LITEON®

LITE-ON IT CORPORATION

HDD/DVD Recorder

HD-A940/960/970 Series*

User's Manual

* : HD-A940G, HD-A940GX, HD-A960G, HD-A960GX, HD-A970GX

RW DVD+R DL   DVD ±R/+RW/-R/-RW   mpeg4   DivX®

SHOWVIEW®   HDMI™   DOLBY DIGITAL STEREO CREATOR

*The HDMI connection of this DVD recorder features HDCP technology for the purpose of content protection. Connecting the recorder to a TV via an HDMI-to-DVI cable may lead to loss of signal if the TV is not DVI/HDCP-compliant.

*Please refer to Model Comparison Chart on the back cover for the features supported by each model.

Important Safety Instructions

1. **READ INSTRUCTIONS -** Read the safety and operation instructions carefully before using this product.

2. **RETAIN INSTRUCTIONS -** Retain the safety and operation instructions for future reference.

3. **HEED WARNINGS -** Observe warnings listed in the manual.

4. **FOLLOW INSTRUCTIONS -** Follow the safety and operation instructions when using this product.

5. **CLEAN -** Use a dry cloth for cleaning.

6. **VENTILATION** - Do not block any ventilation openings of this product.

7. **MOISTURE -** Do not use this product near water, and be sure to prevent this product from being exposed to any dripping or splashing.

8. **HEAT -** Do not install this product near any heat sources**,** such as radiators, heat registers, stoves or other devices (including amplifier) which produce heat.

9. **POLARIZATION -** Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.

10. **POWER CORD -** Protect the power cord from being walked on or pinched, particularly at plugs, convenience receptacles and the point where they exit from the product.

11. **ACCESSORIES/ATTACHMENTS -** Use only accessories/attachments specified by the manufacturer.

12. **USAGE -** Unplug this product during lightning storms or when it is not used for long periods of time.

13. **CART -** Use only cart, stand, tripod bracket or table specified by the manufacturer or sold with the product. When a cart is used, operate carefully to prevent the objects from tip-over.

14. **SERVICING -** Contact qualified personnel when servicing is needed. Servicing is required when this product has been damaged in any way, for example, when the power cord or plug is damaged; liquid has been spilled on the product; objects have fallen into the product; the product has been exposed to rain or moisture; the product does not work normally; or the product has been dropped.

15. **BATTERY** - To prevent battery leakage which may result in bodily injury, property damage or damage to the unit, please follow the instructions listed below when using the product's remote control.

   • Install **all** batteries correctly, with **+** and **-** signs matching the marks indicated.

   • Do not mix batteries (**old** and **new** or **carbon** and **alkaline,** etc.)

   • Remove batteries when the remote is not used for a long time.

16. **WASTE -** End-of-life units should be discarded in accordance with your local environmental regulations. **For disposal or recycling information, please contact your local authorities or the Electronic Industries Alliances: www.eias.org**

Warning, Caution and Others

CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN

The lighting flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated 'dangerous voltage' within the product enclosure that may be of sufficient magnitude constitute a risk of electric shock to humans.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

CAUTION!
TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE THE COVER OF THIS UNIT. THERE ARE NO USER SERVICEABLE PARTS INSIDE. REFER SERVIC-ING TO QUALIFIED SERVICE PERSONNEL.

IMPORTANT FOR LASER PRODUCTS
1. CLASS 1 LASER PRODUCT
2. **DANGER**: Visible and invisible laser radiation when open and interlock failed or defeated. Avoid direct exposure to beam.
3. **CAUTION**: Do not open the top cover. There are no user serviceable parts inside the unit; leave all servicing to qualified service personnel.

CAUTION!
THIS PRODUCT UTILIZES A LASER.USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE. DO NOT OPEN THE COVER AND DO NOT REPAIR YOURSELF. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

WARNING
TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK OR PRODUCT DAMAGE, DO NOT EXPOSE THIS APPARATUS TO MOISTURE AND ENSURE THAT OBJECTS FILLED WITH LIQUIDS, SUCH AS VASES, SHALL BE PLACED AWAY FROM THE UNIT.

CAUTION!
• CD-R/RW discs recorded using a personal computer or a CD Recorder may not play if the disc is damaged or dirty, or if there is dirt or condensation on the player lens.
• Unfinalized CD-R/RW discs can be played, but not all time information (playing time, etc.) will be displayed.
• Check the copyright laws in your country before record-ing from DVD VIDEO, SVCD, Video CD, Audio CD, MP3 and JPEG discs. Recording of copyrighted material may infringe copyright laws.

CAUTION! – ⏻ POWER BUTTON
Disconnect the main plug to shut the power off completely. The POWER button in any position does not disconnect the main line. Power can be controlled from the remote.

PRODUCTS WITH 525P/625P PROGRESSIVE SCAN OUTPUTS NOTICE REQUIREMENTS

"CONSUMERS SHOULD NOTE THAT NOT ALL HIGH DEFINITION TELEVISION SETS ARE FULLY COMPATIBLE WITH THIS PRODUCT AND MAY CAUSE ARTIFACTS TO BE DISPLAYED IN THE PICTURE. IN CASE OF 525 OR 625 PROGRESSIVE SCAN PICTURE PROBLEMS, IT IS RECOMMENDED THAT THE USER SWITCH THE CONNECTION TO THE 'STANDARD DEFINITION' OUTPUT. IF THERE ARE QUESTIONS REGARDING THE TV SET COMPATIBILITY, PLEASE CONTACT OUR CUSTOMER SERVICE CENTER."

LEGAL NOTICES REGARDING MACROVISION PROPERTY RIGHTS
"U.S. Patent Nos. 4,631,603; 4,577,216; 4,819,098; 4,907,093; and 6,516,132."
"This product incorporates copyright protection technology that is protected by U.S. patents and other intellectual property rights. Use of this copyright protection technology must be authorized by Macrovision, and is intended for home and other limited viewing uses only unless otherwise authorized by Macrovision. Reverse engineering or disassembly is prohibited."

This symbol indicates that used electri-cal and electronic equipment requires special handling when the unit is to be discarded. Please send the unwanted unit to a waste collection/recycling center near you to help protect our environment.

SHOWVIEW®

SHOWVIEW is a registered trademark of Gemstar Development Corporation. The SHOWVIEW system is manufactured under licence from Gemstar Development Corporation.

■ Manufactured under license from Dolby Laboratories. 'Dolby' and the double-D symbol are trademarks of Dolby Laboratories.

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■ HDMI, the HDMI logo and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC.

Table of Contents

Disc Information

Unlike traditional VCR (video casette recorder), DVD recorder comes with a wider variety of media to choose from for either playback or recording. Please check the following sections before buying discs or recording.

Recordable Discs

Type	Logo	Information
DVD-R	DVD R R4.7	• DVD+VR mode • Write-Once
DVD-RW	DVD RW	• DVD+VR mode • Rewritable
DVD+R	RW DVD+R	• DVD+VR mode • Write-Once
DVD+RW	RW DVD+ReWritable	• DVD+VR mode • Rewritable
DVD+R DL (Double Layer)	RW DVD+R DL	• DVD+VR mode • Write-Once

✎ The DVD-R/DVD-RW/DVD+R/DVD+RW/DVD+R DL (Double Layer) logos belong to the respective entities holding the trademarks.

✎ For best results, use discs with the above logos.

Recording Time

Type	Mode	Time
DVD (4.7GB)	HQ	1 hour
	SP	2 hours
	LP	3 hours
	EP	4 hours
	SLP	6 hours
	Just Fit	Variable
DVD+R DL (Double Layer) (8.5GB)	HQ	114 minutes
	SP	224 minutes
	LP	332 minutes
	EP	443 minutes
	SLP	665 minutes
	Just Fit	Variable
HDD (160GB)*	HQ	34 hours
	SP	68 hours
	LP	101 hours
	EP	135 hours
	SLP	203 hours
	Just Fit	Variable
HDD (250GB)*	HQ	55 hours
	SP	108 hours
	LP	160 hours
	EP	214 hours
	SLP	321 hours
	Just Fit	Variable
HDD (320GB)*	HQ	70 hours
	SP	139 hours
	LP	206 hours
	EP	275 hours
	SLP	413 hours
	Just Fit	Variable

✎ The 'Just Fit' mode is available for timer recording only.

✎ The table lists the minimum recording time available on each medium.

✎ * depending on the model.

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Playable Discs

Type	Logo	Information
DVD-Video		• Pre-recorded DVD-Video discs (The region code is printed on the rear panel of recorder.)
DVD-R		
DVD-RW		• Recorded in DVD-Video format and finalized
DVD+R		• With JPEG/BMP files • With MP3/WMA/ WAV files • With MPEG-1 files
DVD+RW		• With MPEG-2 files (.VOB/.DAT/.MPG) • With MPEG-4 files (.AVI/.DIV*/.DIVX*)
DVD+R DL (Double Layer)		
CD-R		• With JPEG/BMP files • With MP3/WMA/ WAV files
CD-RW		• With MPEG-1 files • With MPEG-2 files (.VOB/.DAT/.MPG) • With MPEG-4 files (.AVI/.DIV*/.DIVX*)
Video CD (VCD)		• CDs for video files recorded with CD sound, VHS quality, MPEG-1 compression technology
Super Video CD (SVCD)		• CDs for video files recorded with CD sound, SVHS quality, MPEG-2 compression technology
Audio CD		• CDs for music files recorded in digital signal, featuring better audio quality, less distortion and less deterioration of audio quality over time

The DVD-R/DVD-RW/DVD+R/DVD+RW/DVD+R DL (Double Layer) logos belong to the respective entities holding the trademarks.

For best results, use discs with the above logos. Other types of discs may not be played back with the intended results on this DVD recorder. Do not use irregular-shaped discs (e.g. heart-shaped), as these can damage the recorder.

It may not be possible to play CD-R, CD-RW, DVD-R, DVD-RW, DVD+R, DVD+RW discs in all cases due to the type of disc or condition of the recording.

* depending on the model.

If an MP3 file name contains two-byte characters (e.g. Chinese characters), it may not be displayed correctly.

This DVD recorder does not display ID3 (for MP3) and WMA tags.

This DVD recorder does not support mp3PRO files.

The MP3 file bitrates supported by this DVD recorder are: 32Kbps - 320Kbps.

This DVD recorder does not support WMA lossless files and WMA files protected by DRM (digital rights management) technology.

Unplayable Discs

This DVD recorder does not play back the disc types listed below. If you try to play back these discs, excessive noise may cause damage to your amplifiers or speakers. If an unplayable disc is inserted, an 'Invalid Disc' error message will appear on screen after attempts of trying to play the disc fail.

• Unfinalized discs recorded on other DVD/CD recorders
• DVD Audio discs
• KODAK PHOTO CDs
• DVD-Video discs with a region code not supported by the recorder
• DVD-RAMs
• Data discs (e.g. CD-ROMs, DVD-ROMs) which do not contain any type of files supported by this DVD recorder
• Standard SACDs (Hybrid type of SACDs can be played as normal Audio CDs.)

Region Code

This DVD recorder can only play DVD-Video discs marked with the same region code as printed on its rear panel or the all-region discs. If you try to play discs with different region code(s), a message saying 'Invalid Region Code' will appear on screen.

Example of region code :

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Disc Preparation (Formatting)

If you use blank DVD-RW discs, you need to format the discs before recording. After you insert a blank DVD-RW disc, the disc preparation screen will appear. Press ▲ ▼ to select 'Quick Preparation' or 'Full Preparation', then press **ENTER**.

- **Quick Preparation**

  If you select this option, the recorder will format part of the disc for your immediate recording. After the recording is finished, you can continue recording or play back the recorded title. If you wish to watch the title on another DVD recorder, DVD player or PC, you need to finalize the disc first.

- **Full Preparation**

  If you select this option, the recorder will format the whole disc. The process will take a longer time to complete. After formatting, you can repeatedly use the disc for recording, and there is no need to finalize the disc afterwards.

  The preparation screen will also appear after you erase a DVD-RW disc.

```
Please select method for preparing disc

        Quick Preparation
        Disc requires finalization after recording

        Full Preparation(30~60 minutes)
        Prepare disc for playback in other DVD players
```
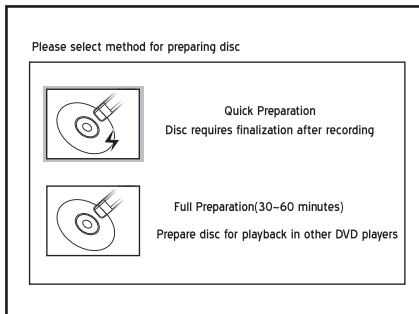
Disc Finalization

After recording or copying, you may need to finalize your disc before it can be played back on another DVD recorder, DVD player or PC. Please refer to the following table for further information on discs you use.

Type		Finalization	Note
DVD-R	Data File	×	-
	Video Title	✓	-
DVD-RW	Data File	×	-
	Video Title	✓	When using a disc formatted with 'Quick Preparation' mode
		×	When using a disc formatted with 'Full Preparation' mode
DVD+R	Data File	×	-
	Video Title	✓	-
DVD+RW	Data File	×	-
	Video Title	×	-
DVD+R DL (Double Layer)	Data File	×	-
	Video Title	✓	-

×: Not required   ✓: Required

> Please note that you may not be able to play a finalized disc on certain devices (e.g. older model DVD players) due to technical incompatibility.

> Only discs used to record video titles require finalization. Discs used to copy media files (such as MP3 or JPEG files) are considered as data: there is no need to finalize these discs.

Title & Chapter

For DVD-Video or other digital videos, disc contents are usually divided into individual titles, which you may preview using the disc menu. Some titles may be further divided into a smaller unit called 'chapter'. To view the disc menu, press **MENU** on the remote control.
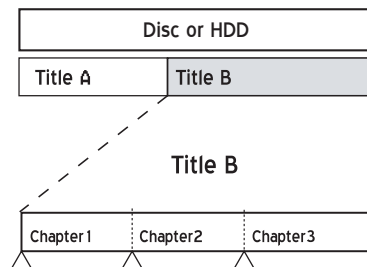
```
         Disc or HDD
    Title A    Title B

           Title B
    Chapter1   Chapter2   Chapter3
```

During or after recording, you can create chapters by inserting chapter marks in a video title. Depending on the target medium you use, the number of maximum chapters and titles you can add may vary. Please see the table below for details.

Type	Maxi. Title	Maxi. Chapter
HDD	5994*	-
DVD	49**	254

* For each title, you can create up to 999 chapters.

** For each title, you can create up to 99 chapters. But you can only create a maximum of 254 chapters in one disc.

Connections

The following sections introduce a step-by-step process to set up this DVD recorder. When more than one setup option are listed at a specific stage, please refer to the option most suitable for your setup condition.

DVD Recorder Overview

Front View

Appearance of the unit may vary slightly depending on the model.
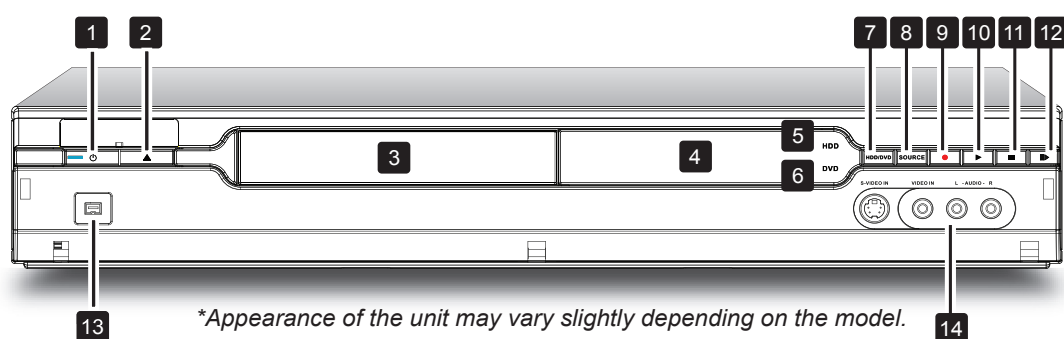
1   POWER ON/OFF button
Switches on the DVD recorder or switches the unit to standby mode

2   OPEN/CLOSE button
Opens or closes the disc tray

3 Disc tray
Holds discs securely during recording or playback

4 DISPLAY window
Shows operation information

5 HDD indicator
Lights when HDD (hard disk drive) is selected as the target device

6 DVD indicator
Lights when DVD drive is selected as the target device

7 HDD/DVD button
Changes DVD recorder's current mode from HDD (hard disk drive) to DVD and vice versa

8 SOURCE button
Selects equipment connected via line inputs

9 ● RECORD button
Starts recording on current device

10 ► PLAY button
Starts playback on current device

11 ■ STOP button
Stops playback or recording

12 ‖► PUASE/STEP button
Pauses playback or recording

13 DV-LINK (IEEE 1394) jack
Connects digital camcorder

14 LINE IN (S-Video/Composite VIDEO & AUDIO L/R) jacks
Connects the outputs of external equipment via S-Video or composite video/audio cables

When using the LINE IN jacks

By default, this DVD recorder automatically selects S-Video signal over the composite one when both input jacks are used to connect to other devices. If you would like your videos to be imported from a specific source, you can either change the default setting through **Setup** → **Video Input/Output** → **Front AV Input**, or use one set of the connections at a time.

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Display Window
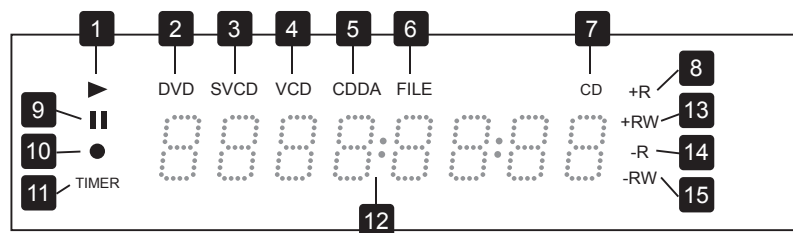
1 PLAY indicator	**6** FILE indicator	**11** TIMER RECORD indicator
2 DVD indicator	**7** CD indicator	**12** Multi-information window
3 SVCD indicator	**8** DVD+R indicator	**13** DVD+RW indicator
4 VCD indicator	**9** PAUSE indicator	**14** CD-R/DVD-R indicator
5 CDDA indicator	**10** RECORD indicator	**15** CD-RW/DVD-RW indicator

Rear View

Appearance of the unit may vary slightly depending on the model.

1 VHF/UHF IN/OUT jacks
Connects antenna cables

2 AV OUTPUT (VIDEO/AUDIO L/R) jacks
Connects the inputs of external equipment
via composite video/audio cables

3 COMP OUT (COMPONENT) jacks
Connects the inputs of external equipment via
component video cables

4 SCART INPUT jack
Connects the output of external equipment
via SCART cable

5 SCART OUTPUT jack
Connects the input of external equipment
via SCART cable

6 HDMI DIGITAL OUT jack
Connects a TV or an AV amplifier (receiver)
with HDMI input jack (via HDMI cable)

7 DIGITAL AUDIO OUT (OPTICAL) jack
Connects an amplifier or a receiver with a
digital input jack

8 DIGITAL AUDIO OUT (COAXIAL) jack
Connects an amplifier or a receiver with a
digital input jack

9 AC IN terminal
Connects the power cord
*(*for models designed with a detachable power cord)*

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Remote Control

1 ⏻ **POWER button**
Switches on the DVD recorder or switches the unit to standby mode

2 DISPLAY button
Displays disc/HDD information

3 Alphabet & Number buttons

4 TIMER button
Displays Timer Record menu

5 CONTENTS button
Displays Contents Menu

6 TOP MENU button
Displays DVD top menu (if available)

7 Direction (▲ ◄ ▼ ►) & ENTER buttons

8 SETUP button
Displays Setup menu

9 HDD/DVD button
Switches to DVD or HDD

10 ■ STOP button
Stops current operation

11 ◄◄ PREVIOUS button
Goes to previous item (file/track/chapter)

12 ◄◄ F. R. (Rewind) button
Reverses playback

13 EDIT button
Displays Edit menu

14 RECORD button
Starts recording

15 AUDIO button
Displays and switches audio options
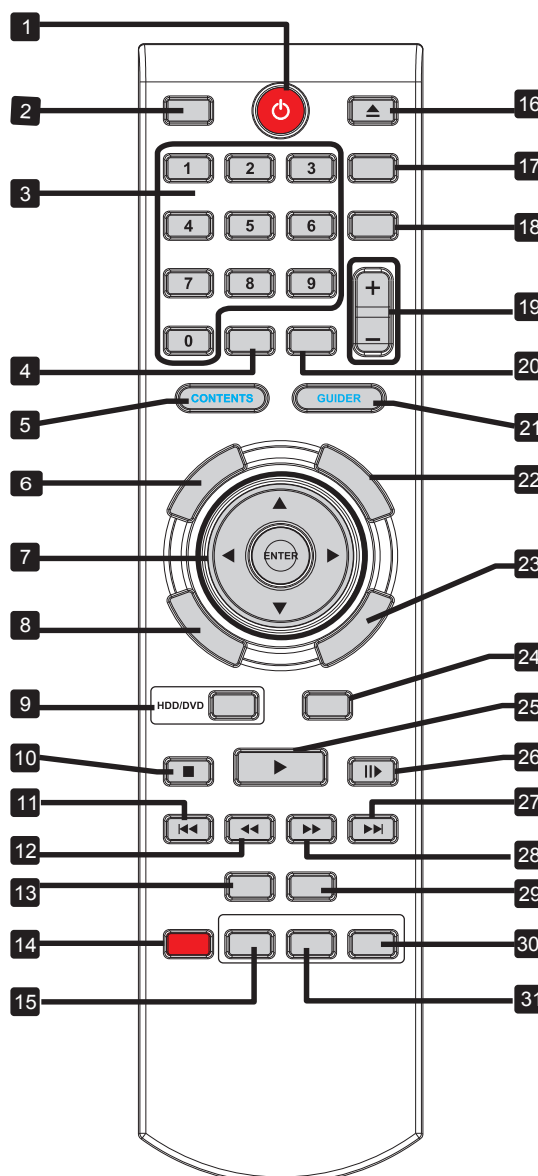
16 ▲ OPEN/CLOSE button
Opens or closes disc tray

17 SOURCE button
Selects input source

18 TV (MODE) button
Switches to TV view or SCART source view (decoder)

19 CH + / CH - button
Changes TV channels

20 ShowView button
Displays the ShowView system menu

21 GUIDER button
Displays Easy Guider menu

22 MENU button
Displays disc menu

23 NAVI. button
Displays Navigation menu

24 TIME SHIFT button
Pauses live TV program

25 ► PLAY button
Starts playback

26 ‖► PAUSE/STEP button
Pauses current operation or starts playback frame by frame

27 ►► NEXT button
Goes to next item (file/track/chapter)

28 ►► F. F. (Fast Forward) button
Fast forward playback

29 COPY button
Starts copying

30 SUBTITLE button
Displays and switches subtitle options

31 ANGLE button
Displays and switches angle options

Using the Remote Control

Apart from the basic playback and recording buttons, the unit's remote control is also designed with a set of quick-access function buttons: **SETUP**, **GUIDER**, **TIMER**, **NAVI**. and **CONTENTS*.** Pressing these buttons will lead you directly to their respective menus. If you would like to exit the screen, simply press the function button again. (*The '**CONTENTS**' button is available in HDD models only.)

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Preparing Remote Control

Open the battery compartment and insert the batteries. Make sure the polarities (+ and -) match the markings inside the remote control.
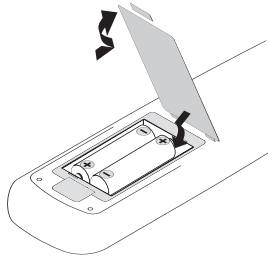
✎ Using rechargeable batteries is not recommended.

Remote Control Signal

The remote has an operating range of approximately 7.5 M, and works best when pointed directly at the unit horizontally at angle up to 30° from the sensor window of the DVD recorder.

7.5 M

30°

12
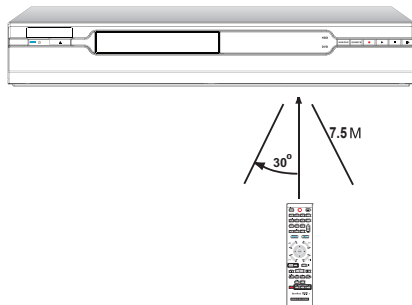
Connecting the DVD Recorder

ⓘ   Do not plug the AC power cord into the outlet until all other connections are made.

ⓘ   It is recommended that you connect VIDEO OUT jack of the DVD recorder directly to the video input of your TV. Connecting VIDEO OUT jack of this recorder to a TV via a VCR may cause a viewing problem when playing a copy-protected disc. The same viewing problem may also occur when connecting the recorder to a TV/VCR combo system.

	Connection Method
☺	Wall → DVD Recorder → TV
☹	Wall → DVD Recorder → VCR → TV

💡 **Before you start**

► Check whether all the accessories are included in your package box.

☐ Remote Control (1)   ☐ Batteries (2)

☐ Audio/Video Cable (1)   ☐ Power Cord (1) (*depending on the model)

☐ HDMI Cable (1)   ☐ Blank DVD Disc (1) (*depending on the model)

☐ Antenna Cable (1)   ☐ User's Manual (1)

☐ Quick Start Guide (1)

Step 1: Connecting Antenna/Satellite Cables

Wall Outlet →DVD Recorder →TV

1 Use an antenna cable to connect the RF IN jack on the DVD recorder to the antenna outlet on the wall.

2 Use an antenna cable to connect the RF OUT jack on the DVD recorder to the RF IN jack on the television. (Please note that this serves as a pass-through only.)
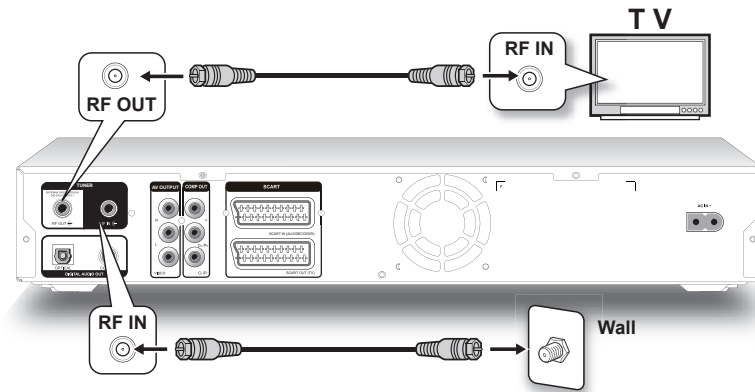
Step 2: Connecting the Video Cable

ⓘ The table below lists some of the options for establishing the video and audio connections of this DVD recorder. For reference, first check the top row to select a type of video cable you wish to use; then look down the column to see what types of audio connections are applicable. Select only one of the applicable options to connect your DVD recorder to other devices unless specified otherwise.

Video Audio	HDMI Cable	Component Video Cable	SCART Cable	Composite Video Cable
HDMI Cable	✓*			
SCART Cable			✓*	
Composite Audio Cable		✓		✓
Digital Audio Cable (Optical)**	✓	✓	✓	✓
Digital Audio Cable (Coaxial)**	✓	✓	✓	✓

* The HDMI and SCART cables can transmit video and audio signals at the same time. Normally, if you use these two cables for video connection, you do not need to establish an additional analog audio connection.

