

LITEON[®]

LITE-ON IT CORPORATION

DVD Recorder

DP-A100/200 Series
DD-A100/101/110/200 Series*
User's Manual

SIMPLY AMAZING !

*: DP-A100GX / 200GX, DD-A100 / 100G / 100X / 101X / 100GX, DD-A110 / 110G / 110X / 110GX, DD-A200GX



VIDEO Plus[™]

HDMI

mpeg4



***For A200 series:**

The HDMI interface 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-complaint.

*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 instructions carefully before using this product.
2. **RETAIN INSTRUCTIONS** - Retain the instructions for future reference.
3. **HEED WARNINGS** - Observe warnings listed in the manual.
4. **FOLLOW INSTRUCTIONS** - Follow the 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** - This product may contain lead and mercury. Disposal of these material may be regulated due to environment considerations. **For disposal or recycling information, please contact your local authorities or the Electronic Industries Alliances: www.eias.org**

Warnings, Cautions and Others

CAUTION

RISK OF ELECTRIC SHOCK

DO NOT OPEN

CAUTION!

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

The lightning 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!

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 APPARATUS.

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.

VIDEO Plus+

VIDEO Plus+ and PlusCode are registered trademarks of Gemstar Development Corporation. The VIDEO Plus+ system is manufactured under license from Gemstar Development Corporation

DivX, DivX Certified, and associated logos are trademarks of DivX Networks, Inc. and are used under license.

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

This symbol indicates that used electrical 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.

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 OUR TV SET COMPATIBILITY WITH THIS MODEL 525P AND 625P DVD PLAYER, PLEASE CONTACT OUR CUSTOMER SERVICE CENTER."

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!

- 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 recording from DVD VIDEO, SVCD, Video CD, Audio CD, MP3 and JPEG discs. Recording of copyrighted material may infringe copyright laws.

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."

CAUTION!

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.

CAUTION!

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 (e.g. set in 'Copy-Once' or 'Copy-Never' modes).

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Overview

Disc Types Supported

Recordable DVD discs are divided into two categories: 'plus(+)' and 'minus(-)' formats. Within these two groups, discs are further classified as 'write-once' discs(+R or -R) on which the blank sections are used for recording once only, and 'rewritable' discs(+RW or -RW) on which the recording sections can be erased and used for recording new content repeatedly. Refer to the following table for the disc types supported by the DVD recorder.

Application	Disc Type	Disc Logo	Information
Playback	DVD-Video		Preset DVD-Video discs with supported region code(Supported region code is printed on the rear panel of recorder).
	DVD+R/+RW		Discs written in DVD-Video or DVD+VR format and finalized, or with JPEG/MP3/WMA/MPEG-4 files. <i>(Playback of a DVD+R double-layer disc is supported by select models only)</i>
	DVD-R/-RW		
	DVD+R DL* (Double Layer)		
	Video CD (VCD)		
	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.
	CD-R/-RW		Finalized CD-R/-RW discs recorded in Audio CD or Video CD formats, or with JPEG/MP3/WMA/MPEG-4 files.
Recording / Timer Recording	DVD+R/+RW		DVD+R/+RW discs in DVD+VR format
	DVD-R/-RW*		DVD-R/-RW discs in DVD+VR format <i>(Select models only)</i>
	DVD+R DL* (Double Layer)		DVD+R double-layer discs in DVD+VR format <i>(Select models only)</i>

- ⓘ * indicates feature which is available in select models only.
- ⓘ The DVD-Video/DVD+RW/DVD+R/DVD-R/DVD-RW/CD-R/CD-RW/DVD+R DL(Double Layer) logos are trademarks of the respective companies.
- ⓘ For best results, use discs with the above logos. This DVD recorder may not play back other discs correctly. 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, DVD+R DL(Double Layer) in all cases due to the type of disc or condition of the recording.
- ⓘ If you are using models which support double-layer DVD recording, please be reminded that 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.

Unplayable Disc Types

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 speakers. When placing an unplayable disc on the disc tray, a message showing 'Invalid Disc' will be displayed on the TV screen.

