC or the recorder.
 - → Disable the protection on the device which protected the disc.
- The disc space is not sufficient.
 - → Delete unwanted data (page 52) or prepare a new disc.
- The disc is not initialized.
 - \rightarrow Initialize the disc (\square) page 34).
- The disc may contain errors.
 - \rightarrow Complete the physical format on the disc (\square) page 35).
- The physical format on the disc is not completed.
 - → Complete the physical format on the disc (page 35).

Cannot be recorded on the HDD.

- The DVD mode is selected.
 - → Press HDD button.
- The disc space of the HDD is not sufficient.
 - → Delete unwanted data (□ page 52) or move the contents to DVD-RAM discs (□ page 106).
- Some causes such as power failure may set the recorder to reject the operation to protect the HDD.
 - → Copy necessary contents recorded in the HDD to a DVD-RAM disc, and initialize the HDD.

TV Guide On Screen

TV program list does not appear when TV Guide is pressed.

- → Leave the recorder turned off overnight.
- →Check the connection and setup TV Guide On Screen[™] again.
- →Listings are not provided for satellite services.
- If you are using a cable box:
- →Ensure the G-LINK cable is connected and its IR transmitter (the G-LINK wand) is placed correctly in front of the cable box. See page 25, "INSTALLATION GUIDE".
- →Leave the cable box turned on all of the time and turn off the recorder when not in use or overnight.
- → Consult your service provider for more information.

Before calling service personnel (Continued)

Remote control

■ The remote control does not work.

- The batteries in the remote control are exhausted.
 - → Replace all the batteries in the remote control (page 18, "INSTALLATION GUIDE").
- The light emitter of the remote control is not pointed at the receptor of this recorder.
 - → Point the emitter of the remote control at the receptor of this recorder.
- The receptor of this recorder is located too far away from the remote control.
 - → Operate the remote control within 7 meters (23 ft) from the receptor of this recorder.
- There are obstacles between the remote control and this recorder.
 - → Remove any obstacles.
- The receptor is disturbed by sunlight or fluorescent light.
 - → Change the place of this recorder or shield the light.
- The remote mode is not appropriate.
 - → Adjust the remote mode of the remote control and this recorder (□ page 46, "INSTALLATION GUIDE").
- The setting of the TV/DVD switch is not correct.
 - ightarrow Set the TV/DVD switch to the equipment to operate.

Clock

■ The clock blinks.

 \rightarrow Set the clock (\square) page 165).

Error codes on the display window

The recorder display shows error codes in addition to the message screen.

Main examples are as follows.

The "**" in the "ERR - **" message indicates an error code. To delete this display, press DISPLAY button on the remote control.

Error code	Description				
ERR-01	Error detected in the physical format.				
ERR-10	Exceeded volume detected.	When creating a DVD-Video			
ERR-11	Exceeded number of titles detected.				
ERR-12	Exceeded number of chapters detected.				
ERR-13	Copy protection information detected.				
ERR-14	DVD disc access error detected.				
ERR-15	Other errors detected.				
ERR-16	HDD access error detected.				
ERR-17	Wide image recorded at 1.4 Mbps detected.				
ERR-18	Different aspects detected in the same part.				
ERR-19	Different resolutions detected in the same part.				
ERR-1A	Different sound quality modes detected in the same part.				
ERR-1B	Invalid control information detected.	_			
ERR-1C	Parts created in other recorder.	_			
ERR-1D	Parts created with "DVD compatible mode = Off" detected.				
ERR-1E	Invalid parts detected.	-			
ERR-1F	Unexpected error detected.	-			
ERR-2E	Menu encode error detected.	When creating a DVD-Video			
ERR-2F	Overflow of the menu size detected.	When recording on DVD-R/RW			
ERR-30	Exceeded maximum number of menus detected.	When dubbing to DVD-R/RW			
ERR-31	Recovery writing executed from compatibility of drive and disc.	-			
ERR-32	Incompatibility of disc format detected.	When recording on DVD-R/RW			
ERR-33	Disc protected.	_			
ERR-34	Disc protected or system control data error detected.				
ERR-35	Exceeded volume in disc budget calculation detected.				
ERR-36	Recording failed. (Title not saved.)				
ERR-37	Recording failed. (Title saved.)				
ERR-38	Writing failed. (Title not reserved)				
ERR-39	Writing failed. (Title saved.)	_			
ERR-3A	Unexpected error detected.				
ER-7000	Possible error detected in the HDD.				
ER-000C	Turning on the power failed.	_			
ER-FAN	An irregular stop of the ventilation fan detected.				