** If you wish to enjoy digital audio sound, you need to establish the digital audio connection (via an optical or a coaxial cable) whatever video cable you use.

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Option 1 Using HDMI Cable

If your TV has an HDMI input, use an HDMI cable to connect the HDMI OUT jack on the DVD recorder to the HDMI IN jack on the television.

ⓘ The HDMI cable can transmit both video and audio signals at the same time. If you use an HDMI cable to connect to your TV, it is recommended that you remove all other audio/video connections (component or composite cables) between the DVD recorder and your TV to enjoy better audio/video quality.

However, if you wish to play back discs recorded in DTS format, you need to use an extra optical or coaxial cable to connect the DVD recorder to your TV or to a stereo amplifier/receiver.
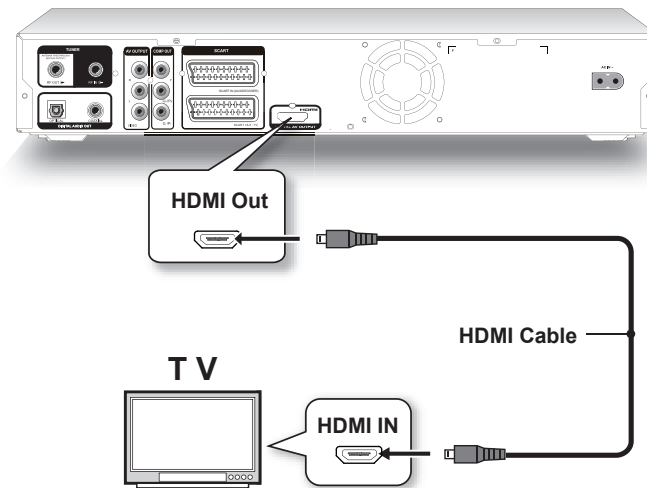
✎ **HDCP (High-bandwidth Digital Content Protection)**

The DVD recorder supports the HDCP technology, which is developed to prevent copying of the content transmitted via the HDMI cable. After all connections are made, the recorder will start checking whether the connecting TV (or other display device) is HDCP-compliant. If the verification process fails, a pop-up window will appear. Press ◄ and **ENTER** to try again. Otherwise, disconnect the HDMI cable and use other types of video cable for connection. If you select 'EXIT' without disconnecting the cable, or if you do not select any option in 10 seconds, the pop-up window will disappear. Next time when you try to watch HDCP-encrypted content, there will be no image shown on screen.

✎ After all connections are made, make sure related system settings are correct on the Setup menu.

• **Setup** → **Video Input/Output** → **HDMI Resolution:** Select a resolution mode supported by your TV.

• **Setup** → **Video Input/Output** → **HDMI Output:** Select what types of signal you wish to be transmitted via HDMI cable.

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Option 2 Using Component Cable

If your TV has a component video input, use a component video cable (with green, blue and red ends) to connect the COMPONENT OUT jack on the DVD recorder to the COMPONENT IN jack on the television.
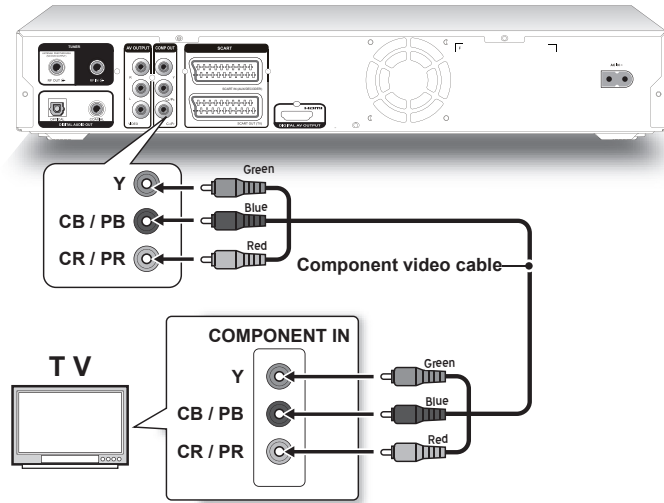
✎ If your television supports 'Progressive Scan' mode, you may adjust the 'Component Output' setting accordingly for better results. Please go to **Setup→ Video Input/Output→ Video Output**, and select 'Component-Progressive'. You can activate the Setup menu directly by pressing **SETUP** button on your remote control.

Option 3 Using SCART Cable

If your TV has a SCART input, use a SCART cable to connect the SCART OUT jack on the DVD recorder to the SCART IN jack on the television.

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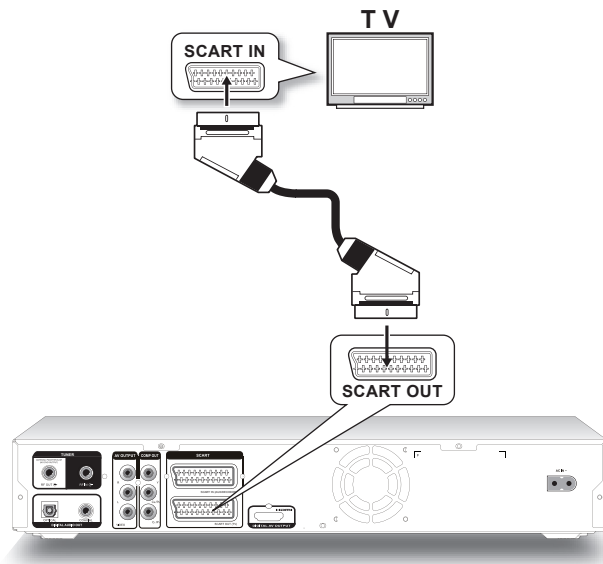
Option 4 Using Composite Cable

If your TV has a composite video input, use a composite video cable to connect the VIDEO (COMPOSITE) OUT jack on the DVD recorder to the VIDEO (COMPOSITE) IN jack on the television.
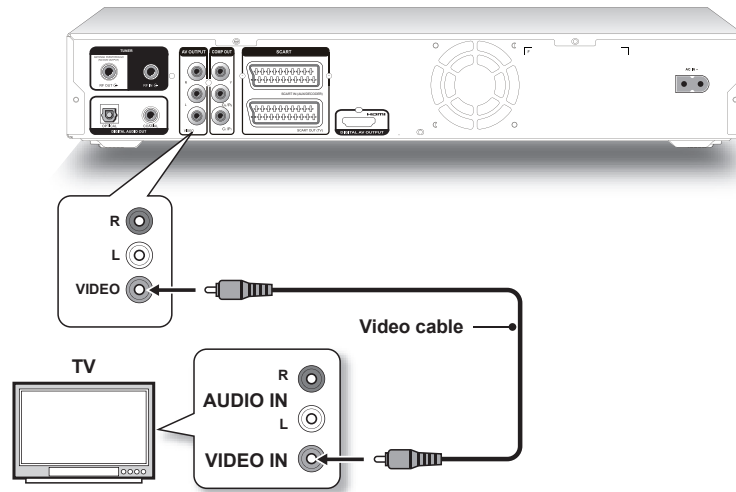
Step 3: Connecting the Audio Cable

Option 1 Using HDMI Cable

If your TV has an HDMI input, use an HDMI cable to connect the HDMI OUT jack on the DVD recorder to the HDMI IN jack on the television.

✎ After all connections are made, make sure related system settings are correct on the Setup menu. If there is still no sound, go to **Setup→Audio Output→HDMI Audio** and set 'PCM' as the audio output mode.

✎ If you select to use the HDMI cable in Step 2, set the HDMI output mode to 'Video + Audio' via **Setup→Video Input/Output→HDMI Output**.

Option 2 Using SCART Cable

If your TV has a SCART input, use a SCART cable to connect the SCART OUT jack on the DVD recorder to the SCART IN jack on the television.

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Option 3 Using Composite Cable

Use a composite audio/video or a composite audio cable (via the red and white ends) to connect the AUDIO OUT jack on the DVD recorder to the AUDIO IN jack on a stereo amplifier, a receiver or a TV.
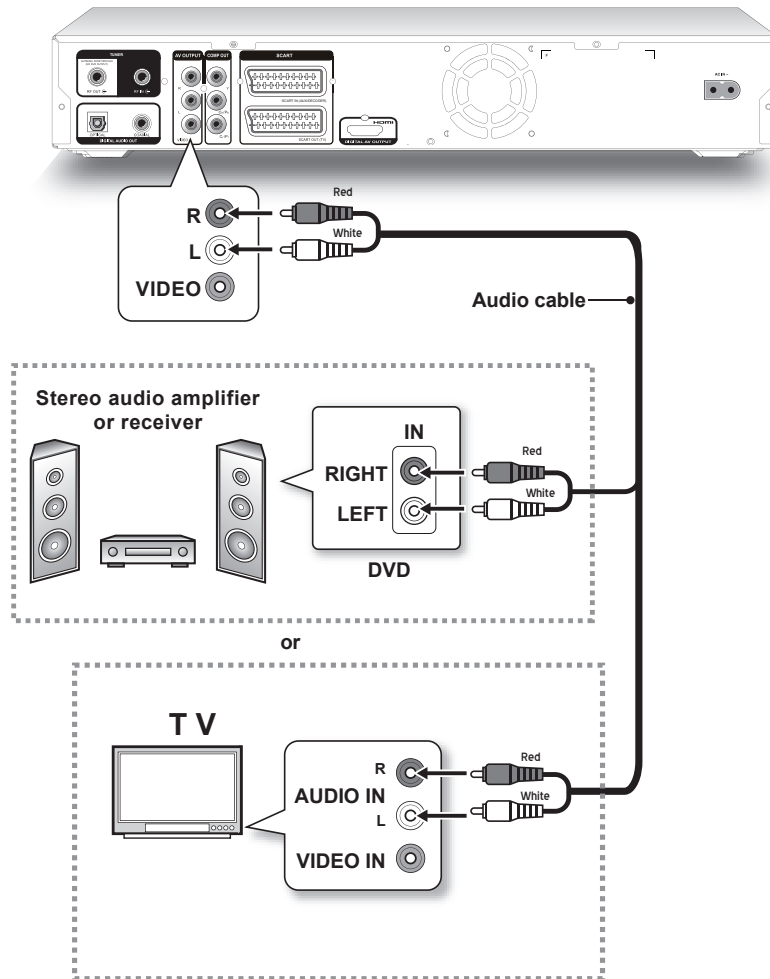
Option 4 Using Digital Audio Cable

1 Using an Optical Cable

Use an optical cable to connect the DIGITAL OUT (OPTICAL) jack on the DVD recorder to the digital optical input on a stereo amplifier or a receiver.

OPTICAL   COAXIAL

Optical digital cable

DIGITAL AUDIO DEVICE

IN

OPTICAL

COAXIAL

Digital Out (Optical)
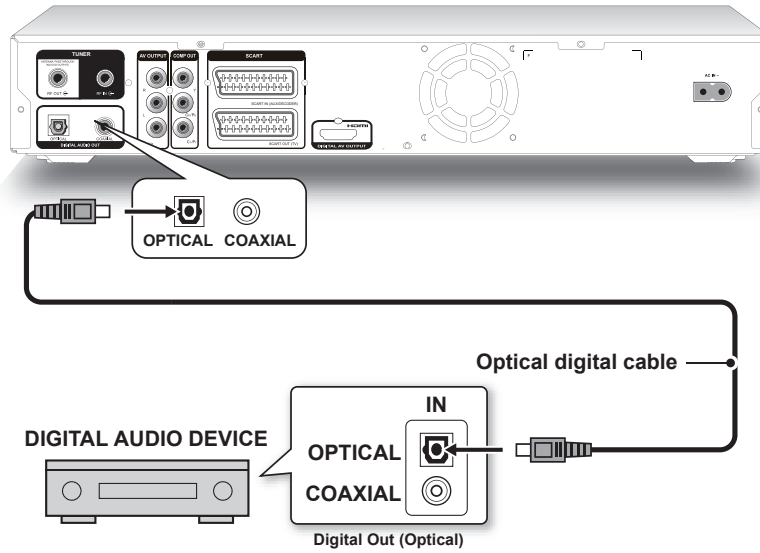
2 Using a Coaxial Cable

Use a coaxial cable to connect the DIGITAL OUT (COAXIAL) jack on the DVD recorder to the coaxial digital input on a stereo amplifier or a receiver.

OPTICAL   COAXIAL

Coaxial digital cable

DIGITAL AUDIO DEVICE

IN

OPTICAL

COAXIAL

Digital Out (Coaxial)

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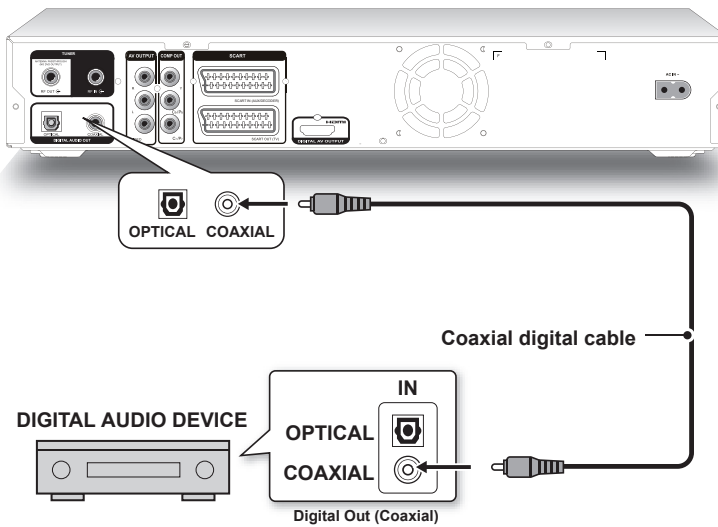
Step 4: Connecting the Decoder (If Required)

For PAY-TV/CANAL+ subscribers, you will need to connect an additional decoder to your TV and DVD recorder.

1 Refer to Step 1 to connect your DVD recorder to the antenna outlet on the wall, and then to the RF IN jack on the television, if you have not established the connection.

2 Use a SCART cable to connect the SCART IN jack on the DVD recorder to the SCART OUT jack on the CANAL+ decoder.

3 Use a SCART cable to connect the SCART OUT jack on the DVD recorder to the SCART IN jack on the television.
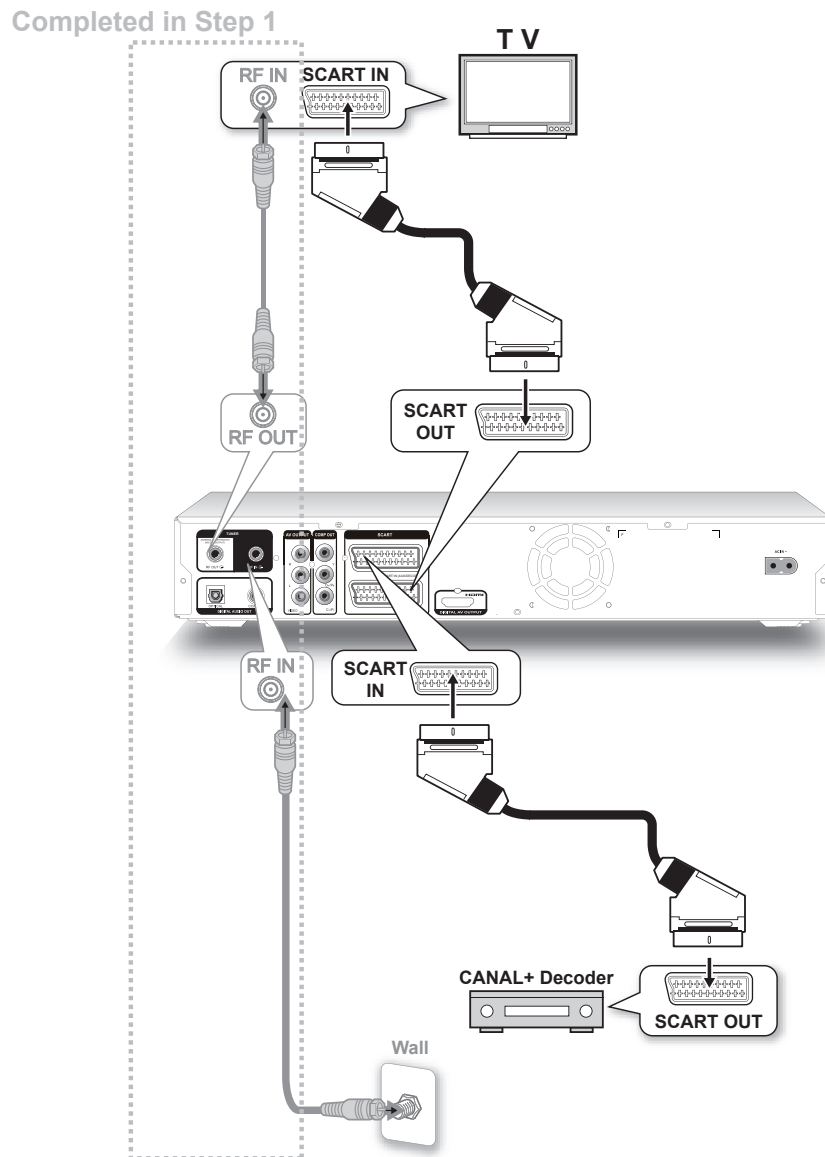
During recording, if you have problem watching programs imported via decoder, you can press **TV (MODE)** to switch to the 'SCART Bypass' mode. However, you need to first activate the feature through **Setup→Video Input/Output →TV MODE**.

☞ **Setting TV MODE/SCART Bypass (p.25)**

Depending on the cable manufacturers, the SCART cable you use may not be able to detect all signals transferred via this connection. If you have activated the 'SCART Bypass' mode through the Setup menu, and still have problem using the feature, try to use a new SCART cable to connect the decoder to your DVD recorder.

Step 5: Connecting the Power Cord

Connect the power cord to the DVD recorder. After all the cable connections are completed, you can now plug the power cord of the recorder into the outlet, and start using the recorder.
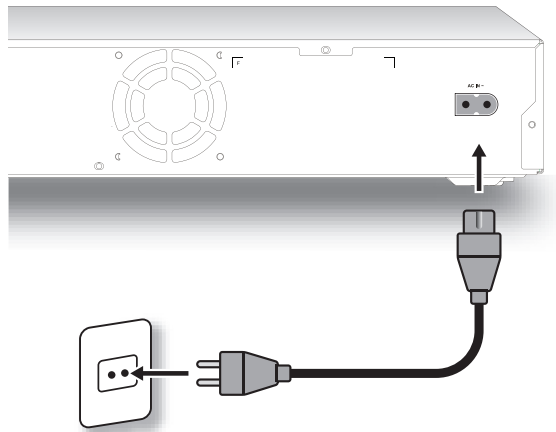
✎ If you use a model which features attached power cord, you only need to plug the power cord to the outlet at this step.

► Preparing the DVD Recorder for Further Settings

After completing the connection process, check whether you have switched your TV's input source to corresponding option (e.g. VIDEO 1, LINE 2, etc.), so that video from the DVD recorder can appear on screen. For further information, please check the instruction manual offered by your TV manufacturer.

System Settings

Easy Setup

The 'Easy Setup' is designed to help you complete basic settings step by step. On each option screen, use ▲ ▼ ◄ ► or number buttons (0-9) to make necessary adjustments, then press **ENTER** to confirm. If you would like to return to the previous option, select 'Back'. Or select 'Exit' if you wish to quit the setup process.

EASY SETUP   Select a language for on-screen message

- Language
  - ▲
  - **English**
  - Français
  - Deutsch
  - Italia
  - Español
  - ▼

← Back

Exit
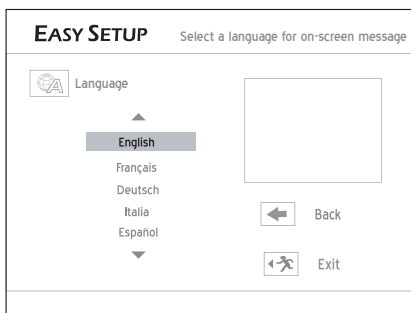
The 'Easy Setup' guide appears automatically when you switch on your new DVD recorder for the first time. After the first-time setup, you can always access the guide via **Setup → System → Easy Setup.**

SETUP   System

- Easy Setup . . . .
- OSD   English
- Auto Sleep   120 minutes
- Restore   . . . .
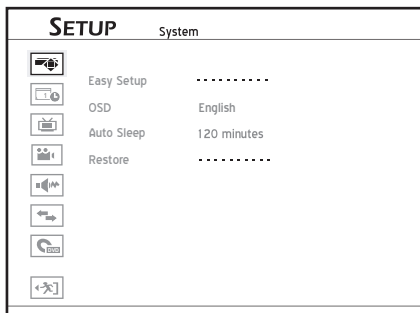
1

Set Language

Press ▲ ▼ to select your preferred language for the on-screen menus and messages, then press **ENTER**.

2

Set Clock Format

Press ▲ ▼ to select your preferred clock format for display, then press **ENTER**.

3

Set System Date

Press ▲ ▼ ◄ ► or number buttons (0-9) to enter correct date information, then press **ENTER**.

4

Set System Time

Press ▲ ▼ ◄ ► or number buttons (0-9) to enter correct time information, then press **ENTER**.

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5

Set TV Channels

Please follow the on-screen instructions to create a complete channel list. If you wish to perform the channel scanning later, select 'Skip the Process', then press **ENTER**.

► Selecting Country

Press ▲ ▼ to select your country/region, then press **ENTER**.

✎ List of countries/regions varies depending on model types.

► Scanning TV Channels

Press ▲ ▼ to select 'Auto Scan', then press **ENTER**.

The scanning process will start.

Otherwise, select 'Skip' to skip the scanning process.

6

Complete Settings

After the scanning process is completed, press **ENTER** to save the settings and exit the 'Easy Setup' screen.

Setup Menu

Use the Setup menu to edit your system setting preferences. Follow these steps to change the default settings.

1 Press **SETUP** to display the Setup menu.

SETUP

Press to display Setup menu
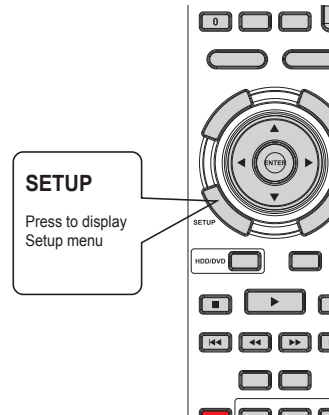
2 Press ▲ ▼ to select a category you wish to change, then press **ENTER**.

SETUP System

Easy Setup	- - - - - - - - - -
OSD	English
Auto Sleep	120 minutes
Restore	- - - - - - - - - -
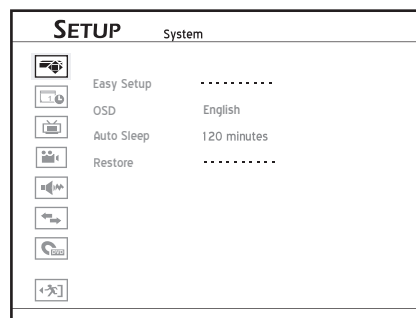
3 Press ▲ ▼ to select an option you would like to change from the sub-menu, then press **ENTER**.

4 Press ▲ ▼ ◄ ► or number buttons (0-9) (when required) to change the settings, then press **ENTER**.

5 When completed, press **SETUP** to exit the Setup menu.

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System

Option	Application
Easy Setup	Use the step-by-step 'Easy Setup' guide to complete basic settings.
OSD	Change the language of on-screen menus and messages.
Auto Sleep	Set the time period for the DVD recorder to turn to standby mode if there is no operation. • Off • 30 minutes • 60 minutes • 90 minutes • 120 minutes
Restore	Reset all options to default settings.

Date/Time

Option	Application
Clock Format	Select a preferred clock format for display. • M/D/Y-12Hr • D/M/Y-12Hr • Y/M/D-12Hr • M/D/Y-24Hr • D/M/Y-24Hr • Y/M/D-24Hr
Date	Set the system date. * You can set the date up to 2099/12/31 (Year/Month/Day)
Time	Set the system time.

Tuner

Option	Application
Country	Select your country/region.
Utilities	Perform channel scanning to create a channel list and edit the list. • Scan Channel • Edit Channel
TV Audio	Select the type of audio signal imported from TV tuner. • Stereo • Main • SAP (Sub) • Mono

Scanning TV Channels

When the 'Scan Channel' function is activated, the TV channels are scanned and stored in a specific order. If your TV content provider changes the channel listing, or if you reinstall this DVD recorder, you may need to go through this process again.

Editing Listed TV Channels

The automatic scanning process lists all available channels in a specific order. If you would like to change the sequence, you can further edit your preference in 'Channel Editor'. The 'Channel Editor' also offers other customizing functions (e.g. rename channel, insert or disable channels, etc.) For more information, please see **'Channel Editor' (p.28).**

Setting TV Audio

Use the 'TV Audio' option to set a preferred audio channel for viewing and recording TV programs through the DVD recorder.

Stereo

Select to record the stereo sound channel of a TV program.

Main

Select to record the primary language channel of a bilingual TV program.

SAP (Sub)

Select to record the second language channel of a bilingual TV program.

Mono

Select to record the mono sound channel of a TV program.

The audio setting is applicable only when the selected audio channel is offered.

For bilingual TV programs, you can only record one of the language versions.

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Video Input/Output

Option	Application
TV MODE	Enable or disable the 'TV MODE/SCART Bypass' function to control the viewing source alternation.
Front AV Input	Prioritize the input source from the front-panel jacks. • Auto (* Use S-Video signal first if available) • S-Video • Composite
Video Output	Select the type of video signal supported by your TV. • Component-Interlaced • Component-Progressive • SCART RGB • SCART S-Video
HDMI Resolution	Select a resolution mode compatible with your HDTV or HD-ready TV. • Auto • 576p • 720p • 1080i • 1080p
HDMI Output	Select the type of contents for output. • Video+ Audio • Video Only

Setting TV MODE/SCART Bypass

The 'TV MODE/SCART Bypass' feature allows you to watch videos/programs from the SCART source (decoder, VCR, etc.) directly at the push of a button.

🖉 You need to activate the function via the Setup menu before using the **TV (MODE)** button on remote control.

🖉 After you press **TV (MODE)** to view videos/programs from the SCART source, only **POWER** and **TV (MODE)** buttons on the remote will be available to use. You can only press **POWER** to switch off the DVD recorder, or press **TV (MODE)** again to return previous viewing mode.

🖉 After you press **TV (MODE)** to view videos/programs from the SCART source, status indicator will light up in the display window.

🖉 Depending on the cable manufacturers, the SCART cable you use to connect an external device to the DVD recorder may not be able to detect all signals transferred via this connection. If you have activated the 'TV MODE/SCART Bypass' function via the Setup menu, and still have problem using the feature, try to use a new SCART cable.

Setting Component Video Output

If your TV supports 'Progressive Scan' mode, you can choose to set the DVD recorder's output accordingly to enjoy better video quality. 'Progressive Scan' mode differs from the 'Interlaced Scan' mode in how a video image is updated. In 'Progressive Scan' mode, scan lines for an image are refreshed in every pass and by a sequential order. In the 'Interlaced Scan' mode, image is updated by alternating sets of odd and even scan lines.