- 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) without files supported by this DVD recorder
- Standard SACDs (Hybrid type of SACDs can be played as normal Audio CDs.)



Media Files Formats Supported

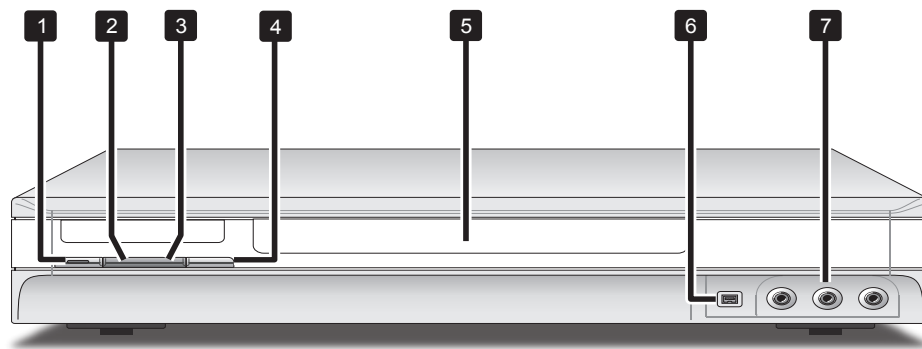
Application	Category	Formats (extension)
Playback	Video	MPEG-1 MPEG-2 (.VOB/ .DAT/ .MPG) MPEG-4 (.AVI/ .DIV*/ .DIVX*)
	Music	.MP3/ .WMA
	Picture	JPEG (.JPG)

- ⓘ * indicates feature which is available in select models only.
- ⓘ If an MP3 file name includes two-byte character, the recorder may not be able to display the name correctly.
- ⓘ This recorder does not support ID3 (for MP3) and WMA tags.
- ⓘ This recorder does not support MP3-Pro, protected WMA and WMA lossless files.
- ⓘ MP3 file bitrates supported by this recorder are: 8Kbps - 320Kbps.

Connecting Up

Knowing Your DVD Recorder

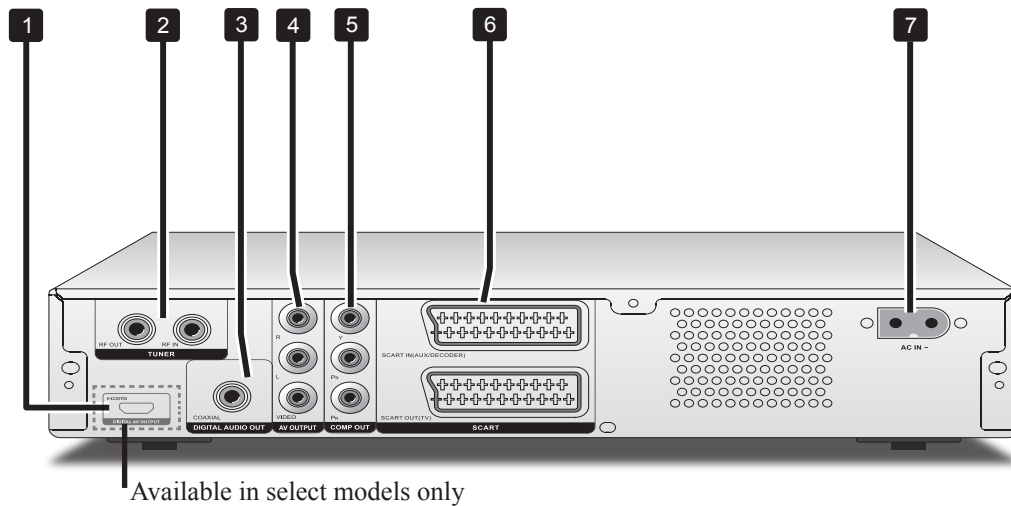
Front Panel



* The actual appearance of the unit may slightly differ depending on model types

1. **⏻ Power ON/OFF button**
Switches the DVD recorder on and off
2. **●/▶ Play/Record indicators**
Show the DVD recorder's current mode
*Green indicator lights up during playback.
Red indicator lights up during recording and timer recording.*
3. **⌚ Timer Record indicator**
Shows the DVD recorder's current mode
Orange indicator lights up when there are Timer Programs set for recording.
4. **▲ OPEN/CLOSE button**
Opens or closes the disc tray
5. **Disc tray**
Holds discs securely during recording or playback
If during power-off mode the disc tray is still left open, please do not put a disc on the tray and forcefully close the tray. This may cause malfunction of the DVD recorder.
6. **DV-LINK (IEEE 1394) jack**
Connects digital camcorder
7. **LINE IN (VIDEO/AUDIO L/R) jacks**
Connects the outputs of external equipment via composite video/audio cables