Note

[•] If you find an error code other than listed above, consult your nearest TOSHIBA dealer.

Recording duration

Sound rate	DD1 (192kHz)		<u>z</u>)	DD2 (384kHz)		L-PCM							
Picture	ΗП	DD	DVD-	RAM	НΕ	DO	DVD	-RAM	Η	DD.	DVD-	-RAM	Remarks
quality rate	Hour	Minute	Hour	Minute	Hour	Minute	Hour	Minute	Hour	Minute	Hour	Minute	
1.0	284	53	80	06	246	44	07	00	136	48	03	52	
1.4	215	28	06	07	192	54	05	28	118	28	03	21	
2.0	154	21	04	22	142	25	04	02	97	17	02	44	Picture quality rate for LP with D/M2.
2.2	141	58	04	01	131	48	03	44	92	12	02	36	Picture quality rate for LP with D/M1.
2.4	131	25	03	43	122	40	03	28	87	38	02	28	
2.6	122	19	03	27	114	42	03	14	83	30	02	21	
2.8	114	24	03	14	107	43	03	02	79	44	02	14	
3.0	107	27	03	02	101	32	02	52	76	17	02	08	
3.2	101	18	02	51	96	01	02	42	73	80	02	03	
3.4	95	48	02	42	91	04	02	34	70	14	01	58	
3.6	90	53	02	33	86	36	02	26	67	33	01	53	
3.8	86	26	02	26	82	34	02	19	65	3	01	49	
4.0	82	24	02	19	78	53	02	13	62	45	01	45	
4.2	78	44	02	13	75	30	02	07	60	36	01	41	
4.4	75	23	02	07	72	25	02	02	58	35	01	38	Picture quality rate for SP with D/M2.
4.6	72	18	02	02	69	34	01	57	56	42	01	35	Picture quality rate for SP with D/M1.
4.8	69	27	01	57	66	56	01	52	54	56	01	32	
5.0	66	50	01	52	64	29	01	48	53	17	01	29	
5.2	64	23	01	48	62	13	01	44	51	43	01	26	
5.4	62	8	01	44	60	06	01	41	50	15	01	24	
5.6	60	1	01	40	58	07	01	37	48	52	01	21	
5.8	58	3	01	37	56	16	01	34	47	33	01	19	
6.0	56	12	01	34	54	32	01	31	46	18	01	17	
6.2	54	28	01	31	52	54	01	28	45	07	01	15	
6.4	52	50	01	28	51	22	01	26	44	00	01	13	
6.6	51	18	01	26	49	55	01	23	42	55	01	11	
6.8	49	51	01	23	48	32	01	21	41	54	01	09	
7.0	48	29	01	21	47	14	01	19	40	56	01	80	
7.2	47	11	01	18	46	01	01	16	40	00	01	06	
7.4	45	58	01	16	44	51	01	14	39	7	01	05	
7.6	44	48	01	14	43	44	01	13	38	16	01	03	
7.8	43	41	01	12	42	41	01	11	37	28	01	02	
8.0	42	38	01	11	41	40	01	09	36	41	01	00	Manual maximum setting for L-PCM.
8.2	41	38	01	09	40	42	01	07					
8.4	40	40	01	07	39	47	01	06					
8.6	39	45	01	06	38	55	01	04					
8.8	38	53	01	04	38	04	01	03					
9.0	38	2	01	03	37	16	01	01					
9.2	37	14	01	01	36	30	01	00					Maximum value for the manual mode.

- The recording durations listed above are for reference purposes only and are not guaranteed. Recording durations
 may vary.
- The recording durations for DVD-RAM discs listed above are applicable to DVD-RAM discs that have been initialized.
 Actual recording duration may vary depending on the disc used.
- If you subtract the actual recording duration from the duration listed in this table, the calculated time period does not represent the remaining time.
- The consumption of space may vary depending on the picture and sound conditions of the recorded content.
- Use the remaining disc space display feature to see the remaining space in the HDD and a DVD-RAM disc.
- One continuous recording cannot exceed in any case 9 hours.
- The number of titles cannot exceed 99 for a DVD-RAM/R/RW disc or 396 for the HDD. If the number of recorded titles reaches these limits, you cannot record even if there is a residual quantity.