Progressive Scan Mode:

Line 1
Line 2
Line 3
Line 4
Line 5
Line 6
Line 7
etc

Interlaced Scan Mode:

Line 1
Line 3
Line 5
Line 7
etc

+

Line 2
Line 4
Line 6
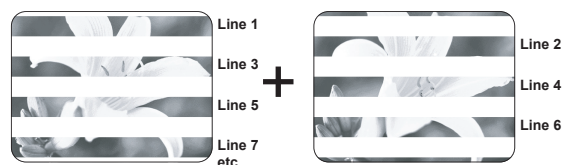
🖉 If you accidentally set 'Progressive' as the video output mode when the DVD recorder is not connected to a progressive-scan-compatible TV, you may lose the video signal on your TV instantly. To recover the problem, switch off the DVD recorder, and then switch it on again. After the DVD recorder is switched on (in about 30 seconds), press ▶ (right direction button), **5, 0, 2, 0,** on remote control, then press **ENTER**. The recorder will then be automatically switched off. The DVD recorder's TV output will be restored to default when you switch on the recorder next time.

Setting HDMI Resolution

With an integrated video upscaler, this DVD recorder can automatically enhance resolution of the output picture up to 1080p (1080 scan lines, Progressive mode). Select a resolution mode supported by your TV to enjoy sharper, clearer image.

🖉 The HDMI resolution setting may affect the video output mode of this recorder.

❚ If the HDMI resolution mode is set to '576p', '720p', '1080i' or '1080p', the recorder's video output format will be automatically switched to the progressive scan mode ('Component-Progressive'). If you

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disconnect the HDMI cable for other connections, you need to either change the video output setting on the Setup menu, or use compatible TV sets.

▌ If the HDMI resolution mode is set to 'Auto', the recorder's video output format will be automatically switched to the last selected interlaced scan mode ('SCART S-Video', 'SCART RGB' or 'Component-Interlaced') after you disconnect the HDMI cable.

▌ Audio Output

Option	Application
Dolby Digital	Set the digital audio output mode. • PCM (when your amplifier does not have an integrated Dolby Digital decoder) • Bit Stream (when your amplifier has an integrated Dolby Digital decoder)
DTS Output	Enable/disable the DTS (Digital Theater System) feature offered by DVD-Video discs. • On • Off
MPEG Audio	Set the MPEG audio output mode. • PCM (when your amplifier does not have an integrated MPEG audio decoder) • Bit Stream (when your amplifier has an integrated MPEG audio decoder)
HDMI Audio	Set the audio output mode via HDMI cable. • Auto • PCM

✎ If the spoken language of your disc(s) is recorded using the DTS format, disabling the DTS option will result in loss of sound when watching film. Please always check the information on disc(s) before you decide to change options.

✎ The DTS-encoded audio can only be transmitted via a digital audio device. Before enabling the 'DTS Output', make sure you have established a digital audio connection. For more information, please see **'Connecting the DVD Recorder' (p.13)**

▌ Recording / Playback

Option	Application
Recording Mode	Select a recording mode for different picture quality and recording time. • HQ (High Quality) • SP (Standard Play) • LP (Long Play) • EP (Extended Play) • SLP (Super Long Play)

Option	Application
Chapter Mark	Select the interval to insert chapter marks in recorded titles. • Off • 5 Minutes • 10 Minutes • 15 Minutes • 20 Minutes • 25 Minutes • 30 Minutes
Slide Time	Set the still picture playback speed. • Off • Interval (3-99 Seconds)
VCD PBC	Enable/disable the PBC (playback control) function offered by VCD or SVCD. • On • Off
DivX (R) VOD*	Display the registration code of the DVD recorder.

✎ * depending on the model

▌ DVD Movie

Option	Application
Menu	Set a preferred language for displaying the DVD menu.
Audio	Set a preferred audio language when watching a DVD-Video disc.
Subtitle	Set a preferred language when displaying subtitles of a DVD-Video disc.
Parental Lock	Set a preferred level to control content access. • Off • 8: Adult • 7: NC-17 • 6: R • 5: PG-R • 4: PG-13 • 3: PG • 2: G • 1: Kid Safe
Password	Set password for the parental lock function. (default: 0000 [zero])
Aspect Ratio	Select a viewing mode supported by your TV or display. • 16:9 Wide • 4:3 Pan • 4:3 L.Box

✎ If the DVD-Video disc is already preset to a default language, the playback will start following this setting, rather than your preferred option. You can later change the default setting using the Setup menu or Navigation menu during playback.

✎ For the 'Menu', 'Audio' and 'Subtitle' options, the selected preference is applicable only when the discs have the desired language versions.

Setting Parental Lock

Some DVD-Video discs are encoded with a Parental Management Level (PML) numbered from 0 to 8. You can set the parental control level of this DVD recorder to one of the numbers, then only a DVD-Video disc with the PML lower than the one you set can be played back by this DVD recorder.

1 Enter the 'DVD Movie' menu via **SETUP → DVD Movie**.

2 Press ▲ ▼ to select 'Parental Lock', then press **ENTER**.

3 If the level you select is different from the one you set before, an input box asking for password will appear. Enter the 4-digit password by pressing number buttons (0-9).
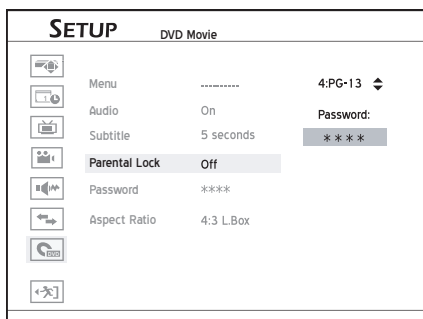
If you press ◄ or ENTER instead of number buttons, you will return to the upper level of the menu without making any change.

4 If the password you enter is correct, the change you made will be applied. Otherwise, the change will be ignored.

5 When completed, press ◄ to return to the main menu.

6 Press ◄ or **SETUP** to completely exit the Setup menu.

Setting Password

1 Enter the 'DVD Movie' menu via **SETUP → DVD Movie**.

2 Press ▲ ▼ to select 'Password', then press **ENTER**.

3 Press number buttons (**0-9**) to enter your password.

4 If the password you enter is correct, you will be asked to enter a new password twice. If two passwords do not match, a warning message will appear.
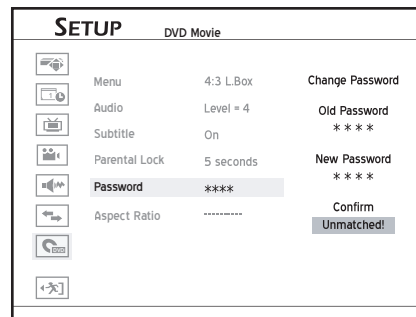
5 When completed, press ◄ to return to the main menu.

6 Press ◄ or **SETUP** to completely exit the Setup menu.

✎ If you press ◄ or **ENTER** instead of number buttons (0-9) when you are asked to enter a password, you will return to the second level of the menu without making any change.

✎ If the password you enter is incorrect or unmatched, a warning message will appear for 5 seconds, and then you will be asked to enter your password again.

✎ If you have forgotten your password, reset the DVD recorder via **Setup → System → Restore.**

Setting Aspect Ratio

Aspect ratio setting affects how video images are presented. Select 4:3 (standard) or 16:9 (widescreen) mode which suits your television.

❙ 16:9 Wide

Select this option if you connect the DVD recorder to a widescreen (16:9) TV.
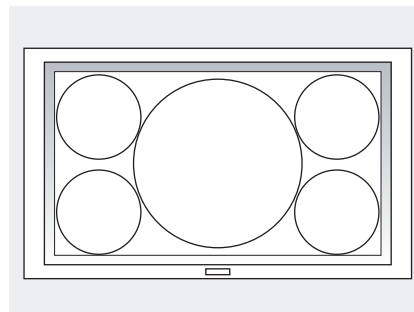
❙ 4:3 L. Box (4:3 Letter Box)

Select this option if you connect the DVD recorder to a standard (4:3) TV, and wish to display widescreen image (16:9) in its original format.

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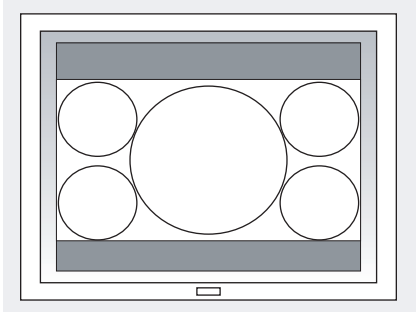
The picture will be shown with black bars at the top and bottom of the screen.

▌ 4:3 Pan (4:3 Pan & Scan)

Select this option if you connect the DVD recorder to a standard (4:3) TV, and wish to display widescreen image (16:9) in full-screen format.
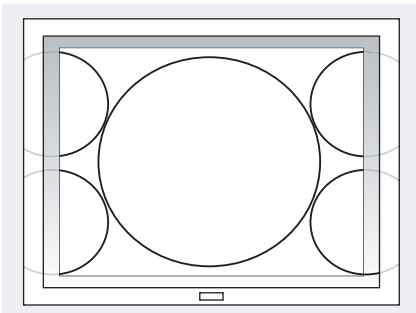
The picture will be zoomed to fill the screen verti-cally with its left and right sides chopped off.

✎ Some discs may not support this viewing option. Even if you select the 4:3 Pan (4:3 Pan & Scan) mode, the picture will still be displayed in the 4:3 L.Box (4:3 Letter Box) format.

Channel Editor

'Channel Editor' offers users an easy-to-manage interface to organize your TV channel list. You can activate 'Channel Editor' through the following paths.

Via Setup Menu

① Press **SETUP** to display the Setup menu.

② Press ▲ ▼ to select 'Tuner', then press **ENTER**.

③ Press ▲ ▼ to select 'Utilities', then press **ENTER.**

④ Press ▲ ▼ to select 'Edit Channel', then press **ENTER**.

⑤ The Channel Editor menu will appear.

Pressing EDIT Button While Viewing TV

① Press **TV (MODE)** or **SOURCE** to switch to the TV-viewing mode.
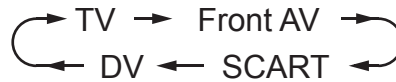
TV → Front AV
DV ← SCART

By default, pressing TV (MODE) allows you to switch to TV directly. However, if you have activated the 'SCART Bypass' mode earlier through Setup menu, you can only press SOURCE to switch to TV.

If you press SOURCE, you may need to press the button more than once to switch to 'TV'.

② Press **EDIT** to activate 'Channel Editor'.

③ The Channel Editor menu will appear.

ⓘ If you have not completed the channel scan-ning process before using the 'Channel Editor', a pop-up box asking you to do so will appear. Press ◀ ▶ to select desired application, then press **ENTER**. If you still choose not to scan channels, you will need to switch on the chan-nels one by one for further applications.

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Moving up/down TV Channels

1 Press ▲ ▼ ◄ ► to select a channel from the list, then press **ENTER**.
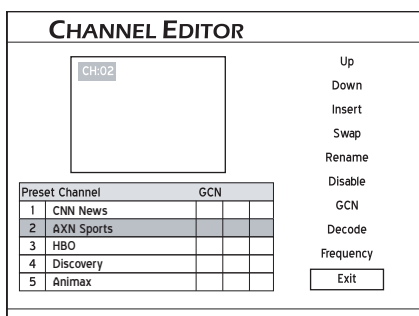
2 Press ▲ ▼ to select 'Up' or 'Down', then press **ENTER**.
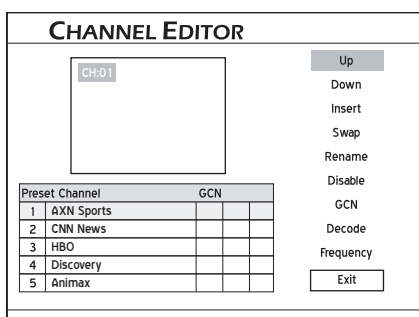
The order of the TV channel will be changed.

3 Each time when you press **ENTER**, the item will be moved in your designated direction.

4 When completed, press ▲ ▼ ◄ ► to select 'Exit' or another option to continue, then press **ENTER**.

Inserting TV Channels

1 Press ▲ ▼ ◄ ► to select a channel from the list, then press **ENTER**.

2 Press ▲ ▼ to select 'Insert', then press **ENTER**.

3 Press ▲ ▼ ◄ ► or number buttons (0-9) to enter the channel number, then press **ENTER**.
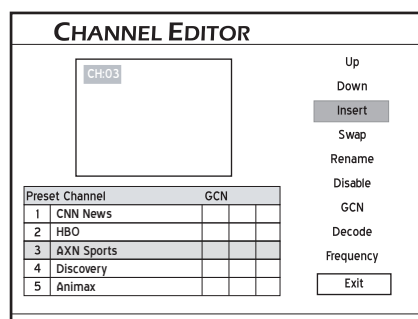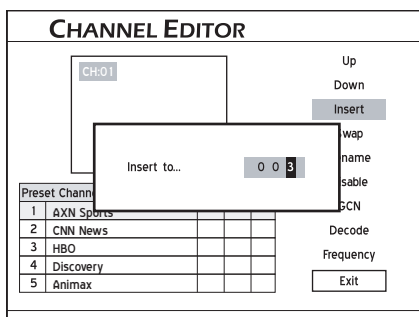
The channel will be moved to the desired location.

4 When completed, press ▲ ▼ ◄ ► to select 'Exit' or another option to continue, then press **ENTER**.

✎ After you insert channel(s), numbers of other channels will change accordingly.

Swapping TV Channels

1 Press ▲ ▼ ◄ ► to select a channel from the list, then press **ENTER**.

2 Press ▲ ▼ to select 'Swap', then press **ENTER**.

3 Press ▲ ▼ ◄ ► or number buttons (0-9) to enter the channel number, then press **ENTER**.
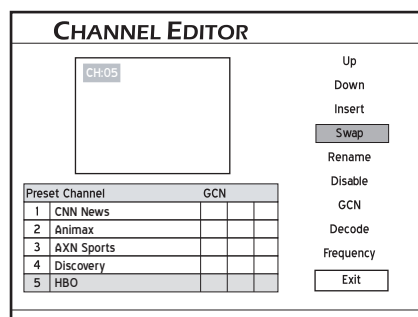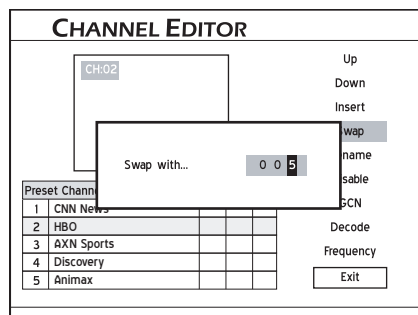
The channel will be swapped to the designated location.

4 To swap other TV channels, repeat steps 1-3.

5 When completed, press ▲ ▼ ◄ ► to select 'Exit' or another option to continue, then press **ENTER**.

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Renaming TV Channels

1 Press ▲ ▼ to select a channel from the list, then press **ENTER**.

2 Press ▲ ▼ to select 'Rename', then press **ENTER**.
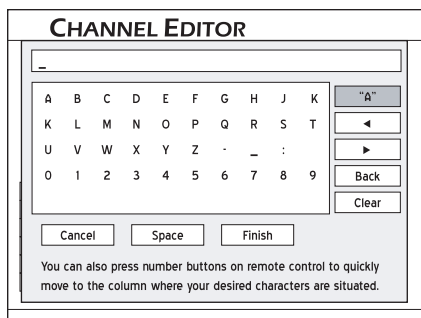
The keypad screen will appear.

3 Press ▲ ▼ ◀ ▶ to select desired characters from the keypad, then press **ENTER** after each entry.

> **For more information, please see the section 'On-Screen Input Keypad' (p.34).**

4 When completed, press ▲ ▼ ◀ ▶ to select 'Exit' or another option to continue, then press **ENTER**.

✍ You can enter up to 10 characters for a name.

Enabling/Disabling TV Channels

The automatic scanning process will list all the available channels for your reference. You can further edit this list by activating the 'Enable/Disable' function, which allows you to temporarily disable unwanted channel(s) from the list or enable the previously hidden channel(s) back to the list.

1 Press ▲ ▼ ◀ ▶ to select a channel from the list, then press **ENTER**.

2 Press ▲ ▼ to select 'Enable' or 'Disable', then press **ENTER**.
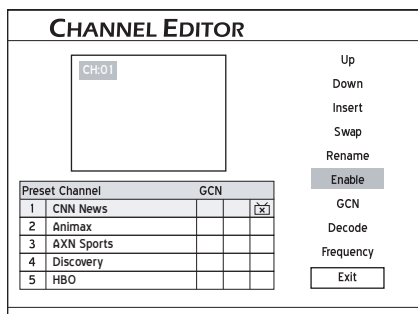
The channel selected will then be switched on or off.

3 To switch on or off other channels, repeat steps 1-2.

4 When completed, press ▲ ▼ ◀ ▶ to select 'Exit' or another option to continue, then press **ENTER**.

Setting Decoder

Use this option to switch on or off the 'Decode' function for particular TV channel(s).

1 Press ▲ ▼ ◀ ▶ to select a channel from the list, then press **ENTER**.

2 Press ▲ ▼ to select 'Decode', then press **ENTER**.
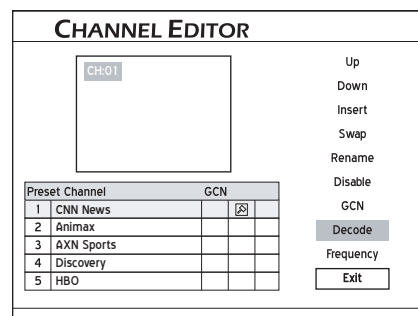
A key icon will appear, indicating that the 'Decode' function for the selected channel is switched on.

3 To set the 'Decode' function on or off for other TV channels, repeat steps 1-2.

4 When completed, press ▲ ▼ ◀ ▶ to select 'Exit' or another option to continue, then press **ENTER**.

Setting Channel Frequency

Use this option to search for better channel signal, or to search for a particular channel which has not been listed after the scanning process.

1 Press ▲ ▼ ◀ ▶ to select a channel from the list, then press **ENTER**.

2 Press ▲ ▼ to select 'Frequency', then press **ENTER**.

3 A pop-up box for entering the channel frequency will appear. Press ▲ ▼ ◀ ▶ or number buttons (0-9) to enter the channel frequency, then press **ENTER**.

4 Press ▲ ▼ to select a suitable TV system, then press **ENTER**.

> **The DVD recorder will start searching for the channel signal.**

5 When the scanning process is completed, press ▲ ▼ to select your desired option, then press **ENTER**.

▌ OK

> **If the scanning result is what you want, press ▲ ▼ to select 'OK', then press ENTER.**

▌ Scan Next

> **If the scanning result is not what you want, press ▲ ▼ to select 'Scan Next', then press ENTER.**

> **The DVD recorder will then start searching for the next available channel frequency.**
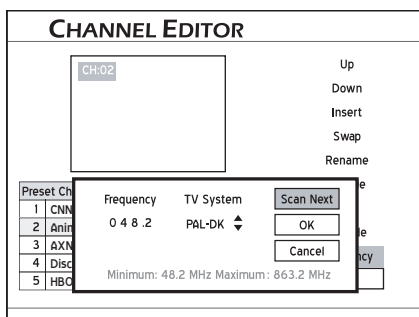
▌ Cancel

> **If you decide not to make any change, press ▲ ▼ to select 'Cancel', then press ENTER.**

6 To apply the frequency setting to other channels, repeat steps 1-5.

7 When completed, press ▲ ▼ ◀ ▶ to select 'Exit' or another option to continue, then press **ENTER**.

ShowView Programming System

The ShowView programming system is a specially-designed feature for recording TV programs. The system greatly simplifies the timer recording process, as it does not require users to enter program information, such as date, channel number and start/end time, which are all contained in the ShowView programming numbers. You can complete the timer recording setup simply by inputting the ShowView number, which can be found in most newspapers, TV listing magazines or online sources.

> ⓘ As channel numbers may vary depending on where you live, it is suggested that you build up a matching channel list when you first set up the DVD recorder. This process will help you to make use of the ShowView system for future timer recording settings.

1 Press **TV(MODE)** or press **SOURCE** to set 'TV' as the signal source.

> **By default, pressing TV(MODE) allows you to switch to TV directly. However, if you have activated the 'SCART Bypass' mode earlier through Setup menu, you can only press SOURCE to switch to TV.**

> **If you press SOURCE, you may need to press the button more than once to switch to 'TV'.**

2 Press **EDIT** to display the Channel Editor menu.

3 Press ▲ ▼ ◀ ▶ to select a TV channel, then press **ENTER**.

4 Press ▲ ▼ to select 'GCN', then press **ENTER**.
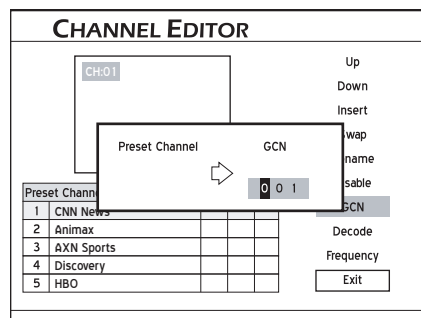
A pop-up box for entering GCN will appear.

5 Press ▲ ▼ ◀ ▶ or number buttons (0-9) to enter the GCN (Guide Channel Number), which is the channel number used by the ShowView system, then press **ENTER**.

6 To set GCN for other channels, repeat steps 3-5.

7 When completed, press ▲ ▼ ◀ ▶ to select 'Exit', then press **ENTER**.

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Getting Started

This chapter introduces three specially-designed interfaces, which aim to offer you a more convenient and hassle-free operation environment. Please follow the steps listed below for the applications.

💡 **Before you start**

► Check whether you have switched your TV's input source to corresponding option (e.g. VIDEO 1, LINE 2, etc.), so that video from the DVD recorder can appear on screen. For further information, please check the instruction manual offered by your TV manufacturer.

► Make sure the remote control works.

Contents Menu

Contents Menu offers you a quick overview of what stored in your selected medium.

Screen Overview

File catalogue
When selected, the tab is highlighted
Press to view files or albums inside catalogue

Source Medium
Press to switch to
DVD or HDD

A title/track/file/album
Press to start playback

| 🎬 Video | 🎵 Music | 🖼 Picture | ◎ DVD 🗄 |

📄
001

Page number

TITLE 01 `VR`
07:32PM 12:04/05
00h00m05s   SP

TITLE 02 `VR`
07:32PM 02/14/15
00h06m18s   HQ

TITLE 03 `VR`
05:45PM 03/06/05
00h00m05s   SP

TITLE 04 `VR`
12:16AM 01/01/03
00h00m09s   SP

TITLE 05 `VR`
12:16AM 01/01/03
00h00m41s   SP

TITLE 06 `VR`
13:19AM 01/01/03
00h00m57s   SP

Page index
001 | 002

◄◄   Text View   Exit   ►►►

Press to go to
previous page

Viewing mode
Press to switch between
'Text' and 'Thumbnail'
modes

Exit button

Press to go to
next page

Access to Contents Menu

Press **CONTENTS** to display the Contents Menu.

Press **CONTENTS** again at any time to exit the program.

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ⓘ File Structure

In the 'Music' and 'Picture' catalogues, a 'Default Album' will be automatically created to accommodate media files which are not grouped under particular directories. For example, if you organize your music and picture files on a disc as follows:

Root
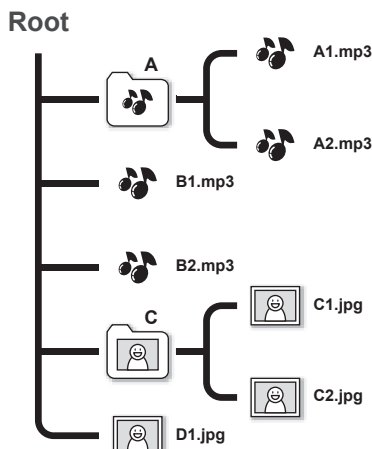
these files will be regrouped and displayed in a new structure shown below when you preview them in the Contents Menu. The file structure on your original disc will not be affected.

Root
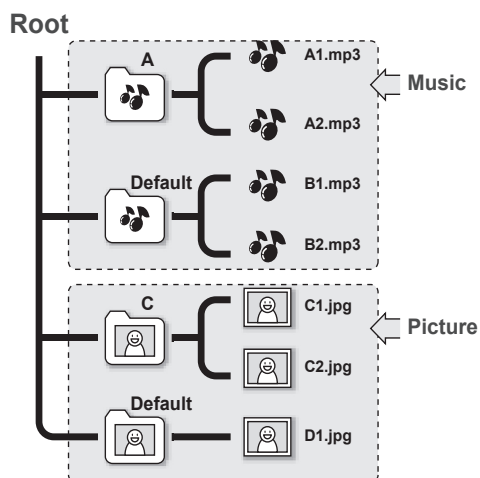
✐ Please allow a few seconds for the DVD recorder to display all your files in the Contents Menu.

✐ Only files in supported media formats will be displayed in the Contents Menu. Normal data files will not be shown.

✐ If the name of a video file or title is too long, it will be abbreviated.

✐ The name of a video file or title may not be correctly displayed, if it contains characters which use a coding page or character sets not supported by this DVD recorder. This, however, will not affect any operation you wish to perform.

Previewing Files via Contents Menu

1 Press **CONTENTS** to display the Contents Menu.

2 Press **HDD/DVD** to switch to DVD or HDD. Or press ▲ ▼ ◀ ▶ to select 'DVD' or 'HDD' as the source medium, then press **ENTER**.
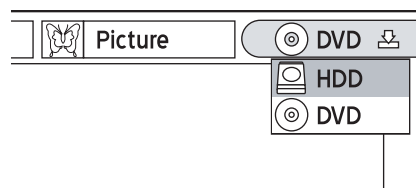
If you wish to view files on a disc, make sure the disc is supported by the DVD recorder, and place the disc carefully with label side facing up on the disc tray. For more details, please see 'Disc Information' (p.6).

3 Press ◀ ▶ to select the type of files (Video/Music/Picture) you wish to view.

4 Press **ENTER** or ▼ to enter the selected catalogue.
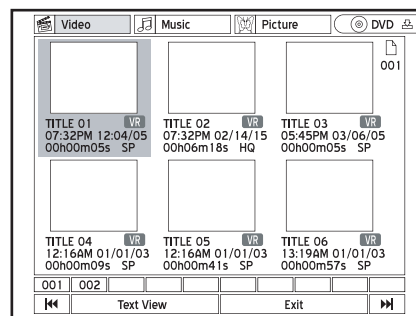
If you want to view a different page, use the ⏮, ⏭ or page index button to make selection.

5 If you have selected:

▌Video

Press ▲ ▼ ◀ ▶ to select desired title or file, then press ENTER to start playback.

▌Music & Picture

Press ▲ ▼ ◀ ▶ to select desired album. Press ▶ PLAY to start playback

Or press ENTER to go to the selected album. Press ▲ ▼ ◀ ▶ to select desired track or file, then press ENTER to start playback.

On-Screen Input Keypad

On-screen input keypad offers you a simple way to enter file names. Entering your desired characters can be easily done by pressing the ▲ ▼ ◀ ▶ and **ENTER** buttons on your remote control.