Rear Panel



Available in select models only

* The actual appearance of the unit may slightly differ depending on model types

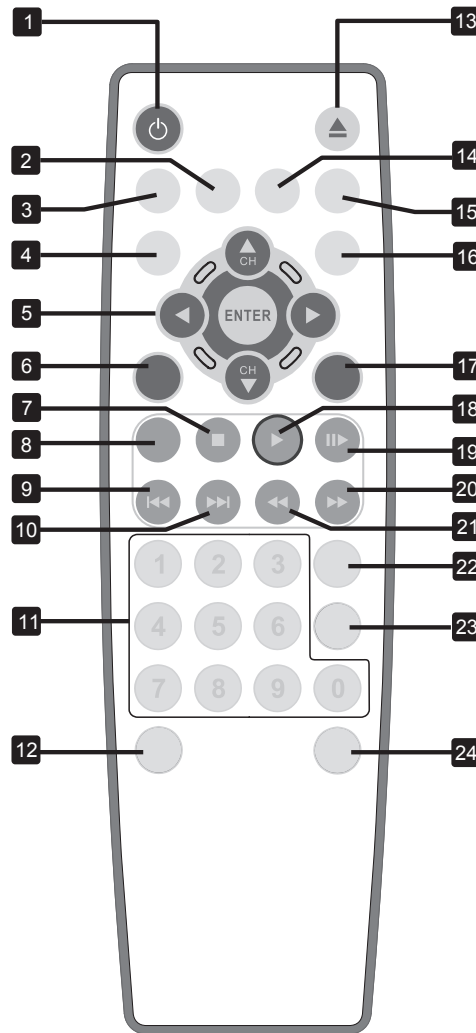
- 1. HDMI DIGITAL OUT jack**
Connects a TV or an AV amplifier (receiver) having HDMI input jack via HDMI cable.
Only models feature HDMI support have this connection jack. See model comparison chart on the back cover.
- 2. VHF/UHF IN/OUT jacks**
Connects antenna cables
- 3. DIGITAL AUDIO OUT (COAXIAL) jack**
Connects an amplifier or a receiver having a digital input jack
- 4. AV OUTPUT (VIDEO/AUDIO L/R) jacks**
Connects the inputs of external equipment via composite video/audio cables
- 5. COMP OUT (COMPONENT) jacks**
Connects the inputs of external equipment via component video cables
- 6. SCART IN/OUT jack**
Connects the input/output of external equipment via SCART cable
- 7. AC IN terminal**
Connects the power cord
Please note that some models feature attached power cords.

Remote Control

The actual appearance of the remote control may be different depending on sale regions and model types. Please check the remote control contained in the package first and refer to one of the two following pages that most suitable.