For D D /M1 and D D /M2, the digital recording technology for consumer products of Dolby Laboratories is used. Setting 1 (D D /M1) records in Dolby Digital at 192 kbps, and Setting 2 (D D D /M2) records at 384 kbps.

Language Code List

Table of languages and their abbreviations

Abbreviation	Language
CHI (ZH) DUT (NL) ENG (EN) FRE (FR) GER (DE) ITA (IT) JPN (JA) KOR (KO) MAY (MS)	No alternate language Chinese Dutch English French German Italian Japanese Korean Malay
SPA (ES) AA AB AF AM AR AS AY	Spanish Afar Abkhazian Afrikaans Amharic Arabic Assamese Aymara
AZ BA BE BG BH BI BN	Azerbaijani Bashkir Belorussian Bulgarian Bihari Bislama Bengali, Bangla
BO BR CA CO CS CY DA	Tibetan Breton Catalan Corsican Czech Welsh Danish Bhutani
EL EO ET EU FA FI FJ	Greek Esperanto Estonian Basque Persian Finnish
FO FY GA GD GL	Fiji Faroese Frisian Irish Scottish Gaelic Galician

Abbreviation	Language
GN	Guarani
GU	Gujarati
HA	Hausa
HI	Hindi
HR	Croatian
HU	Hungarian
HY	Armenian
IA	Interlingua
ΙE	Interlingue
IK	Inupiak
IN	Indonesian
IS	Icelandic
IW	Hebrew
JI	Yiddish
JW	Javanese
KA	Georgian
KK	Kazakh
KL	Greenlandic
KM	Cambodian
KN	Kannada
KS	Kashmiri
KU	Kurdish
KY	Kirghiz
LA	Latin
LN	Lingala
LO	Laotian
LT	Lithuanian
LV	Latvian, Lettish
MG	Malagasy
MI	Maori
MK	Macedonian
ML	Malayalam
MN	Mongolian
MO	Moldavian
MR	Marathi
MT	Maltese
MY	Burmese
NA	Nauru
NE	Nepali
NO	Norwegian
OC	Occitan
OM	(Afan) Oromo
OR	Oriya
PA	Panjabi
PL	Polish

PS

Pashto, Pushto

Abbreviation	Language
PT	Portuguese
QU	Quechua
RM	Rhaeto-Romance
RN	Kirundi
RO	Rumanian
RU	Russian
RW	Kinyarwanda
SA	Sanskrit
SD	Sindhi
SG	Sango
SH	Serbo-Croatian
SI	Singhalese
SK	Slovak
SL	Slovenian
SM	Samoan
SN	Shona
SO	Somali
SQ	Albanian
SR	Serbian
SS	Siswati
ST	Sesotho
SU	Sundanese
SV	Swedish
SW	Swahili
TA	Tamil
TE	Telugu
TG	Tajik
TH	Thai
TI	Tigrinya
TK	Turkmen
TL	Tagalog
TN	Setswana
ТО	Tongan
TR	Turkish
TS	Tsonga
TT	Tatar
TW	Twi
UK	Ukrainian
UR	Urdu
UZ	Uzbek
VI	Vietnamese
VO	Volapük
WO	Wolof
XH	Xhosa
YO	Yoruba
ZU	Zulu

Specification

■ Power requirement during operation 34W

■ Power requirement at standby

17W or below (Front panel display: on) 16W or below (Front panel display: off)

■ Power supply

120V AC, 60 Hz

■ Mass

5.4kg

■ External dimension

Width 430 x Height 62 x Depth 334mm

■ Incoming channels

TV: 2-69CH, Cable:1-125CH

■ Antenna input/output terminal

VHF/UHF: 75Ω, F Connector

■ Signal system

Standard NTSC Color TV system

■ Laser

Semiconductor laser, Wavelength: 650nm/780nm

■ Format

DVD-Video format

■ Image recording system

MPEG2

■ Sound recording system

Dolby Digital M1, M2, Linear PCM

■ Internal hard disk

160 GB

■ VIDEO input

1.0Vp-p (75 Ω), Sync signal negative, Pin jack x 3 systems, 2 at rear, 1 in front