Screen Overview

Input Options:
[A] uppercase letters
[a] lowercase letters
[Symbol] symbols
[International] accented letters

Cursor

Entry bar

Available characters, numbers, symbols

A	B	C	D	E	F	G	H	J	K
K	L	M	N	O	P	Q	R	S	T
U	V	W	X	Y	Z	-	_	:	
0	1	2	3	4	5	6	7	8	9

"A"

◀

▶

Back

Clear

Cancel   Space   Finish

You can also press number buttons on remote control to quickly move to the column where your desired characters are situated.

Move the cursor backwards

Move the cursor forwards

Back button
Press to delete character one by one

Cancel button
Press to discard changes and return to previous screen

Space button
Press to insert space in title/file name

Finish button
Press to confirm setting and exit screen

Clear button
Press to delete all characters

Shortcut Buttons

You can use the number-letter shortcuts on remote control to quickly select desired characters. When you press one of the number buttons, corresponding characters will be highlighted on-screen. Press the button repeatedly until you desired character is highlighted, then press **ENTER** to confirm your selection.
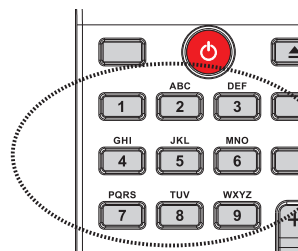
Entering New Title/File Name

1 When the keypad screen appears, the 'Back' button will be automatically highlighted.

Press **ENTER** to delete the characters one by one.

2 Press ▲ ▼ ◀ ▶ to select the input option button, then press **ENTER**.

Press **ENTER** repeatedly to select your desired input option.

E	F	G	H	J	K	"A"
O	P	Q	R	S	T	◀
Y	Z	-	_	:		▶
4	5	6	7	8	9	Back
						Clear

Space   Finish
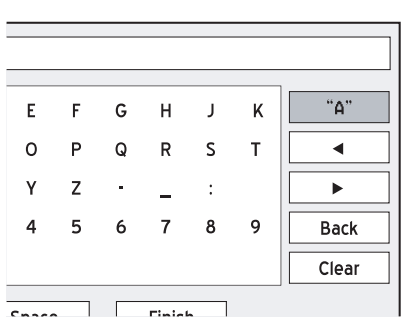
3 Press ▲ ▼ ◀ ▶ to select desired characters, then press **ENTER**.

You can enter up to 30 characters for a title name.

4 If you want to make changes during the process, press ▲ ▼ ◀ ▶ to select 'Back', which allows you to delete character by character in a backward direction, then press **ENTER**.

If you want to delete all the characters you have entered, press ▲ ▼ ◀ ▶ to select 'Clear', then press **ENTER**.

E	F	G	H	J	K	"A"
O	P	Q	R	S	T	◀
Y	Z	-	_	:		▶
4	5	6	7	8	9	Back
						Clear

Space   Finish

4 When completed, press ▲ ▼ ◀ ▶ to select 'Finish', then press **ENTER**.

✎ If the entry bar is left blank, you will not be able to exit the screen by selecting the 'Finish' button. Please follow the instruction in pop-up box to complete the process.

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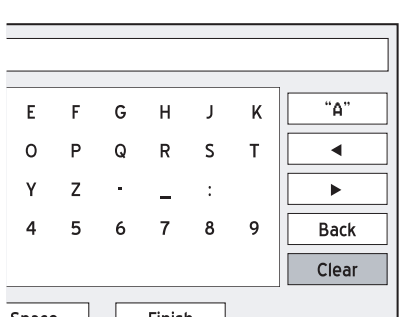
Easy Guider

Graphical and intuitive, the 'Easy Guider' menu guides you through all the major features available, and helps you to complete basic functions in just a few steps. Simply follow the on-screen instructions to start playback, record a TV show or schedule a timer program. All functions in 'Easy Guider' can be conveniently selected and activated by pressing ▲ ▼ ◀ ▶ and **ENTER** buttons on your remote control.

Screen Overview

Function shortcut

EASY GUIDER   Select a function to start

Play

Record

Timer Record

Copy

Disc Tools

Back

Exit

Back button
Press to return to previous step

Exit button

When selected, the icon is highlighted. Press **ENTER** to start the function.

Screen window
Displays image of current video source
(* If you have been playing music files or audio CD, the screen will be blank.)
(** If you have been playing picture files, a 'Picture' icon will appear.)

Access to Easy Guider

Press **GUIDER** to display the Easy Guider menu.

Press **GUIDER** again at any time to exit the program.

Using Easy Guider: Play

ⓘ If you wish to view files on a disc, make sure the disc is supported by the DVD recorder, and place the disc carefully with label side facing up on the disc tray. For more details, please see **'Disc Information' (p.6).**

Playing Media Files (Video/Music/Picture)

1 On the Easy Guider menu, press ▲ ▼ to select 'Play', then press **ENTER**.

EASY GUIDER   Select a function to start

- Play
- Record
- Timer Record
- Copy   ← Back
- Disc Tools   ←🏃 Exit

2 Press ▲ ▼ to select 'DVD' or 'HDD' as the source medium, then press **ENTER**.

EASY GUIDER   Select a device to start playback

- DVD
- HDD   ← Back
                          ←🏃 Exit
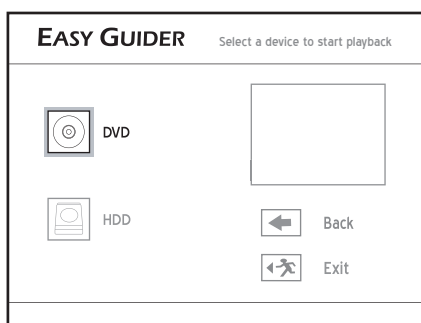
3 Press ▲ ▼ to select the types of files (Video/Music/Picture) you wish to view, then press **ENTER**.

4 Press ▲ ▼ ◀ ▶ to select a title/file/album you wish to play, then press **ENTER**.

▌Video

If you have selected a video title/file, playback will then start.

▌Music

If you have selected a music album, proceed to press ▲ ▼ ◀ ▶ to select a file or track to start playback.

▌Picture

If you have selected a picture album, proceed to press ▲ ▼ ◀ ▶ to select a file to start playback.

5 Press ❙▶ **PAUSE/STEP** to pause playback.
Press ▶ **PLAY** to resume normal playback.

When playing picture files:

Press ▲ to rotate the picture clockwise, or press ▼ to rotate it counterclockwise.
Press ◀ or ▶ to skip the picture.

6 Press ■ **STOP** to stop playback at a marked stop. (Press ▶ **PLAY** to start playback from where you left off.)

Press ■ **STOP** twice to bring the playback to a full stop.

(Press ▶ **PLAY** to start playback from the beginning.)

📝 If you have selected DVD as the target device, playback will begin automatically when you insert a DVD-Video disc, VCD, SVCD or audio CD.

📝 If an MP3 file name contains two-byte characters (e.g. Chinese characters), it may not be displayed correctly.

📝 This DVD recorder does not support ID3 (for MP3) and WMA tags.

📝 This DVD recorder does not support mp3PRO files.

📝 The MP3 file bitrates supported by this DVD recorder are: 32Kbps - 320Kbps.

📝 This DVD recorder does not support WMA lossless files and WMA files protected by DRM (digital rights management) technology.

Playing Picture with Music

1 On the Easy Guider menu, press ▲ ▼ to select 'Play', then press **ENTER**.

2 Press ▲ ▼ to select 'DVD' or 'HDD' as the source medium, then press **ENTER**.

3 Press ▲ ▼ to select 'Picture with Music', then press **ENTER**.

4 Press ▲ ▼ ◀ ▶ to select a picture album, then press **ENTER**.

5 Press ▲ ▼ ◀ ▶ to select a file, then press **ENTER**.
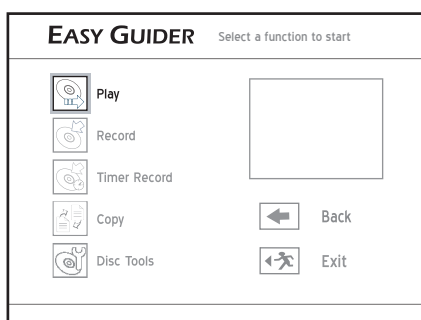
6 The music file catalogue will then appear. Press ▲ ▼ ◀ ▶ to select a music album, then press **ENTER**.

7 Press ▲ ▼ ◀ ▶ to select a file or track, then press **ENTER** to start playback.

8 Press ▲ to rotate the picture clockwise, or press ▼ to rotate it counterclockwise.
Press ◀ or ▶ to skip picture.
Press ❙◀◀ or ▶▶❙ to skip music file.

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9 Press ⏸ **PAUSE/STEP** to pause playback.
Press ▶ **PLAY** to resume normal playback.
Press ■ **STOP** to stop playback.

Playing Last Recorded Title (HDD Only)

1 On the Easy Guider menu, press ▲ ▼ to select 'Play', then press **ENTER**.

2 Press ▲ ▼ to select 'HDD' as the source medium, then press **ENTER**.

3 Press ▲ ▼ to select 'Last Recorded', then press **ENTER**.

4 Playback of the last recorded title will then start.

5 Press ⏸ **PAUSE/STEP** to pause playback.
Press ■ **STOP** to stop playback at a marked stop. (Press ▶ **PLAY** to start playback from where you left off.)

Press ■ **STOP** twice to bring the playback to a full stop.

(Press ▶ **PLAY** to start playback from the beginning.)

Using Easy Guider: Record

ⓘ You may not be able to record a program from TV or from another device connected to this recorder, if the source material is copy-protected.

ⓘ Please note that you **CANNOT** record/copy a rented or purchased video/disc from another device (video cassette recorder, DVD player, DVD recorder, etc.) connected to this recorder.

💡 **Before you start**

► Check whether you have switched your TV's input source to corresponding option (e.g. VIDEO 1, LINE 2, etc.), so that video from the DVD recorder can appear on screen. For further information, please check the instruction manual offered by your TV manufacturer.

► Check whether you select and insert a record-able disc. If you use blank DVD-RW discs, you will need to format the discs before recording. Follow the instructions on screen to complete the process.

☞ **Disc Information (p.6)**

► Check whether there is enough space on the disc or on the hard drive.

► Check whether the channel scanning process for your TV is completed.

☞ **Setup Menu (Tuner) (p.24)**

1 On the Easy Guider menu, press ▲ ▼ to select 'Record', then press **ENTER**.

2 Press ▲ ▼ to select the signal source, then press **ENTER**.

EASY GUIDER   Select a recording source

TV

Front AV

SCART   ← Back

DV   ↩ Exit
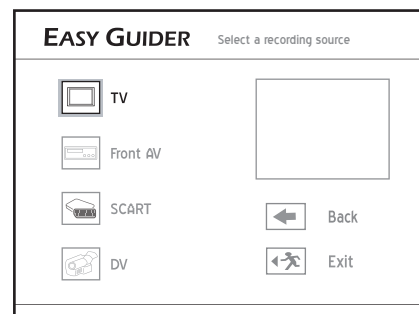
If you select 'TV', press ▲ ▼ to select the channel you wish to record, then press ENTER.

3 Press ▲ ▼ to select 'DVD' or 'HDD' as the target medium to save the recording, then press **ENTER**.

4 Press ▲ ▼ to select a recording mode, then press **ENTER**.

5 If you select 'TV' as the signal source, press ▲ ▼ to select the TV audio mode, then press **ENTER**.

6 Press ◀ ▶ to select 'Go', then press **ENTER**.

   Recording will start.

7 Press ■ **STOP** to stop recording.

   Press ‖▶ **PAUSE/STEP** to pause recording.

   Press ‖▶ **PAUSE/STEP** again to resume recording.

✎ One recording session in double-layer discs **CAN-NOT** exceed 8 hours. Once the session has lasted for over 8 hours, this DVD recorder will automatically stop recording.

✎ If you use a DVD-R, DVD+R, DVD-RW (formatted in 'Quick Preparation' mode), you need to **finalize** the disc before it can be played back on other compatible devices. You can complete the process using 'Easy Guider'. Please see **'Using Easy Guider: Disc Tools' (p.43)** for details on how to finalize a disc.

Using Easy Guider: Timer Record

ⓘ You may not be able to record a program from TV or from another device connected to this recorder, if the source material is copy-protected.

ⓘ Please note that you **CANNOT** record/copy a rented or purchased video/disc from another device (video cassette recorder, DVD player, DVD recorder, etc.) connected to this recorder.

💡 **Before you start**

▶ Check whether you have switched your TV's input source to corresponding option (e.g. VIDEO 1, LINE 2, etc.), so that video from the DVD recorder can appear on screen. For further information, please check the instruction manual offered by your TV manufacturer.

▶ Check whether you select and insert a record-able disc. If you use blank DVD-RW discs, you will need to format the discs before recording. Follow the instructions on screen to complete the process.

   ☞ **Disc Information (p.6)**

▶ Check whether the system date/time is correct.

   ☞ **Setup Menu (Date/Time) (p.24)**

▶ Check whether there is enough space on the disc or on the hard drive.

▶ Check whether the channel scanning process for your TV is completed.

   ☞ **Setup Menu (Tuner) (p.24)**

Date/Time Mode

1 On the Easy Guider menu, press ▲ ▼ to select 'Timer Record', then press **ENTER**.

2 Press ▲ ▼ to select 'Date/Time Setting', then press **ENTER**.
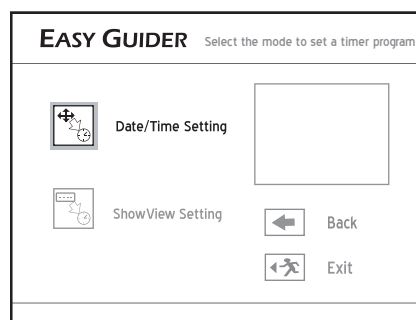
EASY GUIDER Select the mode to set a timer program

Date/Time Setting

ShowView Setting

Back

Exit

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3 Press ▲ ▼ to select the signal source, then press **ENTER**.

> **If you select 'TV', press ▲ ▼ to select the channel you want to record, then press ENTER.**
>
> **If you select 'TV', press ▲ ▼ to switch on or off the PDC function, then press ENTER. (For more details, please see 'VPS (Video Programming System) & PDC (Program Delivery Control)' (p.41) in the note section.)**

4 Press ▲ ▼ to select 'Once', 'Daily' or 'Weekly', then press **ENTER**.

Recording Frequency	Suitable Applications
Once	To record program aired at a specific date/time
Daily	To record program aired every day at a specific time
Weekly	To record program aired on certain day(s) every week at a specfic time

5 Press ▲ ▼ ◄ ► or number buttons (0-9) to enter the date, then press **ENTER**.

> **You can set the date up to 2099/12/31 (Year/Month/Day)**

6 Press ▲ ▼ ◄ ► or number buttons (0-9) to enter the Start time, then press **ENTER**.

7 Press ▲ ▼ ◄ ► or number buttons (0-9) to enter the End time, then press **ENTER**.

8 Press ▲ ▼ to select 'DVD' or 'HDD' as the target medium to save the recording , then press **ENTER**.

9 Press ▲ ▼ to select a recording mode, then press **ENTER**.

10 If your signal source is set to 'TV', press ▲ ▼ to select a TV audio mode, then press **ENTER**.

11 Summary of the timer program will appear.

Press ▲ ▼ to select 'Back' to modify the setting. Or press **ENTER** to save the setting and exit the screen.

EASY GUIDER To modify the settings, select 'Back'

Summary	
Repeat	Once (MON)
Source	TV 2
Date	12/05/2005
Time	06:58AM~07:58AM
HDD/DVD	HDD
Mode	SP
PDC	Turn Off
Sound	Stereo

◄ Back
◄㊅ Save and Exit
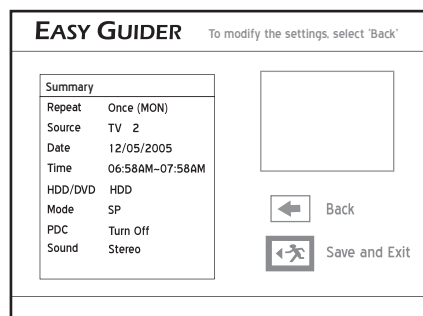
ShowView System Mode

1 On the Easy Guider menu, press ▲ ▼ to select 'Timer Record', then press **ENTER**.

2 Press ▲ ▼ to select 'ShowView Setting', then press **ENTER**.

EASY GUIDER Select the mode to set a timer program

⊕ Date/Time Setting

▦ ShowView Setting   ◄ Back

◄㊅ Exit
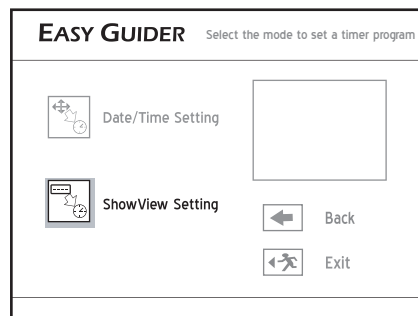
3 Press ▲ ▼ to select 'Once', 'Daily' or 'Weekly', then press **ENTER**.

4 Press number buttons (0-9) to enter the ShowView number of a program you wish to record, then press **ENTER**.

Press ▲ ▼ to switch on or off the PDC function, then press **ENTER**.

> **(For more details, please see 'VPS (Video Programming System) & PDC (Program Delivery Control)' (p.41) in the note section.)**

EASY GUIDER Enter ShowView number of the program

Show View#
    12345 ·

⇩

PDC
    Off   ◄ Back
    On   ◄㊅ Exit
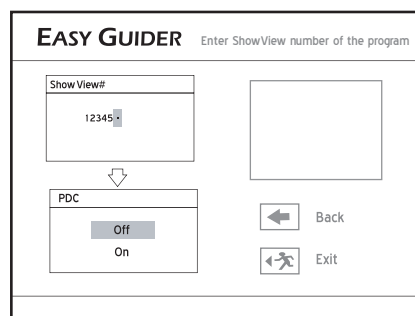
5 A 'Preset Channel' pop-up box will appear, if the DVD recorder fails to find information of a corresponding channel.

Press ▲ ▼ to enter the channel number which corresponds to the GCN (Guide Channel Number) designated by the ShowView system, then press **ENTER**.

EASY GUIDER Enter corresponding channel number

GCN
    002

⇩

Preset Channel
    25 ◆   ◄ Back
                  ◄㊅ Exit

> **As the channel number of a TV station may vary depending on where you live, you need to set up a matching list in order to use the ShowView system to schedule a timer program.**

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For example, on the ShowView System's TV listings, the X station is assigned with a GCN (2), while it is designated to channel 4 and 15 in region A and B, respectively. To set up the corresponding list, enter the number 4 or 15 when the 'Preset Channel' pop-up box appears.

	TV Station	GCN	Preset Channel
Region A	X	2	4
Region B	X	2	15
Region C	X	2	56

6 Press ▲ ▼ to select 'DVD' or 'HDD' as the target medium to save the recording, then press **ENTER**.

7 Press ▲ ▼ to select a recording mode, then press **ENTER**.

8 If your signal source is set to 'TV', press ▲ ▼ to select a TV audio mode, then press **ENTER**.

9 Summary of the timer program will appear. Press **ENTER** to exit the screen.

Make sure a recordable disc is inserted before the timer programs start.

VPS (Video Programming System) & PDC (Program Delivery Control)

VPS/PDC services are used to automatically check the time information of TV programs being aired. If the TV stations in your area carry the service, you can switch on the PDC function when scheduling a timer program on this DVD recorder. With the function activated, the recorder will check whether the start time of your preset program has been rescheduled, and begin recording at the most updated time accordingly.

You can assign a maximum of 20 PDC settings. Please note that the PDC signal can only be monitored when DVD recorder is in standby mode. If you have been using the DVD recorder before a preset timer program starts, the recording will begin following the original schedule.

You can schedule a maximum of 32 timer programs. If the setting list is full, you need to cancel some of the reserved programs first.

This DVD recorder features 'power-on' timer recording: you do not need to switch off the recorder to activate the function.

One recording session in double-layer discs **CAN-NOT** exceed 8 hours. Once the session has lasted for over 8 hours, this DVD recorder will automatically stop recording.

If you use a DVD-R, DVD+R, DVD-RW (formatted in 'Quick Preparation' mode), you need to **finalize** the disc before it can be played back on other compatible devices. You can complete the process using 'Easy Guider'. Please see **'Using Easy Guider: Disc Tools' (p.43)** for details on how to finalize a disc.

Using Easy Guider: Copy

ⓘ You may only use this DVD recorder to reproduce or copy materials for which you own the copyright; or have obtained permission to copy from the copyright owner; or you otherwise have a legal right to reproduce or copy. Unless you own the copyright; or have obtained permission from the copyright owner; or otherwise have a legal right to reproduce or copy, you may be violating the law, including copyright law, and may be subject to payment of damages and other remedies.

Before you start

► Check whether you select and insert a recordable disc. If you use blank DVD-RW discs, you will need to format the discs before copying. Follow the instructions on screen to complete the process.

☞ **Disc Information (p.6)**

► Check whether there is enough space on the disc or on the hard drive.

► Check whether there are files on the disc you insert, if you would like to make copies from disc to the hard drive.

Copying (Disc to HDD)

1 On the Easy Guider menu, press ▲ ▼ to select 'Copy', then press **ENTER**.

2 Press ▲ ▼ to select 'DVD to HDD', then press **ENTER**.

EASY GUIDER   Select how you wish to copy files

DVD to HDD

HDD to DVD   ← Back

                    Exit

3 If you have inserted:

| Audio CD, VCD, SVCD

Press ◀ ▶ to select 'Go', then press ENTER. The copying process will then start.

Disc with Video Titles

A disc menu will appear.

Press ▲ ▼ ◀ ▶ to select the title you would like to copy, then press ENTER.

Press ◀ ▶ to select 'Go', then press ENTER. The copying process will then start.

Disc with Data & Media Files

Press ▲ ▼ ◀ ▶ to select the type of file you would like to copy, then press ENTER. (☞ Proceed to step 4)
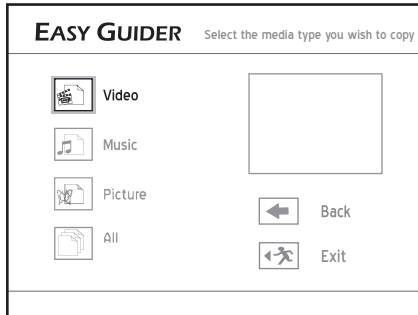
4 If you have chosen:

All

The copying process will then start.

Video

Press ▲ ▼ ◀ ▶ to select desired file, then press ENTER. The copying process will then start.

Music / Picture

Press ▲ ▼ ◀ ▶ to select desired album, then press ENTER. (☞ Proceed to step 5)

5 Press ▲ ▼ ◀ ▶ to select desired file, then press **ENTER**. A pop-up box showing further copying options will appear.

Press ◀ ▶ to select 'Selected File', then press **ENTER**, if you would like to copy only the selected file.

Press ◀ ▶ to select 'Whole Album', then press **ENTER**, if you would like to copy all files in the album.

The pop-up box will appear when you first enter the album. If you decide to copy the whole album after adopting the 'Selected File' option, you will need to exit the album first. Press ▲ ▼ ◀ ▶ to select 'Return', then press ENTER to go back to the album level.

6 When completed, press ▲ ▼ ◀ ▶ to select 'Exit', then press **ENTER** to exit the Contents Menu.

7 Press ▲ ▼ ◀ ▶ to select 'Exit', then press **ENTER** or press **GUIDER** to exit the Easy Guider.

Copying (HDD to Disc)

1 On the Easy Guider menu, press ▲ ▼ to select 'Copy', then press **ENTER**.

2 Press ▲ ▼ to select 'HDD to DVD', then press **ENTER**.

3 Press ▲ ▼ to select the type of file you would like to copy, then press **ENTER**.
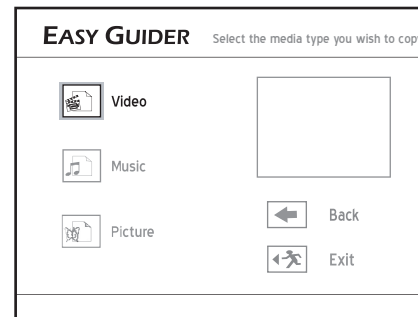
4 If you have chosen:

Video

Press ▲ ▼ ◀ ▶ to select desired file, then press ENTER. The copying process will then start.

Music / Picture

Press ▲ ▼ ◀ ▶ to select desired album, then press ENTER. (☞ Proceed to step 5)

5 Press ▲ ▼ ◀ ▶ to select desired file, then press **ENTER**. A pop-up box showing further copying options will appear.

Press ◀ ▶ to select 'Selected File', then press **ENTER**, if you would like to copy only the selected file.

Press ◀ ▶ to select 'Whole Album', then press **ENTER**, if you would like to copy all files in the album.

The pop-up box will appear when you first enter the album. If you decide to copy the whole album after adopting the 'Selected File' option, you will need to exit the album first. Press ▲ ▼ ◀ ▶ to select 'Return', then press ENTER to go back to the album level.
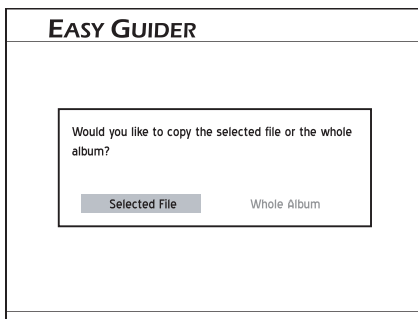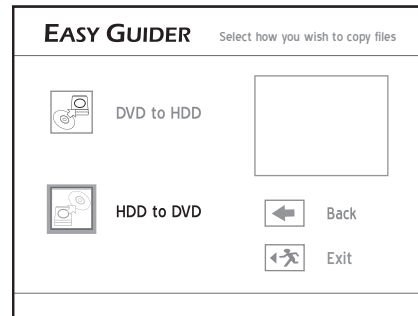
6 Press ▲ ▼ ◀ ▶ to select other files you would like to copy, then press **ENTER**.

7 When completed, press ▲ ▼ ◀ ▶ to select 'Exit', then press **ENTER** to exit the Contents Menu.

8 Press ▲ ▼ ◀ ▶ to select 'Exit', then press **ENTER** or press **GUIDER** to exit the Easy Guider.
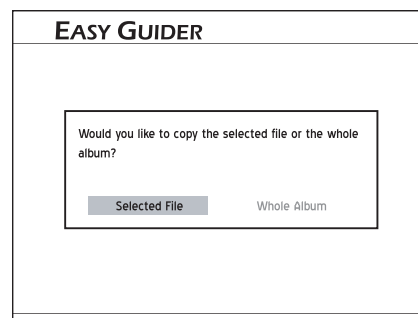
✎ If you use a DVD-R, DVD+R, DVD-RW (formatted in 'Quick Preparation' mode), you need to **finalize** the disc before it can be played back on other compatible devices. You can complete the process using 'Easy Guider'. Please see **'Using Easy Guider: Disc Tools' (p.43)** for details on how to finalize a disc.