Type 1

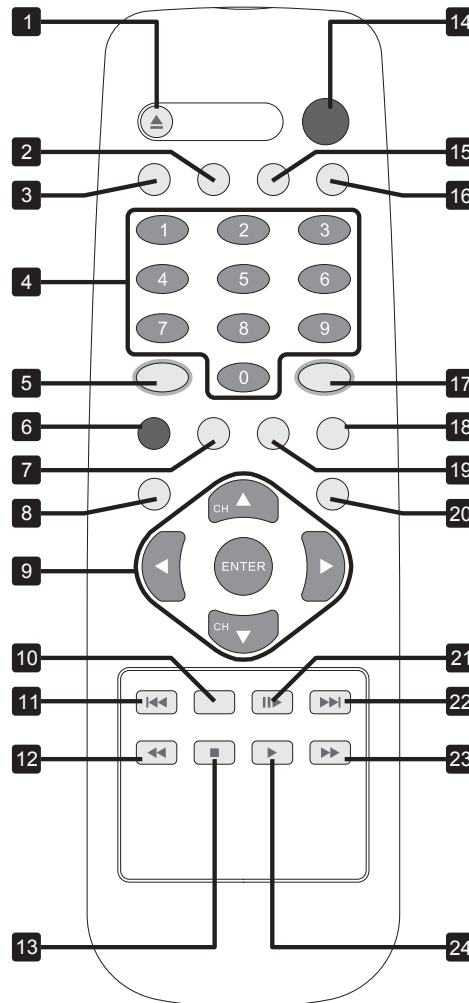
1. **POWER button**
Press to switch on or off the recorder
2. **SETUP button**
Press to display the System Setup menu
3. **DISPLAY button**
Press to view information
4. **TOP MENU button**
Press to display disc's top menu
ALBUM ◀ button
Press to go to previous file folder
5. **▲ ▼ ◀ ▶ (direction) and ENTER buttons**
Press to make selection
CH ▲ / CH ▼ buttons
Press to select channel
6. **NAVI. button**
Press to display Navigation menu
7. **■ STOP button**
Press to stop playback or recording
8. **CM SKIP button (Commercial Skip)**
Press to fast-forward playback by 30 seconds
9. **◀◀ PREVIOUS button**
Press to go to previous file/picture/track/chapter
10. **▶▶ NEXT button**
Press to go to next file/picture/track/chapter
11. **Alphabet and Number buttons**
Press to enter numbers and letters
12. **● RECORD button**
Press to start recording



13. **▲ OPEN/CLOSE button**
Press to open or close the disc tray
14. **SOURCE button**
Press to select signal source
15. **TV(MODE) button**
Press to switch to TV source or SCART Bypass view
16. **MENU button**
Press to display disc's menu
ALBUM ▶▶ button
Press to go to next file folder
17. **GUIDER button**
Press to display Easy Guider menu
18. **▶ PLAY button**
Press to start playback
19. **||▶ PAUSE/STEP button**
Press to pause playback or recording
During the pause mode of video playback, press the button repeatedly to view the content frame by frame.
20. **▶▶ F.F. button**
Press to advance playback
21. **◀◀ F.R. button**
Press to reverse playback
22. **TIMER button**
Press to display Timer Record menu
23. **TOOLS button (For models not supporting VIDEO Plus+ system)**
Press to display the Disc Tools menu.
VIDEO Plus+ button (For models supporting VIDEO Plus+ system)
Press to display the VIDEO Plus+ timer recording menu
24. **EDIT button**
Press to display Edit menu or Channel Editor menu

Type 2

1. **▲ OPEN/CLOSE button**
Press to open or close the disc tray
2. **SETUP button**
Press to display the System Setup menu
3. **DISPLAY button**
Press to view information
4. **Alphabet and Number buttons**
Press to enter numbers and letters
5. **NAVI. button**
Press to display Navigation menu
6. **● RECORD button**
Press to start recording
7. **TIMER button**
Press to display Timer Record menu
8. **TOP MENU button**
Press to display disc's top menu
9. **▲ ▼ ◀ ▶ (direction) and ENTER buttons**
Press to make selection
CH ▲ / CH ▼ buttons
Press to select channel
10. **CM SKIP button (Commercial Skip)**
Press to fast-forward playback by 30 seconds
11. **◀◀ PREVIOUS button**
Press to go to previous file/picture/track/chapter
12. **◀◀ F.R. button**
Press to reverse playback
13. **■ STOP button**
Press to stop playback or recording