■ VIDEO output

1.0Vp-p (75 Ω), Sync signal negative, Pin jack x 2 systems, 1 at rear

■ S-VIDEO input

(Y) 1.0Vp-p (75 Ω), Sync signal negative, Mini DIN4 Pin x 3 systems

(C) 0.286Vp-p (75 Ω), 2 at rear, 1 in front

■ S-VIDEO output

(Y) 1.0Vp-p (75 Ω), Sync signal negative, Mini DIN4 Pin x 2 systems

(C) 0.286Vp-p (75 Ω), 1 at rear

■ COMPONENT output (Y, PB, PR)

Y output (green), 1.0Vp-p (75 Ω), Sync signal negative, Pin jack x 1 system P_B, P_R output (blue, red), 0.7Vp-p (75 Ω), Pin jack x 1 system each

■ AUDIO input

2.0V (rms), $22k\Omega$ or above, pin jack (L, R) x 3 systems 2 at rear, 1 in front

■ AUDIO output

2.0V (rms), $2.2k\Omega$ or below, pin jack (L, R) x 1 systems 1 at rear

■ DIGITAL AUDIO OUTPUT BITSTREAM/PCM (OPTICAL terminal)

Optical connector x 1 system

■ G-LINK jack

This is for connection of the supplied G-LINK cable only.

■ DV input

4-pin x 1 in front

■ Remote control

Wireless remote control (SE-R0144)

Operating conditions

Temperature: 41°F ~ 95°F (5°C ~ 35°C), Position: Horizontal

■ Clock display

12 hour digital display

■ Clock accuracy

Quartz (monthly deviation: approximately ± 30 seconds)

- This model complies with the below specifications.
- Designs and specifications are subject to change without notice.
- This model may not be compatible with features and/or specifications that may be added in the future.
- The Illustrations and screens described in this manual may be exaggerated or simplified for easy recognition and may be slightly different from the actual unit.

Limited United States Warranty

Digital Audio Video ("DAV") Product-Depot Repair Warranty

Toshiba America Consumer Products, L.L.C,. ("TACP") makes the following limited warranties to original consumers in the United States. THESE LIMITED WARRANTIES EXTEND TO THE ORIGINAL CONSUMER PURCHASER OR ANY PERSON RECEIVING THIS DAV PRODUCT AS A GIFT FROM THE ORIGINAL CONSUMER PURCHASER AND TO NO OTHER PURCHASER OR TRANSFEREE.

DAV PRODUCTS PURCHASED IN THE U.S.A. AND USED ANYWHERE OUTSIDE OF THE U.S.A., INCLUDING, WITHOUT LIMITATION, CANADA AND MEXICO, ARE NOT COVERED BY THESE WARRANTIES.

DAV PRODUCTS PURCHASED ANYWHERE OUTSIDE OF THE U.S.A., INCLUDING, WITHOUT LIMITATION, CANADA AND MEXICO, AND USED IN THE U.S.A., ARE NOT COVERED BY THESE WARRANTIES.

Limited Ninety (90) Day Warranty on Labor*

TACP warrants this DAV Product and its parts against defects in materials or workmanship for a period of ninety (90) days after the date of original retail purchase. DURING THIS PERIOD, TACP WILL, AT TACP'S OPTION, REPAIR OR REPLACE A DEFECTIVE PART WITH A NEW OR REFURBISHED PART WITHOUT CHARGE TO YOU FOR PARTS OR LABOR.

Limited One (1) Year Warranty on Parts*

TACP further warrants the parts in this DAV Product against defects in materials or workmanship for a period of one (1) year after the date of original retail purchase. DURING THIS PERIOD, TACP WILL, AT TACP 'S OPTION, REPAIR OR REPLACE A DEFECTIVE PART WITH A NEW OR REFURBISHED PART WITHOUT CHARGE TO YOU FOR THE PART, PROVIDED THAT IF A DEFECTIVE PART IS REPAIRED OR REPLACED AFTER NINETY (90) DAYS FROM THE DATE OF ORIGINAL RETAIL PURCHASE, THE CONSUMER SHALL PAY ALL LABOR CHARGES INVOLVED IN THE REPAIR OR REPLACEMENT THEREOF.

*Rental Units

The warranty for DAV Product rental units begins on the date of the first rental or thirty (30) days after the date of shipment to the rental firm, whichever comes first.

*Commercial Units

DAV Products sold and used for commercial purposes have a limited warranty for all parts and labor, which warranty begins on the date of original retail purchase and ends on the date that is ninety (90) days thereafter.

Owner's Manual and Product Registration Card

Read this owner's manual thoroughly before operating this DAV Product.