✎ Materials recorded on a VCD/SVCD disc **CAN-NOT** be copied to the hard drive before the disc is finalized.

✎ If you own the copyright, you may copy an entire DVD-Video disc to the hard drive. Contents of a DVD-Video disc can only be copied from hard drive to a blank DVD disc.

✎ If you copy recorded titles to a blank DVD disc (DVD-R/-RW, DVD+R/+RW), you will not be able to use the same disc to copy data files, and vice versa.

Using Easy Guider: Disc Tools

ⓘ Use 'Disc Tools' to complete post-production tasks and manage the built-in hard drive.

Media	Available Tools
HDD	• Erase • Clean up • Defragment
Disc	• Erase • Finalize (Make Compatible) • Label Disc

ⓘ Before using the 'Erase' function, please make sure all your important files are safely backed up. Once you perform this function, all contents will be permanently deleted.

Erase (HDD & Disc)

1 On the Easy Guider menu, press ▲ ▼ to select 'Disc Tools', then press **ENTER**.

2 Press ▲ ▼ to select the medium, then press **ENTER**.

▌Tools for Hard Drive

Screen showing available options for hard drive will appear.
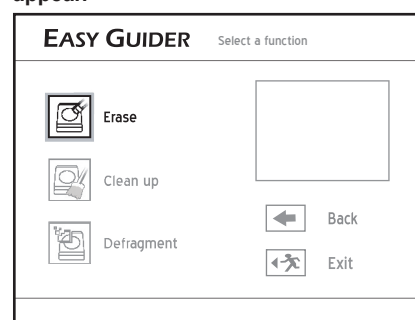
▌Tools for Disc

Screen showing available options for disc will appear.

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3 Press ▲ ▼ to select 'Erase', then press **ENTER**.

4 Press ◄ ► to select 'Go', then press **ENTER**.
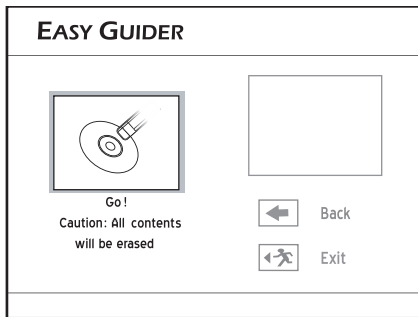
The erasing process will then start.

5 When completed, press **ENTER** to exit the screen.

Clean up (HDD)

1 On the Easy Guider menu, press ▲ ▼ to select 'Disc Tools', then press **ENTER**.

2 Press ▲ ▼ to select 'Tools for Hard Drive; then press **ENTER**.

3 Press ▲ ▼ to select 'Clean up', then press **ENTER**.

4 Press ▲ ▼ to select 'Delete Older Files', 'Delete Larger Files', 'Delete Seldom Played Files', 'Delete Album', or 'Delete All', then press **ENTER**.
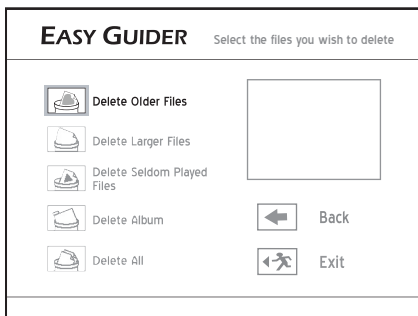
5 If you choose to delete files or albums, press ◄ ► to select 'Delete' or 'Skip', then press **ENTER**.
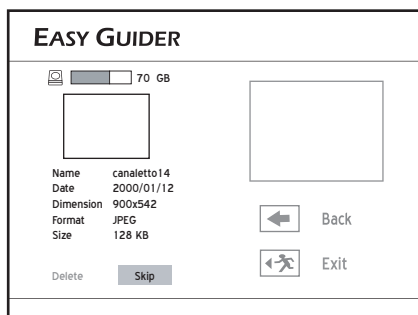
6 If you choose to delete all files, press ◄ ► to select 'Go', then press **ENTER**.
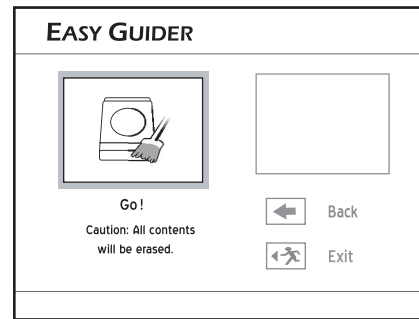
The clean-up process will then start.

7 When completed, press **ENTER** to exit the screen.

🖉 The application will permanently delete selected files or albums.

🖉 Overall clean-up time may vary depending on the original recording conditions.

Defragment (HDD)

1 On the Easy Guider menu, press ▲ ▼ to select 'Disc Tools', then press **ENTER**.

2 Press ▲ ▼ to select 'Tools for Hard Drive; then press **ENTER**.

3 Press ▲ ▼ to select 'Defragment', then press **ENTER**.

4 Press ◄ ► to select 'Go', then press **ENTER.**
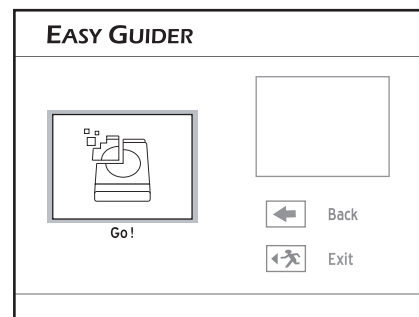
The defragmenting process will then start.

5 When completed, press **ENTER** to exit the screen.

🖉 Materials on the hard drive will not be lost during this process.

🖉 Regular defragmenting is recommended, as it helps improve overall performance of the hard drive.

🖉 If during the process you decide to cancel the application, you can press ◄ ► to select 'Exit', then press **ENTER** to exit the present screen.

Finalize [Make Compatible] (Disc)

1 On the Easy Guider menu, press ▲ ▼ to select 'Disc Tools', then press **ENTER**.

2 Press ▲ ▼ to select 'Tools for Disc; then press **ENTER**.

3 Press ▲ ▼ to select 'Finalize (Make Compatible)', then press **ENTER**.

4 Press ◀ ▶ to select 'Go', then press **ENTER**.

   The finalizing process will then start.

5 When completed, press **ENTER** to exit the screen.

🖉 Finalizing a disc is a necessary step when you want to share certain types of digital content with others. Once a disc is finalized, it can be played back on other DVD players or on PCs. For more details, please see **'Disc Information' (p.6)**.

🖉 Only discs used to record video titles require finalization. Discs used to copy media files (such as MP3 or JPEG files) are considered as data: there is no need to finalize these discs.

Label Disc (Disc)

1 On the Easy Guider menu, press ▲ ▼ to select 'Disc Tools', then press **ENTER**.

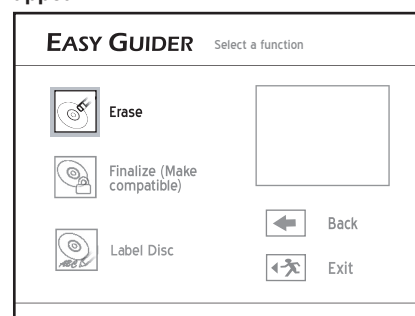**2** Press ▲ ▼ to select 'Tools for Disc; then press **ENTER**.

3 Press ▲ ▼ to select 'Label Disc', then press **ENTER**.

   The on-screen keypad will appear.

4 Press ▲ ▼ ◀ ▶ and **ENTER** buttons to enter the name.

   ☞ **On-Screen Input Keypad (p.34)**

5 After finishing entering the characters, press ▲ ▼ ◀ ▶ to select 'Finish', then press **ENTER** to start labeling the disc.

6 When completed, press **ENTER** to exit the screen.

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Recording

DVD-R, DVD-RW, DVD+R, DVD+RW, DVD+R DL (double layer) & HDD (integrated)

ⓘ You may not be able to record a program from TV or from another device connected to this recorder, if the source material is copy-protected.

ⓘ Please note that you **CANNOT** record/copy a rented or purchased video/disc from another device (video cassette recorder, DVD player, DVD recorder, etc.) connected to this recorder.

ⓘ This DVD recorder adopts the DVD+VR recording format, which enjoys a relatively greater compatibility. However, it is still likely that recordings made with this recorder may not be able to be played back on other DVD recorders or DVD players.

ⓘ One recording session in double-layer discs **CANNOT** exceed 8 hours. Once the session has lasted for over 8 hours, this DVD recorder will automatically stop recording.

ⓘ If you use a DVD-R, DVD+R, DVD-RW (formatted in 'Quick Preparation' mode), you need to **finalize** the disc before it can be played back on other compatible devices. You can complete the process using 'Easy Guider'. Please see **'Using Easy Guider: Disc Tools' (p.43)** for details on how to finalize a disc.

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Recording from TV

1 Select a recording mode.

Press **SETUP** to display the Setup menu.

Press ▲ ▼ to select 'Recording/Playback', then press ▶ or **ENTER**.

Press ▲ ▼ to select 'Recording Mode', then press **ENTER**.

Press ▲ ▼ to select a recording mode, then press **ENTER**.

SETUP   Recording / Playback

Recording Mode	SP	HQ
Chapter Mark	5 minutes	● SP
Slide Time	5 seconds	LP
VCD PBC	On	EP
DivX(R) VOD	--------------	SLP
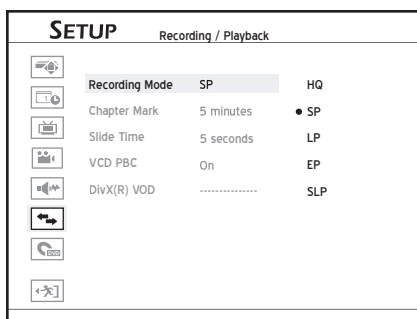
When completed, press **SETUP** to exit the Setup menu.

2 Select the target medium to save the recording.

▌HDD

Press **HDD/DVD** to switch to HDD.

▌Disc

Press ▲ **OPEN/CLOSE** to open the disc tray.

Carefully place the disc in the tray with the label side facing up, then press ▲ **OPEN/CLOSE**.

3 Press **TV (MODE)** or **SOURCE** to select 'TV' as the signal source.

By default, pressing TV (MODE) allows you to switch to TV directly. However, if you have activated the 'SCART Bypass' mode earlier through Setup menu, you can only press SOURCE to switch to TV.

If you press SOURCE, you may need to press the button more than once to switch to 'TV'.

4 Press **CH+** and **CH-** to select desired channel.

CH 28 ➡ CH 68
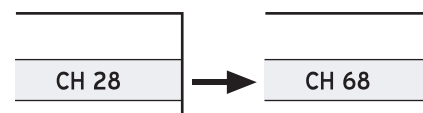
You can press number buttons (0-9) to select a channel. When completed, press ENTER for confirmation. (For Channel 6, press 6, then ENTER. For Channel 55, press 5, 5 and ENTER.)

5 Press ● **RECORD** to start recording.

SP   0:00:11 / 2:00:00   Recording
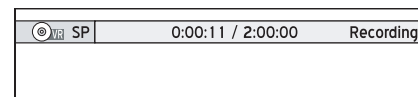
6 Press ‖▶ **PAUSE/STEP** to pause recording

Press ■ **STOP** to stop recording.

7 Press ● **RECORD** again if you need to start another recording session.

📝 When the DVD recorder is switched on during recording, you can only view the recorded channel on screen. If you would like to watch a different TV channel, you can do so by switching your TV's input source to tuner device (e.g. antenna, cable box or satellite box). This will not affect the recording already in progress. For further information on how to change the input source, please check the instruction manual offered by your TV manufacturer.

Recording from External Sources

VCR/V8 Camcorder/ DVD Player

💡 **Before you start**

► Make sure all the cables are correctly connected from external device's AV OUTPUT jacks to the recorder's AV INPUT jacks.

Connecting via front-panel jacks
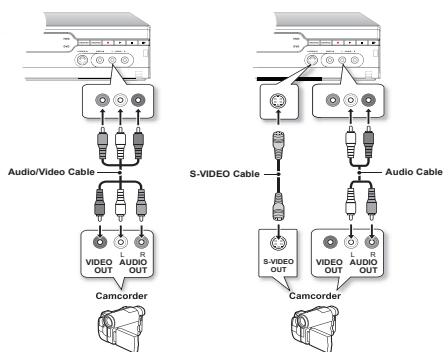
Audio/Video Cable   S-VIDEO Cable   Audio Cable

VIDEO OUT   L R AUDIO OUT   S-VIDEO OUT   VIDEO OUT   L R AUDIO OUT

Camcorder   Camcorder

By default, this DVD recorder automatically selects S-Video signal over the composite one when both input jacks are used to connect to other devices. If you would like your videos to be imported from a specific source, you can either change the default setting through **Setup → Video Input/Output → Front AV Input**, or use one set of the connections at a time.

Connecting via rear-panel jacks

SCART OUT   VCR/DVD Recorder

SCART IN
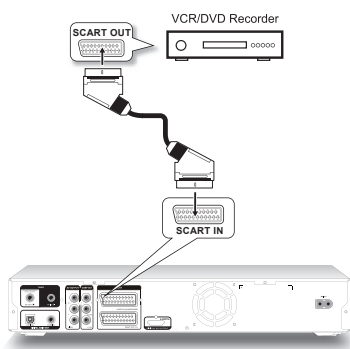
1 Press **SOURCE** repeatedly to select the correct signal source.
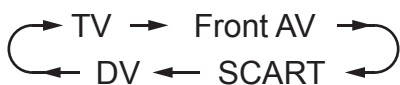
TV → Front AV →
DV ← SCART ←

2 Press **HDD/DVD** to select your target medium.

If you would like to record on disc, press ⏏ OPEN/ CLOSE to open the disc tray, and place a recordable disc on the tray.
Press ⏏ OPEN/CLOSE again to close the tray.

3 Start playback on the external device, and pause the playback at the beginning of a scene you wish to record.

4 Start playback on the external device again.
Press ● **RECORD** to start recording.

SP   0:00:11 / 2:00:00   Recording
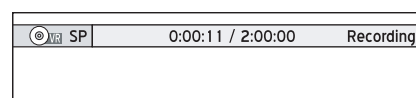
5 Press ⏸ **PAUSE/STEP** to pause recording.
Press ■ **STOP** to stop recording.

6 Press ● **RECORD** again to start another recording session.

DV (Digital Camcorder)

ⓘ The DV-Link INPUT jack on this recorder is for use with DV-compatible camcorders only.

ⓘ Only DV signals can be input to the DV-Link jack on this DVD recorder.

ⓘ Do not connect a MICRO MV format video camcorder to the DV-Link jack.

ⓘ It is possible that your DV may not be fully supported by the recorder. If you experience problem using the DV-Link for recording, please connect your DV via S-Video or composite cables to this DVD recorder.

Before you start

► Check whether the DV is correctly connected to the inputs of this recorder.

DV / Link

DV-Link
IEEE 1394   Camcorder

DV OUT
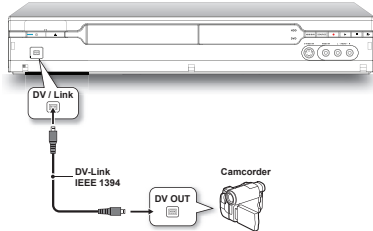
Recording with 'Rec Link'

The 'Rec Link' feature allows you to easily record DV footage with the recorder's remote control. This function is enabled by default.

1 Press **SOURCE** repeatedly to select 'DV' as the signal source.

DVD   DV
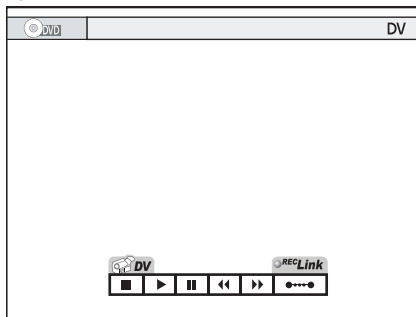
DV   RECLink

The control bar will appear with the 'Rec Link' feature enabled. You can control your DV either through the on-screen control bar using ▲ ▼ ◄ ► and ENTER buttons, or through the control keys on DV.

2 Press **HDD/DVD** to select your target medium.

If you would like to record on disc, press ▲ OPEN/CLOSE to open the disc tray, and place a recordable disc on the tray.
Press ▲ OPEN/CLOSE again to close the tray.

3 Switch your DV to playback mode.

Start playback on DV, and pause the playback at the beginning of a scene you wish to record.

4 Press ● **RECORD** to start recording.

VR SP   0:00:11 / 2:00:00   Recording
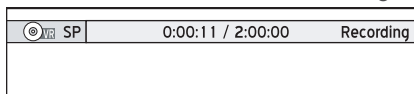
After you press ● **RECORD,** DV will automatically start playing back the footage.

5 Press ▮▶ **PAUSE/STEP** to pause recording.

DV will continue playing back the footage.

6 Press ■ **STOP** to stop recording.

DV will stop playing back the footage.

Recording without 'Rec Link'

1 Press **SOURCE** repeatedly to select 'DV' as the signal source.

2 Press ▲ ▼ ◄ ► to select 'Rec Link' button on the screen, then press **ENTER** to switch off the function.

You can control your DV either through the on-screen control bar using ▲ ▼ ◄ ► and ENTER buttons, or through the control keys on DV.

DVD   DV

DV   RECLink
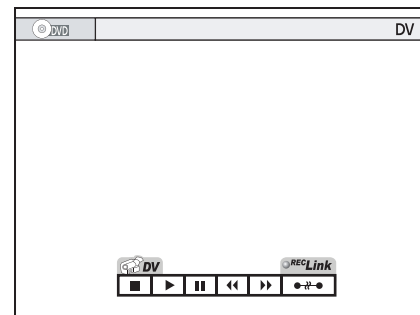
3 Press **HDD/DVD** to select your target medium.

If you would like to record on disc, press ▲ OPEN/CLOSE to open the disc tray, and place a recordable disc on the tray.
Press ▲ OPEN/CLOSE again to close the tray.

4 Switch your DV to playback mode.

5 Press ▲ ▼ ◄ ► to select a desired function from the on-screen control bar, then press **ENTER**.

Pause the playback at the beginning of a scene you wish to record.

6 Press ● **RECORD** to start recording.

VR SP   0:00:11 / 2:00:00   Recording
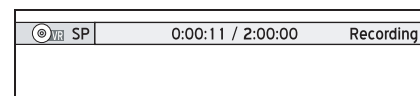
7 Press ▮▶ **PAUSE/STEP** to pause recording.

Press ■ **STOP** to stop recording.

8 Press ● **RECORD** again to start another recording session.

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Recording Options

One-Touch Recording

1 When all recording settings are confirmed, press ● **RECORD** twice to instantly start a 30-minute recording session.

2 For longer recording hours, press ● **RECORD** repeatedly, which will offer you a length option of up to 6 hours in 30-minute increments.

3 Press ● **RECORD** again if you need to start another recording session.

✎ 'One-Touch Recording' will start with the recorder's default recording settings.

☞ **Setup Menu (Recording/Playback) (p.26)**

✎ The overall recording time depends on the selected recording mode and the storage capacity available on your target medium.

✎ Recording will stop automatically when there is no more space on your target medium or when it reaches the end of your preset duration.

Adding New Sessions

1 After the previous recording is stopped, press ● **RECORD** again to start another recording session.

2 Press ▐▶ **PAUSE/STEP** to pause recording.
Press ■ **STOP** to stop recording.

**3** Press ● **RECORD** again if you need to start another recording session.

✎ Each new recording session is placed after the previous session unless a certain recorded title is set to be overwritten (applicable to DVD-RW/DVD+RW discs only)

☞ **Overwrite Title (p.71)**

Playing Last Recorded Title (HDD)

1 Press **HDD/DVD** to switch to HDD.

2 Press ▶ **PLAY**.

3 Playback of the last recorded title will then start.

✎ 'You can also play back the last recorded title via **GUIDER → Play → HDD → Last Recorded.**

☞ **Using Easy Guider: Play (p.37)**

Using Chapter Mark

During or after recording, you can create chapters by inserting chapter marks in a video title. Depending on the target medium you use, the number of maximum chapters and titles you can add may vary. Please see the table below for details.

Type	Maxi. Title	Maxi. Chapter
HDD	5994*	-
DVD	49**	254

* For each title, you can create up to 999 chapters.

** For each title, you can create up to 99 chapters. But you can only create a maximum of 254 chapters in one disc.

Changing Chapter Interval

1 Press **SETUP** to display the Setup menu.

2 Press ▲ ▼ to select 'Recording/Playback', then press **ENTER**.

SETUP   Recording / Playback

Recording Mode	SP	HQ
Chapter Mark	5 minutes	● SP
Slide Time	5 seconds	LP
VCD PBC	On	EP
DivX(R) VOD	··············	SLP
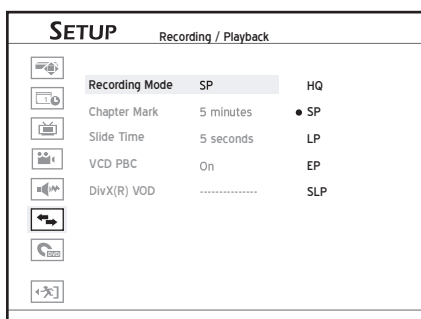
3 Press ▲ ▼ to select 'Chapter Mark', then press **ENTER**.

SETUP   Recording / Playback

Recording Mode	SP	Off
Chapter Mark	5 minutes	● 5 minutes
Slide Time	5 seconds	10 minutes
VCD PBC	On	15 minutes
DivX(R) VOD	··············	20 minutes
		25 minutes
		30 minutes
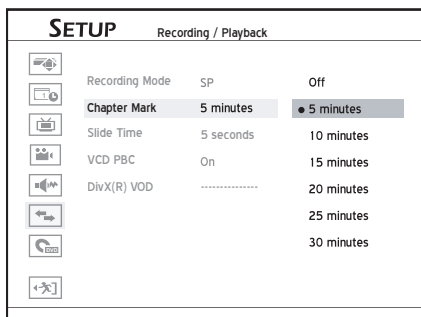
4 Press ▲ ▼ to select your desired interval, then press **ENTER**.

5 When completed, press ◄ to return to the main menu.

6 Press ◄ or **SETUP** to completely exit the Setup menu.

> ✎ New chapter division setting will take effect on future recordings; it **CANNOT** be applied to titles already recorded.

Inserting Additional Chapter Marks

During recording, you can manually insert extra chapter marks other than those created by system default setting.

1 During recording, press **EDIT** to insert chapter mark at your desired point.

SP   0:00:11 / 2:00:00   Chpater Inserted
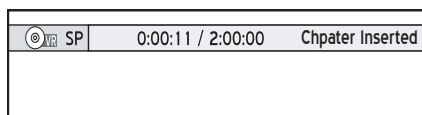
2 To add more chapter marks, repeat step 1.

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Timer Recording

DVD-R, DVD-RW, DVD+R, DVD+RW, DVD+R DL (double layer) & HDD (integrated)

ⓘ You may not be able to record a program from TV or from another device connected to this recorder, if the source material is copy-protected.

ⓘ This DVD recorder adopts the DVD+VR recording format, which enjoys a relatively greater compatibility. However, it is still likely that recordings made with this recorder may not be able to be played back on other DVD recorders or DVD players.

ⓘ One recording session in double-layer discs **CANNOT** exceed 8 hours. Once the session has lasted for over 8 hours, this DVD recorder will automatically stop recording.

ⓘ If you use a DVD-R, DVD+R, DVD-RW (formatted in 'Quick Preparation' mode), you need to **finalize** the disc before it can be played back on other compatible devices. You can complete the process using 'Easy Guider'. Please see '**Using Easy Guider: Disc Tools' (p.43)** for details on how to finalize a disc.

Before you start

► Check whether the system date and time of the DVD recorder is correct.

   ☞ **Setup Menu (Date/Time) (p.24)**

► Check whether there is enough space on the disc or on the hard drive.

► Check whether the channel scanning process for your TV is completed.

   ☞ **Setup Menu (Tuner) (p.24)**

Timer Record Menu

Info Screen 1

Remaining time (available space)
(*white bar represents space available at current recording mode)

Preset recording mode

Disc

HDD

Error message

TIMER RECORD

1h00m·SP

33h25m·SP

Error: Not Recordable Disc

12/04/05   Sunday

08:09PM

Page 2/2

System date

System time

Page index

Source	Repeat	Date	Time	
TV 2	Once	01/04/05	09:00PM~10:00PM	✓
TV 25	Once	03/04/05	11:00AM~11:30AM	✓
TV 13	Once	04/04/05	18:00PM~18:30PM	✓
TV 8	Weekly	Mon, Tue	06:00PM~08:00PM	
TV 6	Once	12/04/05	07:30PM~09:00PM	⚠
TV 12	Once	15/04/05	11:00PM~11:30PM	
TV 33	Once	18/04/05	04:00AM~05:00AM	

Indicates the timer program was successfully activated

Indicates the timer program was not successfully activated

New Timer Program

Delete icon
The icon appears when the timer program is highlighted. Press to delete a timer program.

Previous Page   Exit

Scroll indicator. Press ▶ to go to Info Screen 2 for more details

Target medium for the timer program

Press to go to previous page

Exit button

Info Screen 2

Recording mode of the timer program

PDC/VPS setting of the timer program

TIMER RECORD

1h00m··SP

33h25m··SP

12/04/05   Sunday

08:09PM

Page 2/2

ShowView number of the timer program

ShowView#	HDD/DVD	Mode	PDC/VPS	Sound	
99999	HDD	SP	Off	Stereo	✓
----------	HDD	EP	Off	Mono	✓
1972623	DVD	HQ	On	Mono	✓
----------	DVD	HQ	Off	Stereo	
420124	HDD	SP	Off	Mono	⚠
061776	HDD	EP	On	Mono	
18370524	DVD	HQ	On	Stereo	

TV audio setting of the timer program

New Timer Program

Timer program set using the Date/Time mode

Press to enter the timer program setup screen

Previous Page   Exit

Scroll indicator Press ▶ to go to Info Screen 1 for more details

Target medium for the timer program

Exit button

✎ The schedule list is automatically sorted by system according to the start time of each preset program.

✎ You can set a maximum of 32 timer programs, which will be displayed on four separate pages. If there are fewer than 8 programs, the 'Next Page' button will not be shown.

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Setting Timer Program

Date/Time Mode

1 Press **TIMER** to display the Timer Record menu.

2 Press **ENTER** to start new setting, or press ▲ ▼ to select a previous setting which you would like to modify, then press **ENTER**.