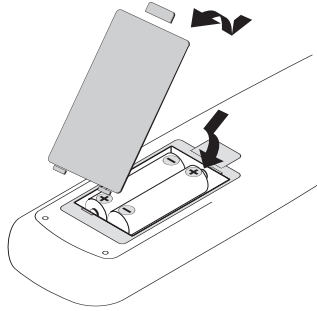
14. **⏻ POWER button**
Press to switch on or off the recorder
15. **SOURCE button**
Press to select signal source
16. **TV(MODE) button**
Press to switch to TV source or SCART Bypass view
17. **GUIDER button**
Press to display Easy Guider menu
18. **EDIT button**
Press to display Edit menu or Channel Editor menu
19. **TOOLS button (For models not supporting VIDEO Plus+ system)**
Press to display the Disc Tools menu.
20. **VIDEO Plus+ button (For models supporting VIDEO Plus+ system)**
Press to display the VIDEO Plus+ timer recording menu
21. **⏸ PAUSE/STEP button**
Press to pause playback or recording
During the pause mode of video playback, press the button repeatedly to view the content frame by frame.
22. **▶▶ NEXT button**
Press to go to next file/picture/track/chapter
23. **▶▶ F.F. button**
Press to advance playback
24. **▶ PLAY button**
Press to start playback

Using Remote Control

- ⚠ Please check the type of the remote control contained in the package first.

Preparing the remote control (Type II)

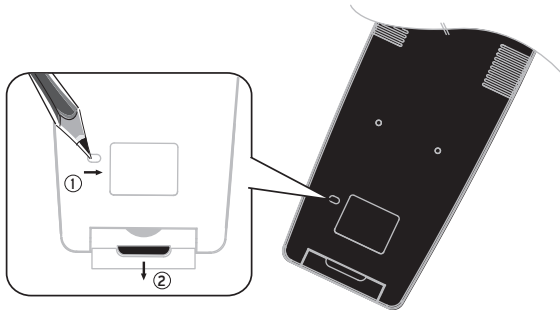
Open the battery compartment and insert the batteries. Make sure the polarities (+ and -) match the markings inside the remote control.



- ⚠ Do not use rechargeable batteries.

Replacing the battery in remote control (Type I)

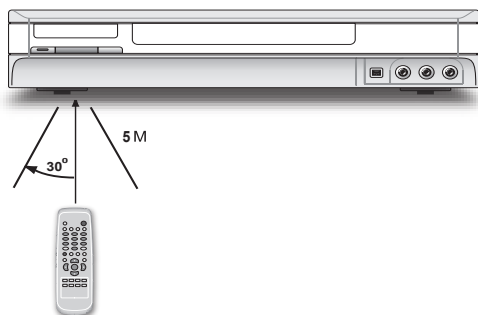
Use a pen to jab in the hole on the back of remote control and push to the right. Then pull down the battery compartment to open it. Place a LITHIUM battery with positive(+) side facing up.



- ⚠ Please keep batteries out of the reach of children.

Remote Control Signal

The remote has a range of approximately 5M and works best when pointed directly at the unit horizontally at angles up to 30° from the sensor window of the DVD recorder.



Easier Application with Remote Control

Function buttons, such as **GUIDER** or **TIMER**, are designed to offer you a quick access to intended applications. Press these buttons to go directly to their individual menus and complete your desired tasks. If you would like to quit an application, simply press the designated button again.

Connecting up Your DVD Recorder

⚡ Before you start...

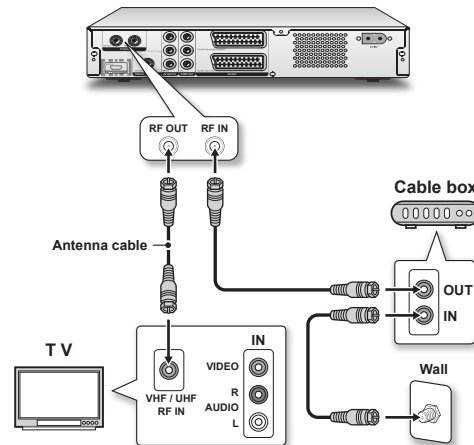
- Do not plug the AC power cord into the outlet until all other connections are made.
- It is recommended that you connect VIDEO OUT jack of the DVD recorder directly to the video input of your TV. Connecting VIDEO OUT jack of this recorder to a TV via a VCR may cause a viewing problem when playing a copyright-protected disc. The same viewing problem may also occur when connecting the recorder to an integrated TV/Video system.