Complete and mail the enclosed product registration card or register your DAV Product on-line at www.tacp.toshiba.com/service as soon as possible. By registering your DAV Product you will enable TACP to bring you new products specifically designed to meet your needs and help us to contact you in the unlikely event a safety notification is required under the Consumer Product Safety Act. Failure to complete and return the product registration card does not diminish your warranty rights.

Your Responsibility

THE ABOVE WARRANTIES ARE SUBJECT TO THE FOLLOWING CONDITIONS:

- You must retain your bill of sale or provide other proof of purchase.
- (2) All warranty servicing of this DAV Product must be made by the Depot Warranty Repair Center specified by the TACP Consumer Solutions Center.
- (3) The warranties from TACP are effective only if the DAV Product is purchased and operated in the Continental U.S.A. or Puerto Rico.
- (4) Labor service charges for set installation, setup, adjustment of customer controls and installation or repair of antenna systems are not covered by this warranty. Reception problems caused by inadequate antenna systems are your responsibility.
- (5) Warranties extend only to defects in materials or workmanship as limited above and do not extend to any DAV Product or parts that have been lost or discarded by you or to damage to DAV Product or parts caused by fires, misuse, accident, Acts of God, such as lightning or fluctuations in electric power, improper installation, improper maintenance or use in violation of instructions furnished by TACP; use or malfunction through simultaneous use of this DAV Product and connected equipment; or to units that have been modified or had the serial number removed, altered, defaced, or rendered illegible.

How to Obtain Warranty Services

If, after following all of the operating instructions in this manual and checking the section "Before calling service personnel", you find that service is needed:

- For instructions on how to obtain warranty service for your DAV Product, contact TACP's Consumer Solution Center toll-free at 1-800-631-3811.
- (2) You must include a copy of original bill of sale or other proof of purchase along with the entire DAV Product to the Depot Warranty Repair Center specified by the TACP Consumer Solutions Center. You are responsible for all inbound transportation and insurance charges for the DAV Product to the Depot Warranty Repair Center specified by the TACP Consumer Solutions Center.

For additional information, visit TACP's web site: www.tacp.toshiba.com.

ALL WARRANTIES IMPLIED BY THE LAW OF ANY STATE OF THE U.S.A., INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE EXPRESSLY LIMITED TO THE DURATION OF THE LIMITED WARRANTIES SET FORTH ABOVE. WITH THE EXCEPTION OF ANY WARRANTIES IMPLIED BY THE LAW OF ANY STATE OF THE U.S.A. AS HEREBY LIMITED, THE FOREGOING WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, GUARANTEES, AGREEMENTS, AND SIMILAR OBLIGATIONS OF TACP WITH RESPECT TO THE REPAIR OR REPLACEMENT OF ANY PARTS. IN NO EVENT SHALL TACP BE LIABLE FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, LOST PROFITS, BUSINESS INTERRUPTION, OR MODIFICATION OR ERASURE OF RECORDED DATA CAUSED BY USE, MISUSE OR INABILITY TO USE THIS DAV PRODUCT).

No person, agent, distributor, dealer or company is authorized to change, modify or extend the terms of these warranties in any manner whatsoever. The time within which an action must be commenced to enforce any obligation of TACP arising under the warranty or under any statute, or law of the United States or of any state thereof, is hereby limited to ninety (90) days from the date you discovered or should have discovered, the defect. This limitation does not apply to implied warranties arising under state law.

THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH MAY VARY FROM STATE TO STATE IN THE U.S.A. SOME STATES OF THE U.S.A. DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, WHEN AN ACTION MAY BE BROUGHT, OR THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE PROVISIONS MAY NOT APPLY TO YOU UNDER SUCH CIRCUMSTANCES.

TOSHIBA

- IMPORTANT -CANADIAN WARRANTY INFORMATION GARANTIE CANADIENNE



STANDARD WARRANTY TYPE OF SET

DVD Player DVD/VCR Combination Home Theatre in a Box **DVD** Recorder Portable DVD

GARANTIE NORMALE TYPE D'APPAREIL

Lecteur DVD DVD/magnétoscope combo Cinéma maison dans une boîte Enregistreur DVD

DVD Portatif

WARRANTY PERIOD 12 MONTHS DURÉE DE LA GARANTIE:

12 MOIS

CANADIAN WARRANTY

Toshiba of Canada Limited (TCL) makes the following limited warranties to original consumers in Canada. Please retain your "Bill of Sale" as proof of purchase. To obtain a "Canadian Warranty" please register online at www.toshiba.ca.