3 Press **ENTER** and ▲ ▼ to select the signal source, then press **ENTER**.

> **If you select 'TV' as the signal source, press ▲ ▼ or number buttons (0-9) to enter the channel number, then press ENTER.**

4 Press **ENTER** and ▲ ▼ to select the target medium for saving the recording, then press **ENTER**.

5 Press ▲ ▼ to select a recording mode, then press **ENTER**.

6 Press **ENTER** and ▲ ▼ to select the recording frequency, then press **ENTER**.

> ▌ Once
>
> **If you select 'Once', you need to set the date. Press ▲ ▼ ◄ ► or number buttons (0-9) to enter the date.**
>
> **You can set the date up to 2099/12/31 (Year/Month/Day).**
>
> ▌ Daily
>
> **The timer program will be automatically set for each day until the setting is cancelled or there is not enough space on the target medium.**
>
> ▌ Weekly
>
> **A weekly calendar will appear for you to select the day.**

```
TIMER RECORD
Source      TV
Channel     12
HDD/DVD     HDD
Mode        SP
Repeat      Weekly      ☐ SUN
Date        🗓          ☐ MON
Start       18:00       ☐ TUE
End         19:00       ☐ WED
Sound       Stereo      ☐ THR
PDC/VPS     Off         ☐ FRI
                        ☐ SAT
                        ☑ OK
         🗓 12/04/05  Sunday
         🕐 08:09PM
         ◉ ▭▭  1h00m···SP
         ▭ ▭▭  33h25m···SP
   OK    Cancel   Advanced  ShowView
```

> **Press ▲ ▼ to select desired day(s), then press ENTER to confirm your selection. You can select more than one day from the pull-down menu.**
>
> **When completed, press ▲ ▼ to select 'OK', then press ENTER.**

7 Press **ENTER** and ▲ ▼ ◄ ► (or number buttons [0-9]) to enter the start time, then press **ENTER.**

8 Press ▲ ▼ ◄ ► or number buttons (0-9) to enter the end time, then press **ENTER.**

9 If you select 'TV' as the signal source, press **ENTER** and ▲ ▼ to select the TV audio mode, then press **ENTER**.

10 Press **ENTER** and ▲ ▼ to switch on or off the PDC function, then press **ENTER.**

> **For more details, please see 'VPS (Video Programming System) & PDC (Program Delivery Control)' (p.55) in the note section.**

11 Press ▲ ▼ ◄ ► to select 'OK', then press **ENTER** to save the setting and return to the Timer Record menu.

> Press ▲ ▼ ◄ ► to select 'Cancel', then press **ENTER**, if you would like to discard current setting.
>
> **If the start time coincides with that of another preset program, the 'OK' button will be disabled. Select 'Cancel' to discard the setting, or press ▲ ▼ ◄ ► and number buttons (0-9) to revise the time.**

12 If you would like to schedule more timer programs, press ▲ ▼ to select another item on the list, then press **ENTER.**

> If not, select 'Exit', then press **ENTER**. Or press **ENTER** to exit the Timer Record menu.

► **Stop a timer-recording session**

> Press ■ **STOP** to stop the timer recording.
>
> **Please note that it may take a few seconds before the program is completely brought to an end.**

► **Check the status during timer recording**

> Press **DISPLAY** to bring up the Timer Record information on screen.

🗑 **Advanced Setting**
If you select 'Daily' or 'Weekly' for timer recording, it is suggested that you use further commands for more effective application. Press ▲ ▼ ◄ ► to select 'Advanced', then press **ENTER**. Choose whether or not to specify a time period for your timer programs by selecting 'With restriction' or 'Without restriction'.

```
Mode        SP
Repe
Da          Apply the setting           y
Sta         ☐ Without Restriction
            ☑ With Restriction    Start  04/04/05
Er                                End    19/04/05
Sour                                          0m···SP
              OK           Cancel            5m···SP
PDC/VPS     Off
   OK    Cancel   Advanced  ShowView
```
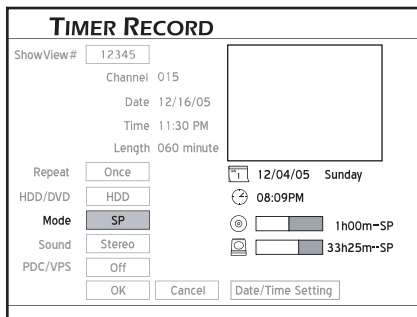
ShowView Mode

There are two ways to schedule timer programs using the ShowView system. For more information, please see **'ShowView Programming System' (p.31)**.

Pressing the ShowView Button

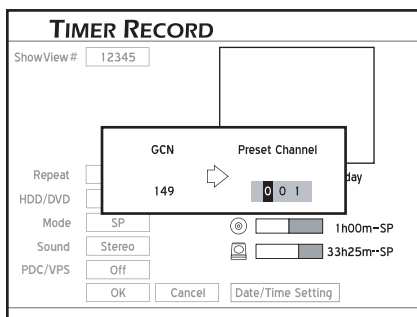① Press the **ShowView** button to display the ShowView system menu.

Via Timer Record Menu

① Press **TIMER** to display the Timer Record menu.

② Press **ENTER** to start new setting, or press ▲ ▼ to select a previous setting which you would like to modify, then press **ENTER**.

③ Press ▲ ▼ ◄ ► to select the 'ShowView' button, then press **ENTER** to display the ShowView setup menu.

1 Press ▲ ▼ ◄ ► or number buttons (0-9) to enter the ShowView number of a program you wish to record, then press **ENTER**.

TIMER RECORD

ShowView # 12345
Channel 015
Date 12/16/05
Time 11:30 PM
Length 060 minute

Repeat	Once
HDD/DVD	HDD
Mode	**SP**
Sound	Stereo
PDC/VPS	Off

1 12/04/05 Sunday
08:09PM
1h00m–SP
33h25m··SP

OK   Cancel   Date/Time Setting

Details of the program will appear.

2 A 'Preset Channel' pop-up box will appear, if the DVD recorder fails to find information of a corresponding channel.

Press ▲ ▼ ◄ ► or number buttons (0-9) to enter the channel number which corresponds to the GCN (Guide Channel Number) designated by the ShowView system, then press **ENTER**.

TIMER RECORD

ShowView # 12345

Repeat	
HDD/DVD	
Mode	SP
Sound	Stereo
PDC/VPS	Off

GCN   Preset Channel
149   0 0 1
day
1h00m–SP
33h25m··SP

OK   Cancel   Date/Time Setting

As the channel number of a TV station may vary depending on where you live, you need to set up a matching list in order to use the ShowView system to schedule a timer program.

For example, on the ShowView System's TV listings, the X station is assigned with a GCN (2), while it is designated to channel 4 and 15 in region A and B, respectively. To set up the corresponding list, enter the number 4 or 15 when the 'Preset Channel' pop-up box appears.

	TV Station	GCN	Preset Channel
Region A	X	2	4
Region B	X	2	15
Region C	X	2	56

3 Press **ENTER** and ▲ ▼ to select the recording frequency, then press **ENTER**.

4 Press **ENTER** and ▲ ▼ to select the target medium for saving the recording, then press **ENTER**.

5 Press ▲ ▼ to select a recording mode, then press **ENTER**.

6 Press **ENTER** and ▲ ▼ to select the TV audio mode, then press **ENTER**.

7 Press **ENTER** and ▲ ▼ to switch on or off the PDC function, then press **ENTER.**

For more details, please see 'VPS (Video Programming System) & PDC (Program Delivery Control)' (p.55) in the note section.

8 Press ▲ ▼ ◄ ► to select 'OK', then press **ENTER** to save the setting and return to the Timer Record menu.

Press ▲ ▼ ◄ ► to select 'Cancel', then press **ENTER**, if you would like to discard current setting.

If you would like to return to the Date/Time mode, press ▲ ▼ ◄ ► to select 'Date/Time Setting', then press ENTER. Please note that all the settings you have entered will be cleared once you exit the present setup screen.

9 If you would like to schedule more timer programs, press ▲ ▼ to select another item on the list, then press **ENTER.**

If not, select 'Exit', then press **ENTER**. Or press **ENTER** to exit the Timer Record menu.

✎ **VPS (Video Programming System) & PDC (Program Delivery Control)**

VPS/PDC services are used to automatically check the time information of TV programs being aired. If the TV stations in your area carry the service, you can switch on the PDC function when scheduling a timer program on this DVD recorder. With the function activated, the recorder will check whether the start time of your preset program has been rescheduled, and begin recording at the most updated time accordingly.

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You can assign a maximum of 20 PDC settings. Please note that the PDC signal can only be monitored when DVD recorder is in standby mode. If you have been using the DVD recorder before a preset timer program starts, the recording will begin following the original schedule.

🖉 You can schedule a maximum of 32 timer programs. If the setting list is full, you need to cancel some of the reserved programs first.

🖉 This DVD recorder features 'power-on' timer recording: you do not need to switch off the recorder to activate the function.

🖉 One recording session in double-layer discs **CAN-NOT** exceed 8 hours. Once the session has lasted for over 8 hours, this DVD recorder will automatically stop recording.

🖉 If you use a DVD-R, DVD+R, DVD-RW (formatted in 'Quick Preparation' mode), you need to **finalize** the disc before it can be played back on other compatible devices. You can complete the process using 'Easy Guider'. Please see **'Using Easy Guider: Disc Tools' (p.43)** for details on how to finalize a disc.

⑦ Why is my preset program not completely recorded?

➥ **• Space**
If there is not enough space on the target medium, your preset program can only be partially recorded depending on the capacity available.

➥ **• Overlapped Settings**
The unfinished recording may occur when time settings of two timer programs overlap. The DVD recorder will stop recording the earlier program at the start time of the later program. (The black bars represent contents recorded.)

Case 1
Program 1
Program 2

Case 2
Program 1
Program 2
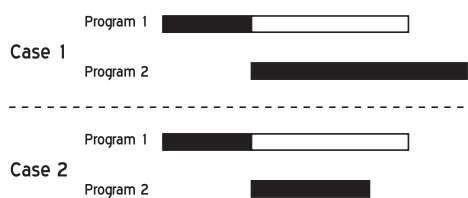
Time Shift

ⓘ Please note that if the source materials you are viewing are copy-protected, you will not be able to make use of the 'Time Shift' function.

💡 **Before you start**

► Check whether you have switched your TV's input source to corresponding option (e.g. VIDEO 1, LINE 2, etc.), so that signal from the DVD recorder can appear on screen. For further information, please check the instruction manual offered by your TV manufacturer.

► Check whether the channel scanning process for your TV is completed.

   ☞ **Setup Menu (Tuner) (p.24)**

Pause Live TV

1 Press **CH+** and **CH-** to select a desired channel.

2 Press **TIME SHIFT** to pause the program you are currently watching.

🖵 Timeshift	0:00:00 / 0:00:15	❚❚
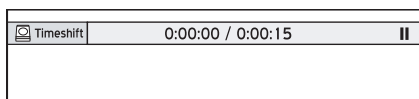
   The scene displayed on the TV screen will be the last picture shown when you press TIME SHIFT.

3 Press ▶ **PLAY** when you decide to go back to watch the program. The program will then be played back from where it is interrupted.

4 Press ❚▶ **PAUSE/STEP** to pause playback.

   Press ▶ **PLAY** again to resume playback.

   Press ▶▶ **F. F.** to fast-forward playack.

   Press ◀◀ **F. R.** to rewind playack.

5 Press **TIME SHIFT** to switch off the function, and return to the normal TV-viewing mode.

✎ The maximum time for live program pause is 2 hours.

Record & Play

1 During recording or timer recording, press ▶ **PLAY** to start playback of contents recorded on the hard drive.

2 Playback will then start from beginning of the recorded session.

🖵HDD SP	0:00:11 / 0:05:26	▶ ◉
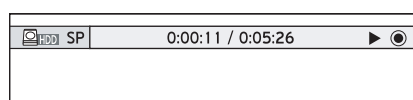
3 Press ❚▶ **PAUSE/STEP** to pause playback.

   Press ▶ **PLAY** again to resume playback.

   Press ■ **STOP** to stop playback.

   Press ■ **STOP** again to stop the recording completely.
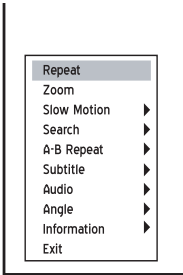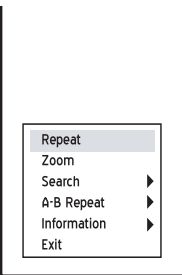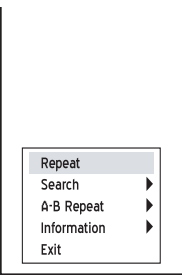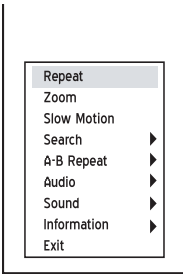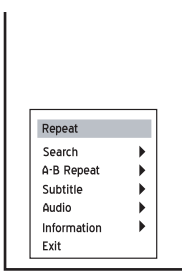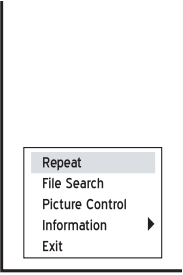
✎ The function is applicable to video titles recorded on hard drive only.

✎ You can only use this function when the recording has been in progress for at least 10 seconds.

Playback

> ℹ️ Please note that it is likely you may not be able to play back discs which contain contents recorded in other DVD recorders.

> ℹ️ This DVD recorder can only play DVD-Video discs marked with the same region code as printed on its rear panel. For details on which types of discs or files can be played back on this DVD recorder, please see **'Disc Information' (p.6).**

> ℹ️ If you use a DVD-R, DVD+R, DVD-RW (formatted in 'Quick Preparation' mode), you need to **finalize** the disc before it can be played back on other compatible devices. You can complete the process using 'Easy Guider'. Please see 'Using Easy Guider: Disc Tools' (p.43) for details on how to finalize a disc.

Navigation Menu

Screen Overview

Media	DVD-Video / Video Titles	MPEG-1/MPEG-2 Files	Audio CD / Music Files
Screen View	Repeat / Zoom / Slow Motion ▶ / Search ▶ / A-B Repeat ▶ / Subtitle ▶ / Audio ▶ / Angle ▶ / Information ▶ / Exit	Repeat / Zoom / Search ▶ / A-B Repeat ▶ / Information ▶ / Exit	Repeat / Search ▶ / A-B Repeat ▶ / Information ▶ / Exit

Media	VCD / SVCD	MPEG-4 Files	Picture Files
Screen View	Repeat / Zoom / Slow Motion / Search ▶ / A-B Repeat ▶ / Audio ▶ / Sound ▶ / Information ▶ / Exit	Repeat / Search ▶ / A-B Repeat ▶ / Subtitle ▶ / Audio ▶ / Information ▶ / Exit	Repeat / File Search / Picture Control / Information ▶ / Exit

✎ The options shown on the Navigation menu vary depending on the media types (e.g. DVD, audio CD, VCD, etc.) as well as the supporting features offered by the media being played. **Unavailable options will be disabled.**

Access to the Navigation Menu
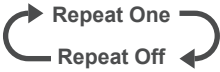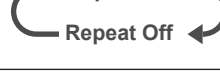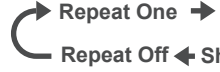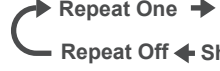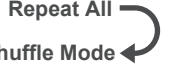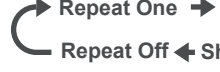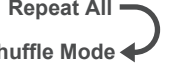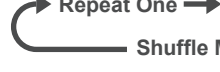
① Press **NAVI**. to display the Navigation menu.

② Press ▲ ▼ ◀ ▶ and **ENTER** to select a playback option from the menu, and set your preference.

③ When completed, press ▲ ▼ ◀ ▶ to select 'Exit', then press **ENTER**.

Playback Options

Repeat

Use the 'Repeat' function to set your playback preference.

1 Press **ENTER** repeatedly to choose a repeat mode.

Type	Repeat Mode
DVD-Video Video Title	Repeat One Repeat Off
VCD SVCD	Repeat All Repeat Off
Video Files	Repeat One → Repeat All Repeat Off ← Shuffle Mode
Audio CD	Repeat One → Repeat All Repeat Off ← Shuffle Mode
Music Files	Repeat One → Repeat All Repeat Off ← Shuffle Mode
Picture Files	Repeat One → Repeat All Shuffle Mode

Zoom

The 'Zoom' feature allows you to enlarge the video image and to pan through the enlarged image during playback.

1 Press ▲ ▼ ◀ ▶ to select the ⊕ (zoom in) icon, then press **ENTER** repeatedly to enlarge the video image by 100%, 200%, 300% or 400%.

Or select the ⊖ (zoom out) icon, then press **ENTER** repeatedly to reduce the video image by 400%, 300%, 200% or 100%.
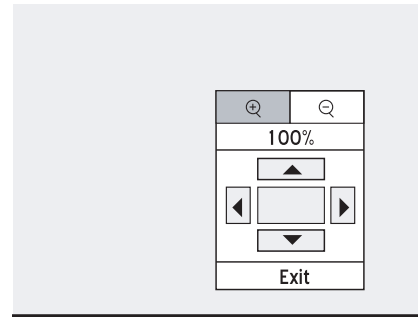
2 To resume the normal image size, press ▲ ▼ ◀ ▶ to select '100%', then press **ENTER**.

3 To view different sections of the enlarged image, go to the on-screen control pad.

Press ▲ ▼ ◀ ▶ to select the direction you would like to apply, then press **ENTER**.

Press **ENTER** repeatedly, if necessary, to move the image.

Picture Control

The 'Picture Control' function not only allows you to enlarge or reduce the picture image, but also makes it possible to pan through the image for more detailed viewing.

1 Press ▲ ▼ ◀ ▶ to select the ⊕ (zoom in) icon, then press **ENTER** repeatedly to enlarge the picture by 25%, 50%, 75% or 100%.

Or select the ⊖ (zoom out) icon, then press **ENTER** repeatedly to reduce the picture by 75%, 50% or 25%.
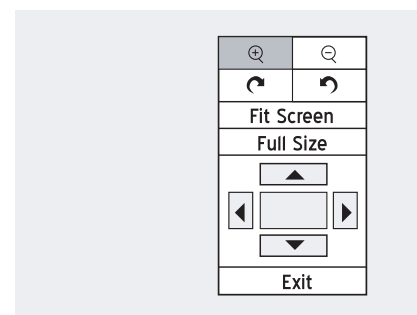
2 To resume the normal image size, press ▲ ▼ ◀ ▶ to select 'Full Size', then press **ENTER**.

3 To view different sections of the enlarged picture, go to the on-screen control pad.

Press ▲ ▼ ◀ ▶ to select the direction you would like to apply, then press **ENTER**.

Press **ENTER** repeatedly, if necessary, to move the image.

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Slow Motion

1 Press ▲ ▼ to select from the options, then press **ENTER.**

   ···► **1/2x (forward)**

   ···► **1/4x (forward)**

   ◄··· **1/2x (backward)**

   ◄··· **1/4x (backward)**

2 Press ▸**PLAY** to resume normal playback.

Search

You can search a disc which contains video files or titles by entering the title/chapter number or by entering a specific time. A similar function is also available when you play audio CDs or music files.

► Search by Title/Chapter Number

1 Press ▲ ▼ to select 'Title/Chapter', then press **ENTER**.

2 Press ▲ ▼ ◄ ► or number buttons (0-9) to enter the numbers, then press **ENTER**.
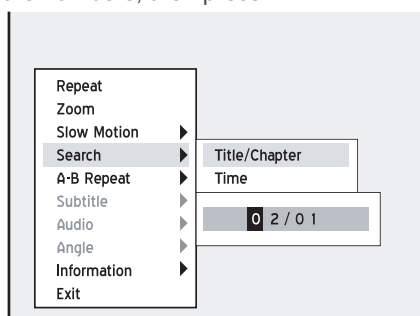
The bar for entering the title/chapter number will appear.

If during the process you would like to revise the number you enter, press ◄ to re-edit the last digit(s) when necessary.

✍ For more details on 'title' and 'chapter', please see **'Disc Information (Title & Chapter)' (p.8)**

✍ If the number you enter exceeds total title/chapter number, an invalid icon will appear, and the recorder will keep playing back the disc.

✍ If you would like to see the total number of title/chapter, please go to 'Information' on the Navigation menu.

► Search by Time

1 Press ▲ ▼ to select 'Time', then press **ENTER**.

2 Press ▲ ▼ ◄ ► or number buttons (0-9) to enter the numbers, then press **ENTER**.
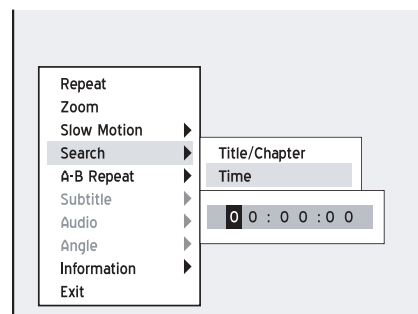
The bar for entering time will appear.

If during the process you would like to revise the number you enter, press ◄ to re-edit the last digit(s) when necessary.

✍ If the number you enter exceeds total time, an invalid icon will appear, and the recorder will keep playing back the disc.

✍ If you would like to see the overall time, please go to 'Information' on the Navigation menu.

A-B Repeat

1 When playback reaches the beginning of your desired session, press ▲ ▼ to select 'Set Point A', then press **ENTER**.
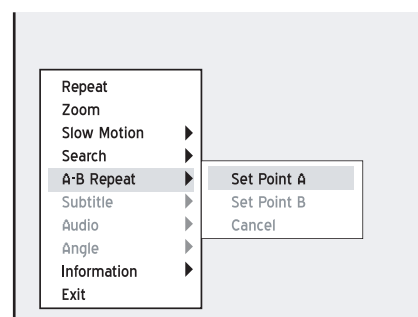
2 When playback reaches the end of the desired session, press ▲ ▼ to select 'Set Point B', then press **ENTER**.
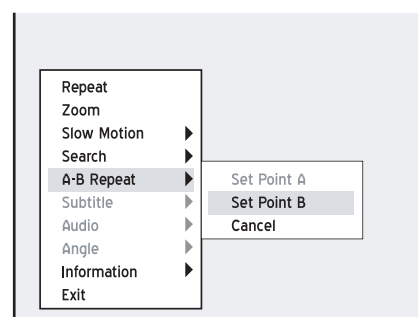
Playback of the designated session will start.

3 To cancel the repeat mode, press ▲ ▼ to select 'Cancel', then press **ENTER**.

✍ If you exit the function, setting only point A, the preset point A will still be valid when you enter the 'A-B Repeat' function next time.

✎ The 'Cancel' function is only available when both point A and point B are set.

✎ The 'A-B Repeat' setting will be canceled when you bring the program to a marked stop or a full stop.

Subtitle

On some pre-recorded DVDs, there may be more than one subtitle language. If the DVD-Video disc is already preset to a default language, the playback will start following this setting, but you can use the Navigation menu to select a different language at any time during playback.

1 Press ▲ ▼ to select a subtitle language, then press **ENTER**.

```
Repeat
Zoom
Slow Motion     ▶
Search          ▶
A-B Repeat      ▶
Subtitle        ▶      Off
Audio           ▶   ● Chinese
Angle           ▶      English
Information     ▶
Exit
```
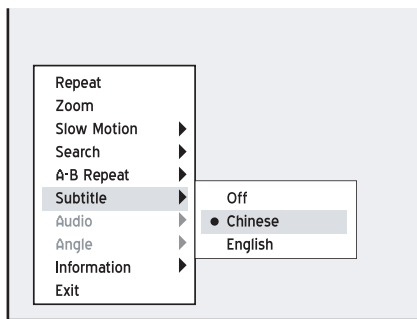
Audio

On some pre-recorded DVD discs, there may be more than one audio language. If the DVD-Video disc is already preset to a default language, the playback will start following this setting, but you can use the Navigation menu to select a different language at any time during playback.

1 Press ▲ ▼ to select an audio language, then press **ENTER**.

```
Repeat
Zoom
Slow Motion     ▶
Search          ▶
A-B Repeat      ▶
Subtitle        ▶
Audio           ▶   ● Chinese (DD)
Angle           ▶      English (DD)
Information     ▶
Exit
```
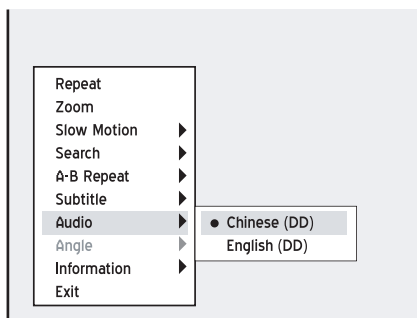
✎ When VCD/SVCD is selected for playback, sound options will be: **Normal, SWAP, Left and Right.**

Angle

Some pre-recorded DVD discs contains scenes shot from different camera angles. You can choose to view these camera angles during playback.

1 Press ▲ ▼ to select a camera angle, then press **ENTER**.

```
Repeat
Zoom
Slow Motion     ▶
Search          ▶
A-B Repeat      ▶
Subtitle        ▶
Audio           ▶
Angle           ▶   ● 1
Information     ▶      2
Exit
```
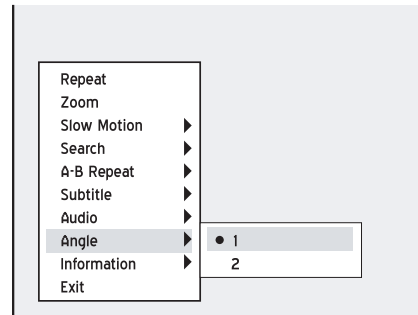
Information

During playback, you can select to display the disc information on the top of the screen or to hide it.

1 Press ▲ ▼ to select 'On' or 'Off', then press **ENTER**.

```
Title       01/08    Chpater   001/001   Time     00:00:27
Subtitle    --       Audio     - -       Total    00:03:04
Display     4 : 3    Sound     DD        Angle    1/1
     VR              Title 01 Chpater 001 0:00:27        ▶

Repeat
Zoom
Slow Motion     ▶
Search          ▶
A-B Repeat      ▶
Subtitle        ▶
Audio           ▶
Angle           ▶
Information     ▶   ● On
Exit                   Off
```
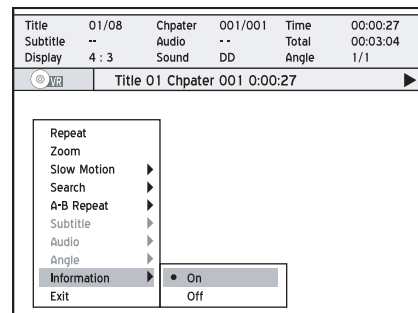
If you select 'On', disc information will appear on the top of the screen.

✎ Different categories of information will be shown depending on the media type.

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Playback (Disc)

DVD-Video/VCD/ SVCD

1 Press ⏏ **OPEN/CLOSE** to open the disc tray.

2 Carefully place the disc on the tray with the label side facing up, then press ⏏ **OPEN/CLOSE**.

3 If playback does not start automatically, press ▶ **PLAY** to begin playback.

> **If you have inserted a DVD-Video disc, a menu may appear when the disc is in playback mode.**
>
> **Press ▲ ▼ ◀ ▶ to select an item and confirm with ENTER.**
>
> **If the titles and chapters are numbered, you can also press number buttons (0-9) to select a desired item and confirm with ENTER.**

4 Press ■ **STOP** to stop playback at a marked stop.

Press ▶ **PLAY** to resume playback from a marked stop.

Press ■ **STOP** twice to bring the playback to a full stop.

5 To remove the disc, press ⏏ **OPEN/CLOSE**.

> ✎ If you would like to bring up the DVD menu, press **MENU** on the remote control to display it.
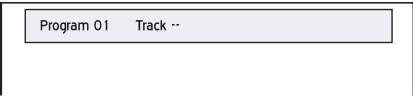
> ✎ This DVD recorder supports discs recorded with multiple sessions.

Audio CD

Standard Playback

1 Press ⏏ **OPEN/CLOSE** to open the disc tray.

2 Carefully place the disc on the tray with the label side facing up, then press ⏏ **OPEN/CLOSE**.

3 If playback does not start automatically, press ▶ **PLAY** to begin playback.

4 Press ■ **STOP** to stop playback.

Press ▶ **PLAY** to resume playback.

5 To remove the disc, press ⏏ **OPEN/CLOSE**.

Programmed Playback

1 Press ⏏ **OPEN/CLOSE** to open the disc tray.

2 Carefully place the disc on the tray with the label side facing up, then press ⏏ **OPEN/CLOSE**.

3 If playback does not start automatically, press ▶ **PLAY** to begin playback.

4 Press **EDIT** to bring up the editing bar.

Program 01   Track --

5 Press the number buttons (0-9) to enter the number of track you would like to play and confirm with **ENTER**.

6 When completed, press ▶ **PLAY** to begin playback.

Press ■ **STOP** to stop playback.

Press ▶ **PLAY** to resume playback.

7 To remove the disc, press ⏏ **OPEN/CLOSE**.

> ✎ This DVD recorder supports discs recorded with multiple sessions.

Media Files (Video/Music/Picture)

1 Press ⏏ **OPEN/CLOSE** to open the disc tray.

2 Carefully place the disc on the tray with the label side facing up, then press ⏏ **OPEN/CLOSE**.

3 Press **CONTENTS** to display the Contents Menu.

4 Press ▲ ▼ ◀ ▶ to select 'DVD' as the source medium, then press **ENTER**.

5 Press ▲ ▼ ◀ ▶ to select the types of files (Video/Music/Picture) you wish to play, then press **ENTER**.

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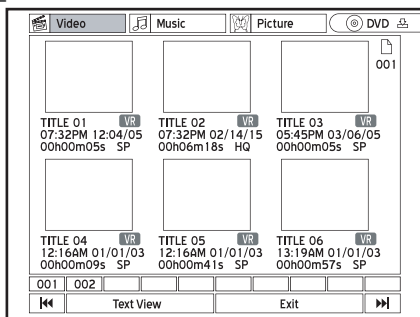
Video

Press ▲ ▼ ◄ ► to select a video title, then press ENTER.
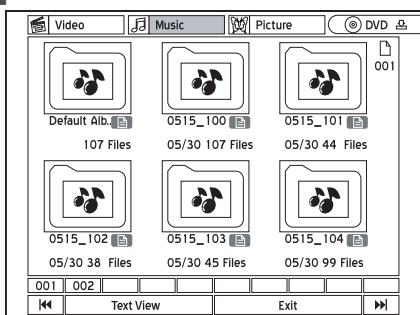
Playback will then start.

Music

Press ▲ ▼ ◄ ► to select a music album, then press ENTER to go into the album.

Press ▲ ▼ to select a music file, then press ENTER.

Picture
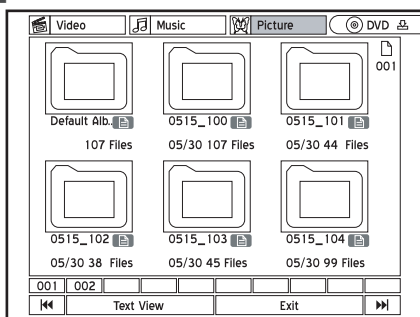
Press ▲ ▼ ◄ ► to select a picture album, then press ENTER to go into the album.

Press ▲ ▼ to select a music file, then press ENTER.

6 If you have chosen to play:

Video

Press ◄◄ PREVIOUS or ►► NEXT to advance or return to the previous or next chapter.
Press ■ STOP to stop playback at a marked stop.
Press ► PLAY to resume playback from a marked stop.
Press ■ STOP twice to bring the playback to a full stop.

Music

Press ■ STOP to stop playback.
Press ► PLAY to resume playback.

Picture

Press ◄ ► to skip to the previous or next picture.

Press ▲ repeatedly to rotate the picture clockwise, or press ▼ repeatedly to rotate the picture counter-clockwise.
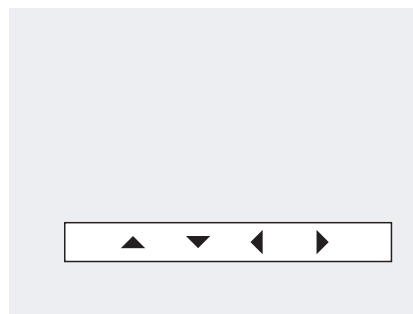
Press ■ STOP to stop playback at a marked stop.
Press ► PLAY to resume playback from a marked stop.
Press ■ STOP twice to bring the playback to a full stop.

- This DVD recorder supports discs recorded with multiple sessions.

- If an MP3 file name includes two-byte character, it may not be displayed correctly.

- This DVD recorder does not support ID3 (for MP3) and WMA tags.

- This DVD recorder does not support mp3PRO files.

- The MP3 file bitrates supported by this DVD recorder are: 32Kbps - 320Kbps.

- This DVD recorder does not support WMA lossless files and WMA files protected by DRM (digital rights management) technology.

Picture with Music

If your source medium contains picture and music files, you can play both types of files at the same time.

Using Contents Menu

1 Press ▲ OPEN/CLOSE to open the disc tray.

2 Carefully place the disc on the tray with the label side facing up, then press ▲ OPEN/CLOSE.

3 Press **CONTENTS** to display the Contents Menu.

4 Press ▲ ▼ ◄ ► to select 'DVD' as the source medium, then press **ENTER**.

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5 Press ◀ ▶ to select 'Picture', then press **ENTER**.

6 Press ▲ ▼ ◀ ▶ to select a picture album, then press **ENTER**.

7 Press ▲ ▼ ◀ ▶ to select a picture, then press **ENTER**.

  Playback will then start.

8 Press **CONTENTS** to display the Contents Menu.

9 Press ◀ ▶ to select 'Music', then press **ENTER**.

10 Press ▲ ▼ ◀ ▶ to select a music album, then press **ENTER**.

11 Press ▲ ▼ ◀ ▶ to select a music file, then press **ENTER**.

  Playback will then start.

12 Press ◀ ▶ to skip to the previous or next picture. Press ▲ repeatedly to rotate the picture clockwise, or press ▼ repeatedly to rotate the picture counterclockwise.

Using Easy Guider

For more information on how to make use of the simultaneous playback, please see **'Using Easy Guider: Play' (p.37).**

Playback (HDD)

To play back files stored on the built-in hard drive, follow the steps below.

1 Select 'HDD' as the source medium.

▌HDD/DVD Button

Press HDD/DVD on the remote or the front panel to switch to HDD mode.
Press CONTENTS to display the Contents Menu.

▌Contents Menu

Press CONTENTS to display the Contents Menu.
Press ▲ ▼ ◀ ▶ to select 'HDD' as the source medium, then press ENTER.

▌Easy Guider

Press GUIDER to display the Easy Guider Menu.
Press ▲ ▼ to select 'Play', then press ENTER.

Press ▲ ▼ to select 'HDD' as the source medium, then press ENTER.

2 Press ▲ ▼ ◀ ▶ to select the desired file/album, then press **ENTER**.

  ✏ For more information, please see **'Using Easy Guider: Play' (p.37)** and the **'Playback (Disc)'** section in this chapter.

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Digital Video Support

ⓘ   It is illegal to download and use unauthorized copyrighted materials. Make sure you obtain the permission or authorization from copyright owners and related third-parties before you start using or watching the videos or files. If you fail to do so, you may be subject to fines and/or penalties.

💡 **Before you start**

►   Check whether you have switched your TV's input source to corresponding option (e.g. VIDEO 1, LINE 2, etc.), so that signal from the DVD recorder can appear on screen. For further information, please check the instruction manual offered by your TV manufacturer.

MPEG-4 Videos

▌ Supported Formats

The MPEG-4 technology allows a large video file, such as a two-hour movie, to be efficiently compressed without sacrificing its original video and audio quality. If you watch an MPEG-4-based movie, there may be subtitle files saved for playback in addition to the video/audio files. Please check the table below to see whether your MPEG-4 files are supported by this DVD recorder.

Category		Codec Standard	File Extension
Movie	Video	• DivX • XviD	AVI, DIVX*, DIV*
	Audio	• MP3 • AC3 • LPCM	
Subtitle		---	SUB, SRT, TXT

✎   Bitmap-based subtitles, such as idx+sub, are not supported by this DVD recorder.

✎   * depending on the model.

▌ Playing MPEG-4 Files

1   Select the file you wish to play either through Easy Guider or through the Contents Menu.

   For more details, please see 'Contents Menu' (p.32) or 'Using Easy Guider: Play' (p.37)

2   If playback does not start automatically, press ‣ **PLAY** to begin playback.

3   If the file is not supported by the DVD recorder, a pop-up box will appear. Press **ENTER** to skip the file.

At least one of the following formats is not supported by the DVD recorder. Playback cannot start.

Video Codec: 3ivx
Audio Codec: OGG
Resolution: 1280 x 768

Skip This File
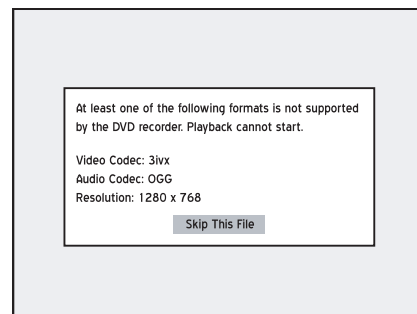
4   If there are other files on your source medium, the DVD recorder will start playing back the next file.

5   Press ■ **STOP** to stop playback at a marked stop.
   Press ‣ **PLAY** to resume playback from a marked stop.

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DivX® VOD

DivX® VOD (video-on-demand) allows you to download video files to your PC, which you can watch on your computer or on your TV. To protect copyrights of these digital videos, the service features an Internet-based copyright protection system called DRM (digital rights management). DRM safeguards copyrights through an online authorization process. To watch DRM-protected video files, you need to complete the registration procedure.

ⓘ This feature is supported by 'GX' models only.

Before you start

► Make sure you have a blank recordable disc at hand.

1

Applying for a User Account

To watch DRM-protected video files, you need to register a user account on the DivX® website first. For more information, please visit: http://www.divx.com/vod.

2

Registering Your DVD Recorder

► **Checking Registration Code**

To register your DVD recorder, you will need to acquire the recorder's registration code.

1 Press **SETUP** to display the Setup menu.

2 Press ▲ ▼ to select 'Recording/Playback', then press **ENTER**.

3 Press ▲ ▼ to select 'DivX(R) VOD', then press **ENTER**.

4 Press **ENTER** to display the registration information.

SETUP Recording / Playback

DivX(R) Video On Demand

Your registration code is : **BBK3JGWE**

To learn more visit www.divx.com/vod

Done

The registration code of your DVD recorder will appear. (The code seen above serves as an example only.)

5 When completed, press **SETUP** to exit the Setup menu.

► **Registering Code Online**

After you acquire the ID code, go to the DivX® website, and enter the recorder's registration code in your account. When you finish filling in the required details, you will then be directed to a film download link. Follow the instructions given on the website, and burn the short film to a DVD disc.

► **Playing Information Disc**

To complete the registration process, you need to play the disc which contains the downloaded film on your DVD recorder.

1 Press ▲ **OPEN/CLOSE** to open the disc tray.

2 Carefully place the disc on the tray with the label side facing up, then press ▲ **OPEN/CLOSE**.

3 If playback does not start automatically, press ▶ **PLAY** to begin playback.

4 Your DVD recorder will be officially registered when playback stops.

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3

Selecting Video Files

Select the video files you would like to watch from various online rental or retail shops. Normally, users pay to get the viewing rights of these video files, which are downloaded to users' PCs. If you would like to watch them on your TV, you need to transfer these files to the recordable CD or DVD discs.

✎ Conditions of viewing rights vary depending on the service providers.

4

Playing Video Files

1 Press ▲ **OPEN/CLOSE** to open the disc tray.

2 Carefully place the disc on the tray with the label side facing up, then press ▲ **OPEN/CLOSE**.

3 If playback does not start automatically, press ▶ **PLAY** to begin playback.

4 If the file is not protected by the DRM system, playback will then begin.

5 If the file is protected by the DRM system, the system will check whether the DVD recorder's registration code corresponds to the user account which holds viewing rights of the video file.

6 If you have purchased the file, playback will then start.

7 If you have a rental file, a dialogue box showing the remaining number of viewing rights will appear. Press ◀ ▶ to select 'Yes' or 'No', then press **ENTER**.

```
              View DivX(R) VOD Rental

         This rental has 3 views left.
            Do you want to use one
              of your 3 views now?


         Yes                    No
```
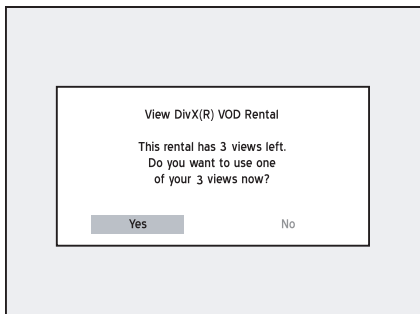
Navigation Menu

Press **NAVI** to display additional viewing options during playback. For more information, please see **'Navigation Menu' (p.58).**

Subtitle

This DVD recorder supports the text-based subtitles when playing back MPEG-4 videos. Activate the function to get the most out of your viewing experience.

ⓘ If you would like the subtitle to be automatically displayed when playback starts, please make sure you have:

• **Given a correct file name**
You need to give the same file names to video title and subtitle file, so that the DVD recorder can match one file with the other. For example, name 'XXX.avi' for the video title, and 'XXX.txt' for the accompanied subtitle file.

• **Placed the file in the same folder as the video title, or under an appropriate sub-directory.**
In addition, you need to save the subtitle file either in the same folder as the video title, or in a sub-directory which is given one of the following names: SRT, SUB, SUBS, SUBTITLE or SUBTITLES.

Using Text-Based Subtitle

1 Press ▲ ▼ to select 'Subtitle', then press **ENTER** to go to the sub-menu.

2 If the subtitle file is in unicode format, press ▲ ▼ to switch on or off the subtitle function.

If the subtitle file is in non-unicode format, press ▲ ▼ to select an appropriate coding system for displaying the subtitle correctly, then press **ENTER**.

3 Press **NAVI.** again or repeatedly press ◀ to exit the Navigation menu.

Editing

ⓘ Media files (e.g. video titles, music files, picture files) saved on the hard drive and the video titles saved on the discs can be edited. Available editing options may vary depending on media types.

Type	Available Options
Music / Picture Album	• Rename • Split from • Merge • Erase
Music / Picture File	• Rename • Erase

ⓘ If you do not finalize a disc before playing it on another player/recorder, results of the editings you have made will not be shown. Please see **'Using Easy Guider: Disc Tools' (p.43)** for details on how to finalize a disc.

ⓘ Please finish all editings before finalizing the discs. You **CANNOT** apply the editing function to a finalized disc, except in a DVD-RW disc previously formatted in 'Quick Preparation' mode.

☞ **Disc Information (p.6)**

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Edit Menu

▌Screen Overview

Screen window
Displays image of current video source

Title Editing Options
(*unavailable items shown in gray)

Indicates available option buttons on remote

Displays original chapter markings of the title

EDIT

Rename   TITLE 02
Protect   Off
Overwrite   Off
Split
Merge
Erase
Set Thumbnail

Thumbnail image

Chapter01

Insert Chapter Mark
Remove Chapter Mark
Hide Chapter

Chapter Editing Options
(*unavailable items shown in gray)

00:00:00   00:12:30   00:59:01

Exit

Time indicator   Displays current progress of the title   **Exit button**

Access to the Edit Menu (via Contents Menu)

① Press **CONTENTS** to display the Contents Menu.

② Press ▲ ▼ ◀ ▶ to select the source medium, then press **ENTER.**

③ Press ◀ ▶ to select 'Video', then press **ENTER**.

④ Press ▲ ▼ ◀ ▶ to select a video title.

⑤ Press **EDIT** to display the Edit menu.

Access to the Edit Menu (pressing EDIT button)

① Start playing back a title via the Contents Menu or via DVD menu.

② Press **EDIT** to display the Edit menu.

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Editing Titles

Application	DVD-R	DVD-RW	DVD+R	DVD+RW	HDD
Rename Title	✓	✓	✓	✓	✓
Protect Title	✓	✓	✓	✓	✓
Overwrite Title	×	✓	×	✓	×
Split Title	×	✓	×	✓	✓
Merge Title	×	✓	×	✓	✓
Erase Title	✓	✓	✓	✓	✓
Set Title Thumbnail	✓	✓	✓	✓	✓

✓: Applicable   ×: Not applicable

Rename Title

1 On the Edit menu, press ▲ ▼ to select 'Rename', then press **ENTER**.

```
 EDIT
 ┌─────────────────────────────────┐
 │ _                               │
 ├─────────────────────────┬───────┤
 │ A  B  C  D  E  F  G  H  J  K │ "A" │
 │ K  L  M  N  O  P  Q  R  S  T │  ◄  │
 │ U  V  W  X  Y  Z  -  _  :    │  ►  │
 │ 0  1  2  3  4  5  6  7  8  9 │Back │
 │                             │Clear│
 │  Cancel     Space     Finish │
 │ You can also press number buttons on remote control to quickly │
 │ move to the column where your desired characters are situated. │
 └─────────────────────────────────┘
```
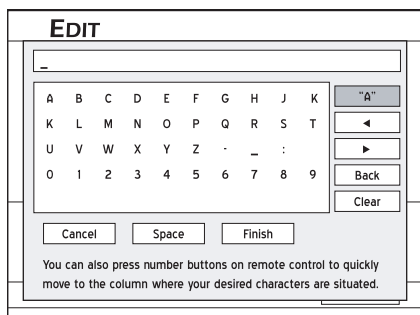
☞ **On-Screen Input Keypad (p.34)**

2 Press ▲ ▼ to select 'Clear', then press **ENTER** before starting to enter the new name.

3 Press ▲ ▼ ◄ ► to select desired letters, numbers or punctuation marks, then press **ENTER**.
You can enter up to 30 characters for a title name.

4 If you want to make changes during the process, press ▲ ▼ ◄ ► to select 'Back', which allows you to delete character by character in a backward direction, then press **ENTER**.

If you want to delete all the characters you have entered, press ▲ ▼ ◄ ► to select 'Clear', then press **ENTER**.

If you decide not to change the original title name, press ▲ ▼ ◄ ► to select 'Cancel', then press **ENTER**.

5 When completed, press ▲ ▼ ◄ ► to select 'Finish', then press **ENTER**.

✐ If the entry bar is left blank, you will not be able to exit the screen by selecting the 'Finish' button. Please follow the instruction in pop-up box to complete the process; or select 'Cancel' to return to the Edit menu.

✐ Different titles with identical names can all be saved on this DVD recorder. Please make sure you do not enter a title name already in use to avoid confusion.

Protect Title

You can protect the title from accidental erasure or un-planned editings when you activate the 'Protect' function. When the function is switched on, the title **CANNOT** be edited or erased. If you need to edit it, you must unlock the file first.

1 On the Edit menu, press ▲ ▼ to select 'Protect'.

2 Press **ENTER** to switch on or off the function.

3 Press ▲ ▼ to select 'Exit', then press **ENTER** to exit the setting.

4 If you switch on the function, a lock icon will appear next to the protected title when you return to the disc menu or Contents Menu.

Video Music

TITLE 01 VR🔒   TITLE 02
07:32PM 12:04/05   07:32PM 0
00h00m05s SP   00h06m18
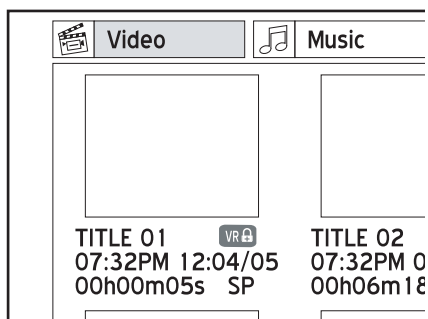
Overwrite Title

When you apply the function to a title, it will be overwritten when you record new title/program next time.

1 On the Edit menu, press ▲ ▼ to select 'Overwrite'.

2 Press **ENTER** to switch on or off the function.

3 Press ▲ ▼ to select 'Exit', then press **ENTER** to exit the setting.

4 If you switch on the function, a pen icon will appear next to the overwritten title when you return to the disc menu or Contents Menu.

Video Music

TITLE 01 VR✏   TITLE 02
07:32PM 12:04/05   07:32PM 0
00h00m05s SP   00h06m18
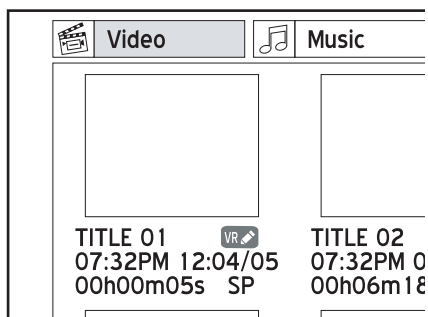
❓ How will the video be recorded after the 'Overwrite' function is activated?

➲ **• Location**
The new video will be recorded in the location of the overwritten title on disc.

➲ **• Space**
When you set the 'Overwrite' function to a title, the next title will be immediately 'protected' in case of accidental erasure. If the new video is longer than the overwritten title, or you use a recording mode of higher quality, the video may not be recorded completely.

Title 1
Title 2 Overwrite ✏
Title 3 🔒

Title 1
New
Title 3 🔒
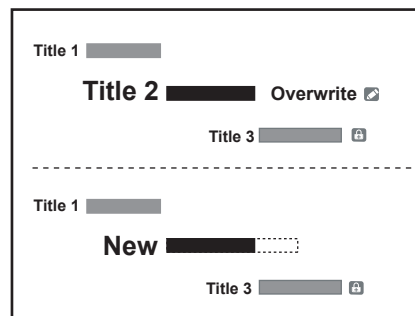
The black bars represent contents recorded.

🖊 When using the overwritten space for new recording, please note that there may be discrepancy between the time shown on the Contents Menu screen and that for actual recording due to diffrent recording modes applied.

Split Title

Use this function to divide a title into two parts. After being split, the new titles can be merged again. You can use 'Split' and 'Merge' functions to temporarily edit out commercials or scenes you would like to skip.

1 Start playing back the title.

2 On the Edit menu, press ▲ ▼ to select 'Split'.

3 When the playback reaches the point where you would like to set a dividing mark, press **ENTER**.

The title will be split into two new titles at where you press ENTER.

4 To split more titles, repeat steps 1 to 4. Or press ▲ ▼ to select 'Exit', then press **ENTER** to exit the setting.

🖊 The split function is only applicable to video titles longer than 6 seconds.

🖊 You will not be able to split titles, if there are already 49 titles or 99 chapters on your disc.

☞ **Disc Information (Title & Chapter) (p.8)**

Merge Titles

Use this function to merge two titles into one, such as two sections of programs before and after the commercials. After being merged, the new title can be split again.

1 Start playing back the title.

2 On the Edit menu, press ▲ ▼ to select 'Merge', then press **ENTER**.

3 A menu showing all titles applicable for this function will appear.

```
EDIT
Please select a title to merge.        Video
                                         001

TITLE 01    VR   TITLE 02   VR   TITLE 03   VR

TITLE 04    VR   TITLE 05   VR

001
  |◄◄         Text View          Exit         ►►|
```
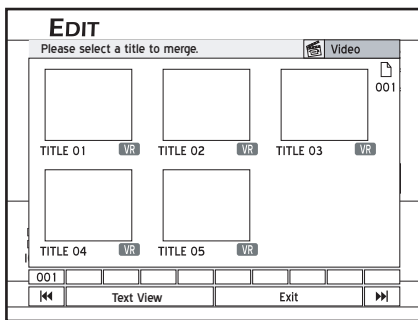
4 Press ▲ ▼ ◄ ► to select the title to be merged with, then press **ENTER**.

5 To merge more titles, repeat steps 1 to 5. Or press ▲ ▼ to select 'Exit', then press **ENTER** to exit the setting.

✎ For video titles recorded on a DVD+RW or a DVD-RW disc, you can only merge the title with its previous/next title and only when the previous/next title has the same recording quality, TV signal, audio and video settings. Otherwise, the function will not be applicable.

✎ Protected and deleted titles **CANNOT** be merged.

Erase Title

ⓘ Before using the 'Erase' function, please make sure all your important files are safely backed up. Once you perform this function, all contents will be permanently deleted.

1 On the Edit menu, press ▲ ▼ to select 'Erase', then press **ENTER**.

A pop-up box asking for confirmation will appear. The title selected will be erased.

2 To erase more titles, repeat steps 1 to 2. Or press ▲ ▼ to select 'Exit', then press **ENTER** to exit the setting.

3 After you complete the process, a deleted title will be shown when you return to the disc menu or Contents Menu.

```
   Video            Music

DELETED          TITLE 02
00:25:10  SP     07:32PM 0
                 00h06m18
```
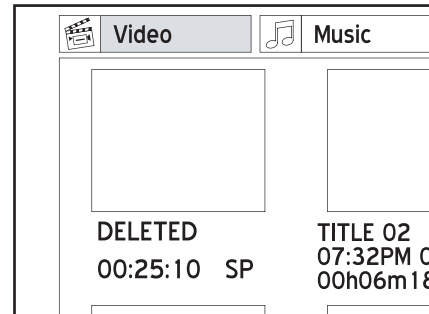
✎ You **CANNOT** erase recorded title(s) on a DVD-R or DVD+R disc if the disc is finalized.

✎ You **CANNOT** erase protected title(s).

Set Title Thumbnail

Normally the first picture of a recording is used as the thumbnail image. Use this function to reset the image.

1 Start playing back the title.

2 On the Edit menu, press ▲ ▼ to select 'Set Thumbnail'.

3 When the desired image appears, press **ENTER** to select it as the thumbnail picture.

4 To set thumbnails for other titles, repeat steps 1 to 4. Or press ▲ ▼ to select 'Exit', then press **ENTER** to exit the setting.

✎ You **CANNOT** set thumbnail image(s) for the recorded title(s) on a DVD+R or DVD-R disc if the disc is finalized.

✎ This DVD recorder captures images on an interval basis. As a result, there may be a slight discrepancy between the image selected and the image ultimately shown as the thumbnail picture.

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Editing Chapters

Application	DVD-R	DVD-RW	DVD+R	DVD+RW	HDD
Insert Chapter Mark	✓	✓	✓	✓	✓
Remove Chapter Mark	✓	✓	✓	✓	✓
Hide Chapter	✓	✓	✓	✓	✓
Show Chapter	✓	✓	✓	✓	✓

✓: Applicable   ×: Not applicable

▌ Insert Chapter Mark

You can insert additional chapter mark(s) while playing back a title.

1 Start playing back the title.

2 On the Edit menu, press ▲ ▼ to select 'Insert Chapter Mark'.


```
Merge
Erase
Set Thumbnail

Insert Chapter Mark
Remove Chapter Mark
0:03:04   Hide Chapter

                        Exit
```
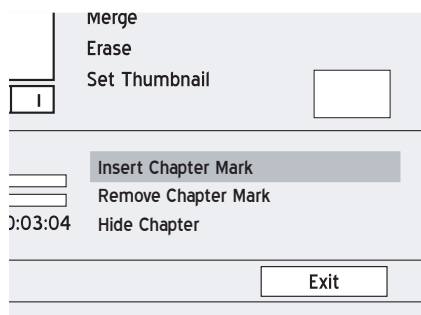
3 As the playback progresses, press **ENTER** at desired point to insert chapter mark.