GARANTIE CANADIENNE

1) Toshiba du Canada Limitée (TCL) offre au Canada les garanties limitées suivantes aux consommateurs originaux. Veuillez conserver votre « facture » comme preuve d'achat. Pour obtenir une garantie canadienne, veuillez vous inscrire en ligne à www.toshiba.ca

Canadian Warranty Information

Should service be required on this unit during the one year warranty period, TCL's option will be to repair or exchange the defective unit. It will be necessary to follow this procedure:

Contact: Toshiba of Canada Limited at the Consumer Electronics Group, customer support line.

Phone: 1-800-268-3404

ceg customer support@toshiba.ca Email:

All in-warranty repairs must be made by an authorized TCL service centre.

For service exchange TCL will arrange to have the unit picked up by courier and a replacement unit will be returned via same courier. (Note: A major credit card number will be required as a charge of \$25.00 will apply if no fault is found with the unit.) During the first 3 months of ownership, a new unit will be supplied as a replacement. During the remainder of the warranty period a service-renewed unit will be supplied.

The original "Bill of Sale" must be provided as proof of purchase (it will be returned with the replacement unit.) This 12-month warranty will be strictly adhered to.

Out of warranty units should be repaired by a TCL authorized service centre.

Note: It is the responsibility of the owner to ensure proper packaging. Should damage in shipping occur, due to poor packaging, a charge back for the repair will result.

This warranty applies to the original purchaser only and is not transferable.

This warranty does not apply to sets that have been subjected to misuse, neglect, accident, physical damage or acts of

Sets with the serial number removed, altered, replaced or defaced will not be covered by this warranty,

The warranties from TCL are effective only if the product is purchased in Canada from an authorized TCL dealer and operated in Canada.

Products utilized for rental or commercial purposes are not covered by this warranty.

This warranty is in lieu of all other warranties, guaranties or agreements, whether expressed or implied, and no person, agent distributor, dealer, service centre or company is authorized to change, modify or extend its terms in any manner whatsoever.

Information sur la garantie Canadienne

Si vous avez besoin de service sur cet appareil au cours le l'année de garantie, Toshiba du Canada Limitée aura l'option de réparer ou échanger l'appareil défectueux. Vous devrez suivre la procédure suivante:

Contact: Toshiba du Canada Limitée au Groupe Électronique

aux consommateurs, service à la clientèle. Tél:

1-800-268-3404

Courriel: ceg_customer_support@toshiba.ca

Toutes les réparations au cours de la garantie doivent être faites par un centre de service autorisé Toshiba.

Pour un échange TCL s'assurera qu'un service de courrier ramassera l'unité et qu'un appareil de remplacement soit expédié par le même service de courrier.

(Note: Un numéro de carte de crédit sera requis car une charge de 25.00\$ sera appliquée si toutefois l'appareil n'avait

aucun problème de fonctionnement.) Une nouvelle unité sera fournie comme remplacement durant les premiers 3 mois de propriété. Par contre durant la balance de la garantie une unité remise à neuf sera fournie.

La «facture originale doit être fournie comme preuve d'achat (elle vous sera retournée avec l'unité de remplacement.)

Cette garantie de 12 mois sera strictement adhérée. Les unités hors de garantie devraient être réparées par un centre de service autorisé Toshiba.

Note: C'est la responsabilité du propriétaire de s'assurer que l'emballage est adéquat. Vous serez facturé pour toutes réparations causées par des dommages encourus à cause d'un emballage non adéquat.

Cette garantie est octroyée à l'acheteur initial et n'est pas transférable. Cette garantie ne s'aplique pas aux appareils qui ont été sujets aux abus, négligences, accidents, dommages physiques ou actes naturels.

Les appareils dont le numéro de série a été enlevé, altété, remplacé ou barbouillé ne sont pas couverts par cette garantie.

Les garanties de TCL sont valides seulement sur les unités qui sont achetées et utilisées au Canada d'un marchand autorisé

Cette garantie ne couvre pas les produits de location ou à usage commercial. Cette garantie remplace toutes autres garanties ou ententes exprimées ou sous-entendues. Aucune personne, agent, distributeur, concessionaire ou compagnie n'est autorisé à changer, modifier ou prolonger les termes de cette garantie de quelque façon que ce soit.

Memo

Memo