4 To insert more chapter marks, repeat step 3. Or press ▲ ▼ to select 'Exit', then press **ENTER** to exit the setting.

✎ You can insert up to 99 chapter marks.

☞ **Disc Information (Title & Chapter) (p.8)**

✎ The minimum time of a valid interval between two chapter marks is one second. If you insert two chapter marks within one second, only the first command will be successfully executed.

✎ This DVD recorder captures images on an interval basis. As a result, there may be a slight discrepancy between the point selected and the point ultimately designated as the chapter mark.

✎ You **CANNOT** insert chapter marks in recorded title(s) on a DVD+R or DVD-R disc if the disc is finalized.

✎ During recording, you can also press **EDIT** to insert chapter marks in the recorded session(s) manually.

▌ Remove Chapter Mark

You can remove chapter mark(s) while playing back a title.

1 Start playing back the title.

2 On the Edit menu, press ▲ ▼ to select 'Remove Chapter Mark'.

3 As the playback progresses, press **ENTER** at desired point to remove chapter mark.

4 To remove other chapter marks, repeat step 3. Or press ▲ ▼ to select 'Exit', then press **ENTER** to exit the setting.

✎ The first chapter mark within a video title **CANNOT** be removed.

▌ Hide Chapter

During playback you can hide chapters within a title.

1 Start playing back the title.

2 On the Edit menu, press ▲ ▼ to select 'Hide Chapter'.

3 Press ◄◄ **PREVIOUS** or ►►| **NEXT** to advance to the previous or next chapter.

4 As the playback progresses, press **ENTER** at desired point to hide a chapter.

5 To hide more chapters within the title, repeat steps 3 to 4. Or press ▲ ▼ to select 'Exit', then press **ENTER** to exit the setting.

🖉 You **CANNOT** hide chapters within recorded title(s) on a DVD+R or DVD-R disc if the disc is finalized.

🖉 When viewing the title through Edit menu, a hidden chapter will be displayed in a darker color. A message 'hidden' appears at the left bottom corner of the screen window.

Show Chapter

During playback you can choose to show chapter(s) currently hidden within a title.

1 Start playing back the title.

2 On the Edit menu, press ◄◄ **PREVIOUS** or ►►| **NEXT** to select the hidden chapter you would like to show again.

You can press ▐►► PAUSE/STEP to pause playback before you proceed to step 3 and step 4 to show the hidden chapter.

3 Press ▲ ▼ to select 'Show Chapter', then press **ENTER**.

4 To show more hidden chapters within the title, repeat steps 2 to 3. Or press ▲ ▼ to select 'Exit', then press **ENTER** to exit the setting.

Copying

DVD-R, DVD-RW, DVD+R, DVD+RW, DVD+R DL (double layer) & HDD (integrated)

You may only use this DVD recorder to reproduce or copy materials for which you own the copyright; or have obtained permission to copy from the copyright owner; or you otherwise have a legal right to reproduce or copy. Unless you own the copyright; or have obtained permission from the copyright owner; or otherwise have a legal right to reproduce or copy, you may be violating the law, including copyright law, and may be subject to payment of damages and other remedies.

Please note that you **CANNOT** record/copy a rented or purchased video/disc from another device (video cassette recorder, DVD player, DVD recorder, etc.) connected to this recorder.

If you use a DVD-R, DVD+R, DVD-RW (formatted in 'Quick Preparation' mode), you need to **finalize** the disc before it can be played back on other compatible devices. You can complete the process using 'Easy Guider'. Please see '**Using Easy Guider: Disc Tools' (p.43)** for details on how to finalize a disc.

Not all discs are compatible with high-speed copying. Check with the disc manufacturer for compatibility.

Discs initialized on another recorder **CANNOT** be used for copying.

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One-Touch Copying

The one-touch copying feature allows you to copy files from a DVD disc to hard drive and vice versa. The DVD recorder will copy at the maximum speed possible.

1 Press **CONTENTS** to display the Contents Menu.

2 Press ▲ ▼ ◄ ► to select 'DVD' or 'HDD' as the source medium, then press **ENTER**.

3 Press ◄ ► to select the file catalogue which contains files you wish to copy, then press **ENTER**.

4 Press ▲ ▼ ◄ ► to select the desired album or file, then press **COPY**.
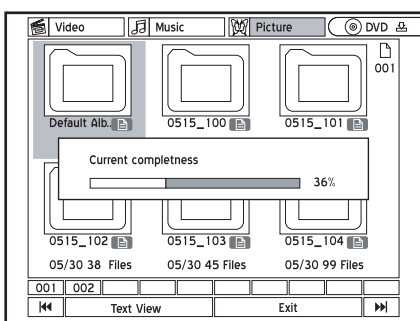
The copying process will then start.

5 If you wish to cancel the copying process, press ■ **STOP**.

If you have been copying files from hard drive to disc and then decide to cancel the process, you may not be able to use the disc to record or copy again.

6 During the process:

▌ Lack of Space

If the DVD recorder detects lack of space on your disc, a pop-up box will appear.
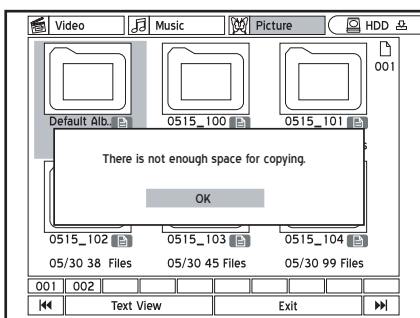
▌ Wrong Format

If the DVD recorder detects an incompatible format on your disc, a pop-up box will appear.
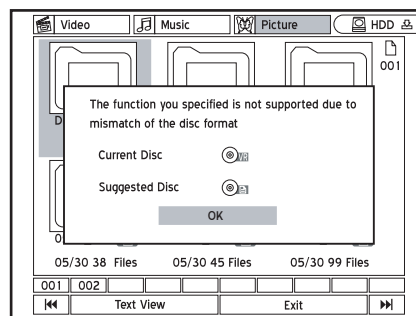
Press ◄ ► to select desired application, then press ENTER.

7 When completed, press **CONTENTS** to exit the Contents Menu.

🖉 Materials recorded on a VCD/SVCD disc **CANNOT** be copied to the hard drive before the disc is finalized.

🖉 If you own the copyright, you may copy an entire DVD-Video disc to the hard drive. Contents of a DVD-Video disc can only be copied from hard drive to a blank DVD disc.

🖉 If you copy recorded titles to a blank DVD disc, you will not be able to use the same disc to copy data files, and vice versa.

🖉 The 'One-Touch Copying' function will not be applicable, if any part of the title you wish to copy is copy-protected.

► **Use Easy Guider to Copy Files**

You can also copy files using the Easy Guider menu. For more information, please see 'Using Easy Guider: Copy' (p.41).

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Troubleshooting

If you experience any problem while using the DVD recorder, please consult the following troubleshooting guide first, as it may offer immediate solution to the condition occurred. Should the problem remain, contact a Lite-On IT's service point near you. For more information, please visit **www.liteonit.com**

? Picture

Problem	Possible Solutions
No image shown on the TV screen	► Make sure the video cable (composite, component, SCART, S-Video, HDMI, etc.) between TV and DVD recorder is correctly and securely connected. ► Check whether you have switched your TV's input source to corresponding option (e.g. VIDEO 1, LINE 2, etc.), so that signal from the DVD recorder can appear on screen. For further information, please check the instruction manual offered by your TV manufacturer. ► Make sure a disc is properly placed on the disc tray, and it is recorded in a format compatible with your local TV system (NTSC or PAL). ► Check your setting on component video output mode (Progressive or Interlaced). Please select the output mode supported by your TV. To reset the recorder, press ▶ (direction button), **'5'**, **'0'**, **'2'**, **'0'**, **ENTER** on the remote control.
Image shown with noises	► Check if the disc is distorted or scratched. ► If the video output signal from the recorder goes via VCR to your TV set, or if you connect the recorder to a TV/VCR set, the copyright protection code applied to some DVD programs could affect picture quality. If you still experience this problem even when you connect the recorder to TV, try connecting your recorder to the TV's S-VIDEO input.
Image imported from an external device is distorted	► If the video signal from the external device is copy-protected, you need to connect the device directly to your TV.

? Recording

Problem	Possible Solutions
Cannot record	► Check whether you have inserted a recordable disc. ► Check whether the disc you insert has been formatted or prepared for recording. ► Press **DISPLAY** to check whether there is enough space on the disc. ► Check whether the disc has been finalized. You **CANNOT** record on a finalized disc. ► Check whether the disc you insert has already been used for recording on other DVD recorders. ► Check whether the disc you insert has already been used for recording programs of a different type of TV signal. A disc containing NTSC-based contents **CANNOT** be used to record PAL-based programs and vice versa.
Recording does not start immediately after pressing ● RECORD button	► This occurs as disc preparation process is taking place, which will last for a few seconds. (Applicable to DVD-R/DVD+R/DVD+RW/DVD+R DL discs)

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⑦ Timer Recording

Problem	Possible Solutions
Timer recording does not work properly	► Check whether the system time/date is correct. ► Check whether the timer program is set to correct time and channel. ► Check whether you have inserted a recordable disc.
Recording result is not completed	► Check whether there is a schedule overlap. If so, go to the Timer Record menu to reset one of the overlapped programs. ► Press **DISPLAY** to check whether there is enough space on the disc. ► Make sure you switch off the DVD recorder, so that the VPS/PDC setting of your timer program can function properly.

⑦ Sound

Problem	Possible Solutions
No sound	► Check whether the audio cable is correctly and securely connected. ► Check whether the audio cable is damaged. ► Check whether the input source setting on the amplifier is correct. ► There is no sound when playback is paused or is set for slow motion. Press ► **PLAY** to resume regular playback. ► If the audio signal does not come through the DIGITAL OUT jacks, please check whether related settings (on Setup menu) for the audio output are correct.
The sound from the recorder is not presented properly or is distorted	► Check whether the audio cable is correctly and securely connected. ► Check whether the audio cable is damaged. ► Make sure the amplifier/receiver or TV is set to the correct input and the volume is switched on. ► If the sound is distorted, try cleaning the cable plugs.

⑦ Playback

Problem	Possible Solutions
Cannot play back a disc	► Check whether the disc inserted is supported by the DVD recorder. ► If the disc inserted contains videos recorded on other DVD recorders, check whether the disc is finalized. In some cases, the DVD recorder may not be able to play a finalized disc due to the type of disc or condition of the recording. ► Discs recorded with copy-once materials can only be played on CPRM (Content Protection for Recordable Media)-compatible players. ► Check whether you have inserted a blank disc. ► Check whether the way you insert the disc is correct. Insert the disc with the label side up. If there is no label on the disc, please check with the disc retailer. ► Check whether the disc's region code is the same as that of the recorder. ► Check whether the parental control function is switched on. If so, you have to unlock it first. (Default password for the function: 0000 [zero])
Cannot play back from HDD	► Check whether there are titles or files on the hard drive. ► Check whether the titles or files on the hard drive are supported by the DVD recorder for playback.

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The recorder starts playing a disc automatically	► If you have selected DVD as the target device, playback will begin automatically when you insert a DVD-Video disc, VCD, SVCD or audio CD.

❓ TV Channels

Problem	Possible Solutions
Cannot change TV channels	► Press **SOURCE** to switch the DVD recorder's input source to 'TV'. ► Check whether the antenna cables are connected correctly. ► Check whether the channel scanning process for your TV is completed.

❓ Others

Problem	Possible Solutions
The disc tray does not open/close	► Contact your local dealer or local authorized service point.
The recorder does not respond to commands	► Switch off the recorder and switch it on again. If the problem persists, unplug the power cord, reconnect it and switch on the recorder one more time. If neither the solutions work, contact your local dealer or an authorized service point.

Specifications

General

Power Supply	■ AC 100~240V 50/60Hz
Power Consumption	■ Approx. 50W (operation)
Operating Temperature	■ +5°C to +40°C (+36°F to +104°F)
Operating Humidity	■ 5% to 80% RH
Dimensions (W/H/D)	■ 430 x 66 x 315 mm
Weight	■ Approx. 4.5 kg

Video/Audio

Input

Composite Video	■ Cinch (yellow) x 1
Composite Audio	■ Cinch (white/red) x 1
S-Video	■ Hosiden 4-pin x 1
SCART	■ CVBS/RGB/Decoder x 1
DV	■ IEEE 1394 4-pin x 1

Output

Composite Video	■ Cinch (yellow) x 1
Composite Audio	■ Cinch (white/red) x 1
Component Video	■ Y/Pb/Pr (green/blue/red) x 1
SCART	■ CVBS/S-Video/RGB x 1
HDMI	■ HDMI x 1
Digital Audio	■ Coaxial x 1 / Optical x 1

Video Performance

DA Converter	■ 10-bit/27MHz
Composite Video Output	■ 1 Vpp 75 Ohm
Component Video Output	■ Y: 1 Vpp 75 Ohm
	■ Pb: 0.7 Vpp 75 Ohm
	■ Pr: 0.7 Vpp 75 Ohm

Audio Performance

DA Converter	■ 24-bit/96KHZ
Signal-Noise (1kHz)	■ ≥90dB
Dynamic Range (1kHz)	■ ≥80dB
Channel Separation (1kHz)	■ ≥110dB
Total Harmonic Distortion (1kHz)	■ ≤-65dB

Component Video Output Mode

Progressive Scan	■ 576p output

Tuner

Input/Output

RF Input	■ Coaxial x 1
RF Output	■ Coaxial x 1

Video System	■ PAL-B/G
	■ PAL-D/K
	■ PAL-I
	■ SECAM-L/L

Audio System	■ NICAM TV audio

Recording

Recordable Media
- ■ Built-in HDD
- ■ DVD-R/-RW
- ■ DVD+R/+RW
- ■ DVD+R Double Layer

Video Recording Format

DVD+VR (HQ/SP/LP/EP mode)	■ MPEG-2
DVD+VR (SLP mode)	■ MPEG-1

Audio Recording Format

DVD+VR	■ Dolby Digital 2-channel

Playback

Playable disc

■ DVD-Video	■ DVD-R/-RW**
■ DVD+R/+RW**	■ DVD+R Double Layer**
■ Video CD (VCD)	■ Super Video CD (SVCD)
■ Audio CD	■ CD-R/-RW**

Supported Format

Video	■ JPEG/BMP
	■ MPEG-1
	■ MPEG-2 files (.VOB/.DAT/.MPG)
	■ MPEG-4 files (.AVI/.DIV*/.DIVX*)
Audio	■ MP3
	■ WMA
	■ WAV
	■ LPCM
	■ Dolby Digital 2-channel
	■ Dolby Digital 5.1 channel (only digital out)
	■ DTS (only digital out)

✍ * depending on the model
✍ ** with files supported by this DVD recorder
✍ The specifications and design of this product are subject to change without notice.

Glossary

480i/480p (576i/576p)

Indicates the number of scanning lines and scanning format of an image signal.

480i/576i indicates 480/576 scanning lines with interlaced format, and 480p/576p indicates 480/576 scanning lines with progressive format.

Aspect Ratio

Aspect ratio refers to the length to height ratio of TV screens. The ratio of a standard TV is 4:3, while the ratio of a high-definition or wide-screen TV is 16:9.

Bit Stream

The digital form of multi-channel audio data (e.g. 5.1-chan-nel) before it is decoded into its various channels.

Chapter / Title

Chapter is a division of a video title on a DVD disc.

Component Video

Video signals with three channels of separate information that makes up the picture. There are several types of component video, such as R/G/B and Y/Cb(Pb)/Cr(Pr).

Composite Video

A single video signal commonly used in most consumer video products that contains all luminance, color, and synchronization information.

CPRM (Content Protection for Recordable Media)

CPRM is a technology developed to prevent digital content from being copied more than once.

DivX® VOD

DivX® VOD (video-on-demand) service is designed to protect copyrights of digital videos. Through an online registration process, DivX® VOD prevents unauthorized downloads or file sharing. For more information, please visit: http://www.divx.com/vod.

Dolby Digital®

A six-channel system consisting of left, center, right, left rear, right rear and LFE (Low-Frequency Effect channel, for use with a sub-woofer) channels. It requires a Dolby Digital® decoder, either in the player or in an external receiver to regenerate the sound. All processing is done in the digital domain. Not all Dolby Digital discs contain six (5.1) channels of information.

DTS® (Digital Theater Systems)

DTS® is a Digital Surround audio encoding format configured with six (5.1) channels, similar to Dolby Digital®. It requires a DTS® decoder, either in the player or in an external receiver to regenerate the sound. All processing is done in the digital domain. Not all DTS discs contain six (5.1) channels of information.

HDCP (High-bandwidth Digital Content Protection)

HDCP is developed by Intel Corporation to ensure the integrity of digital content transmitted via HDMI/DVI interface.

HDMI (High-Definition Multimedia Interface)

HDMI is an all-digital interface which transmits uncompressed high-definition video and multi-channel digital audio from any audio/video source to display devices via a single cable.

Interlaced / Progressive Scan

The two modes refer to the methods by which a video image is updated. In 'Interlaced Scan' mode, image is updated by alternating sets of odd and even scan lines. In 'Progressive Scan' mode, scan lines for an image are refreshed in every pass and by a sequential order.

JPEG (Joint Photographic Experts Group)

A popular file format for still image compression and storage. There are two sub-types of the JPEG formats: (1) Baseline JPEG: used for digital cameras, the web, etc. (2) Lossless JPEG: an old type, rarely used now.

Linear PCM (Pulse Code Modulation) Audio

Linear PCM is a method to digitally encoding audio without compression, and is used for the audio tracks on DVD-Video discs, Audio CDs, etc.

MP3

MP3 (MPEG-1 audio layer 3) is a compressed audio file format. Files are recognized by their file extension .mp3 or .MP3.

MPEG (Motion Picture Experts Group)

MPEG is an international standard for compressing digital video/audio content. MPEG-1 is used for VCD and music. MPEG-2 is used for SVCD and DVD-Video. MPEG-4 is used for DVD-Video and other digital videos.

NTSC (National Television System Committee)

This is the committee that established the standards for television systems in the United States. The NTSC standard broadcasts 525 or 480 lines of resolution per second, and 30 frames per second of refresh rate, 60 Hz field frequency. NTSC TV system is widely used in USA, Canada, Latin America and Taiwan etc.

PAL (Phase Alternation by Line)

PAL (Phase Alteration Line) is the color television broadcast standard throughout the Western Europe (except in France, where SECAM is the standard), Australia, China, Singapore and Malaysia etc. It has 625 lines of vertical resolution per second and 25 frames per second refresh rate, 50 Hz field frequency.

PBC (Playback Control)

A special feature on a Video CD or Super VCD that enables interactive use.

S-Video

A video signal which improves picture quality over standard composite connections. Used on Super VHS, DVD, high-end TV monitors, etc.

Track

SVCD, VCD, Audio CD discs use tracks to divide up the content of a disc.

WMA (Windows Media Audio)

WMA is an audio codec standard proposed by Microsoft. Music/audio files which are compressed using this standard come with the file extension, .wma or .WMA.

Recommended Disc List

DVD+R

	Manufacturer	Disc ID	Write Speed
1	Mitsubishi	MCC 002	4x
2	RICOH	RICOHJPN R01	4x
3	CMC	CMC MAG F01	4x
4	MAXELL	MAXELL 001	4x
5	TAIYO YUDEN	TY T01	4x
6	RITEK	RITEK R02	4x
7	BEALL	BEALL000 P40	4x
8	MBI	MBIPG101 R03	4x
9	Mitsubishi	MCC 003	8x
10	RICOH	RICOHJPN R02	8x
11	MAXELL	MAXELL 002	8x
12	SONY	SONY D11	8x
13	TAIYO YUDEN	TY T02	8x
14	PRODISC	PRODISC R03	8x
15	RICOH	RICOHJPN R02	8x
16	MBI	MBIPG101 R04	8x
17	OPTODISC	OPTODISC OR8	8x
18	PRODISC	PRODISC R04	8x
19	DAXON	DAXON AZ2	8x
20	Plasmon	Plasmon1 C01	8x
21	INFOMEDIA	INFOME R20	8x
22	TDK	TDK 002	8x
23	NANYA	NANYA CLX	8x
24	GIGASTORAGE	GIGASTORAGE H01	8x
25	LEAD DATA	LD S03	8x
26	INFORDISC	INFORDISC DISC R20	8x
27	Mitsubishi	MCC 004	16x
28	TAIYO YUDEN	YUDEN000 T03	16x
29	TDK	TDK 003	16x
30	RICOH	RICOHJPN R03	16x
31	MAXELL	MAXELL 003	16x
32	CMC	CMC MAG M01	16x
33	RITEK	RITEK R04	16x
34	SONY	SONY D21	16x
35	RITEK	RITEK R05	16x

	Manufacturer	Disc ID	Write Speed
36	NANYA	NANYA FLX	16x
37	DAXON	DAXON AZ3	16x
38	INTERAXIA AG	VDSPMSAB 004	16x
39	DVSN	Dvsn +160001	16x
40	Lead Data	LD S04	16x
41	GIGASTORAGE	GIGASTORAGE H02	16x
42	MUST	MUST 006	16x
43	PRODISC	PRODISC R05	16x
44	NEW START	NEW START NSD R40	16x
45	RITEK	RITEK P16	16x
46	OPTODISC	OPTODISC R16	16x
47	PRODISC	PRODISC R04	16x
48	MBI	MBI R05	16x
49	LG	LGEP16 001	16x

DVD+RW

	Brand	Disc ID	Write Speed
1	Mitsubishi	MCC A01	2.4x
2	RITEK	RICOHJPN W01	2.4x
3	CMC	CMC MAG W01	2.4x
4	OPTODISC	OPTODISC OP1	2.4x
5	PRODISC	PRODISC W01	2.4x
6	INFOMEDIA	INFODISC A01	2.4x
7	MBI	MBI W03	2.4x
8	RICOH	RICOHJPN W11	4x
9	PHILIPS	PHILIPS 041	4x
10	Mitsubishi	MKM A02	4x
11	SONY	SONY S11	4x
12	CMC	CMC MAG W02	4x
13	OPTODISC	OPTODISC OP4	4x
14	PRODISC	PRODISC W02	4x
15	DAXON	DAXON D42	4x
16	INFOMEDIA	INFODISC A10	4x

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DVD-R

	Brand	Disc ID	Write Speed
1	Ritek	RITEK G03	2x
2	RITEK	RITEK G04	4x
3	PRODISC	PRODIS CS03	4x
4	Mitsubishi	MCC 01 RG20	4x
5	SONY	SONY04 D1	4x
6	CMC	CMC MAG AF1	4x
7	RITEK	RITEK M02	4x
8	MAXELL	MXL RG02	4x
9	MBI	MBI01 RG20	4x
10	POS	POS POSG04	4x
11	DST	Dvsn A001	4x
12	GIGASTORAGE	GSC001	4x
13	TDK	TDK TTH01	8x
14	TAIYO YUDEN	TYG02	8x
15	Mitsubishi	MCC 02 RG20	8x
16	MAXELL	MAXELL RG03	8x
17	TAIYO YUDEN	TYG01	8x
18	SONY	SONY08 D1	8x
19	TDK	TDK TTG02	8x
20	RITEK	RITEK G05	8x
21	PRODISC	PRODISC S04	8x
22	NANYA	NANYA A01	8x
23	CMC	CMC MAG AE1	8x
24	LEAD DATA	LEADDA TA S03	8x
25	GIGASTORAGE	GSC003	8x
26	GIGASTORAGE	GSC004	8x
27	OPTODISC	OPTODI SCR008	8x
28	POS	POSG06	8x
29	INFOMEDIA	INFOMEDIA R20	8x
30	DAXON	DAXON 008S	8x
31	Fuji	Fuji film M03	8x
32	PRINCO	PRINCO 8X02	8x
33	SONY	SONY16 D1	16x
34	Mitsubishi	MCC 03 RG20	16x
35	TAIYO YUDEN	TYG03	16x
36	RITEK	RITEK M16	16x
37	BeALL	BeALL G16001	16x
38	MAXELL	MXL RG04	16x
39	CMC	CMC MAG AM3	16x
40	MBI	MBI01 RG40	16x
41	MBI	MBI03 RG40	16x
42	PRODISC	PRODISC F02	16x
43	NANYA	NANYA F02	16x
44	TDK	TTH02	16x
45	PRODISC	PRODISC S05	16x

	Brand	Disc ID	Write Speed
46	OPTODISC	OPTODISC R016	16x
47	Fuji film	Fuji film M04	16x
48	MUST	MUST 007	16x
49	POS	POS POSG08	16x
50	DST	Dvsn-160	16x
51	DAXON	DAXON 016S	16x

DVD-RW

	Brand	Disc ID	Write Speed
1	Mitsubishi	MCC 01 RW11N9	2x
2	JVC	JVC_Vi ctorW7	2x
3	CMC	CMC W02	2x
4	RITEK	RITEK W01	2x
5	TDK	TDK502 sakuM3	2x
6	PRODISC	PRODISC DW04	2x
7	PRINCO	PRINCO PRINCO	2x
8	Mitsubishi	MCC 01 RW4X	4x
9	JVC	JVC0Vi ctorD7	4x
10	TDK	TDK 601saku	4x
11	RITEK	RITEK W04	4x
12	PRODISC	PRODIS CDW06	4x
13	OPTODISC	OPTODIS CW004	4x
14	CMC	CMC W03	4x
15	INFOMEDIA	INFOMEDIA A20	4x
16	MBI	R01RWG20	4x
17	Mitsubishi	MKM 01 RW6X01	x6
18	JVC	JVC1Vi ctord7	x6
19	TDK	TDK 701	x6
20	CMC	CMC W04	x6
21	RITEK	RITEK W06	x6

Model Comparison Chart

Some supporting features vary depending on model types. Please check the following chart before you consult relevant sections for your desired information.

	HD-A940G	HD-A940GX	HD-A960G	HD-A960GX	HD-A970GX
ShowView Programming System	✓	✓	✓	✓	✓
HDMI Output	✓	✓	✓	✓	✓
MPEG-4	✓	✓	✓	✓	✓
DivX® VOD	✕	✓	✕	✓	✓
Hard Drive	✓ (160GB)	✓ (160GB)	✓ (250GB)	✓ (250GB)	✓ (320GB)
DVD+R DL (Double Layer) Recording	✓	✓	✓	✓	✓

LITE-ON http: www.liteonit.com

Hotline Service (EU)

If you still encounter problems using your DVD recorder, please call our local service hotlines.

• **Belgium**	027001725
• **France**	0171230455
• **Germany**	06950073897
• **Ireland**	1850882017
• **Italy**	0269682194
• **Netherlands**	0202015094
• **Switzerland**	018009687
• **Spain**	914533459
• **United Kingdom**	02073652401

Firmware

Please visit our website at **http://www.liteonit.com** for latest firmware downloads and additional supporting information.

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