Step 1: Connecting Antenna/Satellite Cables

Option 1 With Cable Box

Wall Outlet → Cable Box → DVD Recorder → TV

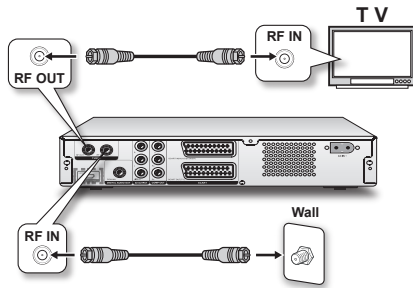
1. Use an antenna cable to connect the RF IN jack on the cable box to the antenna outlet on the wall.
2. Use an antenna cable to connect the RF OUT jack on the cable box to the RF IN jack on the DVD recorder.
3. Use an antenna cable to connect the RF OUT jack on the DVD recorder to the RF IN jack on the television.



Option 2 Without Cable Box

Wall Outlet → DVD Recorder → TV

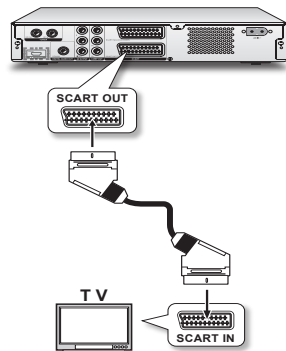
1. Use an antenna cable to connect the RF IN jack on the DVD recorder to the antenna outlet on the wall.
2. Use an antenna cable to connect the RF OUT jack on the DVD recorder to the RF IN jack on the television. (Please note that this serves as a pass-through only.)



Step 2: Connecting the Video Cable

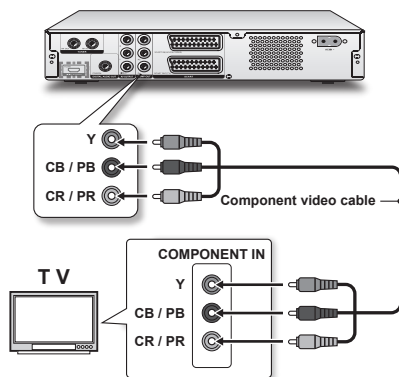
Option 1 Using SCART Cable

Use a SCART cable to connect the SCART OUT jack on the DVD recorder to the SCART IN jack on the television.



Option 2 Using Component Cable

Use a component video (with green, blue and red ends) cable to connect the COMPONENT OUT jack on the DVD recorder to the COMPONENT IN jack on the television.

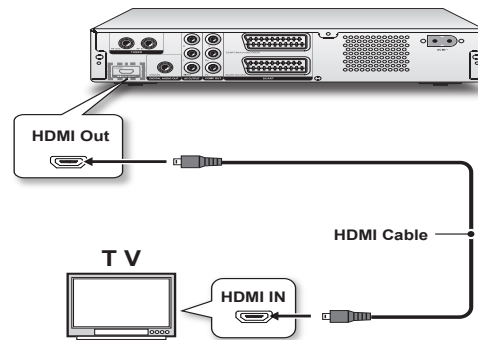


- If your television supports 'Progressive Scan' mode, you may adjust the 'Video Output' setting accordingly in setup menu for better results. Go through **Setup** → **System** → **Video Output**, and select 'Progressive'.

Introducing System Setup(p.16)

Option 3 Using HDMI Cable

If your TV supports HDMI, use a HDMI cable to connect the HDMI OUT jack on this DVD recorder to the HDMI IN jack on the TV.



- After all connection steps are done, the DVD recorder and TV start to create HDCP (High-bandwidth Digital Content Protection) connection which prevents the signal transmitted via HDMI cable from being copied. If this HDCP connection fails to build, a warning window will pop up. Press **◀** and **ENTER** to try again. Or disconnect the HDMI cable and use another kind of video cable for connection. If you select 'EXIT' without disconnecting the cable or do not make a choice in 10 seconds, the warning message will disappear. However, next time when you watch HDCP-encrypted content, the window pops up again.

Step 3: Connecting the Audio Cable

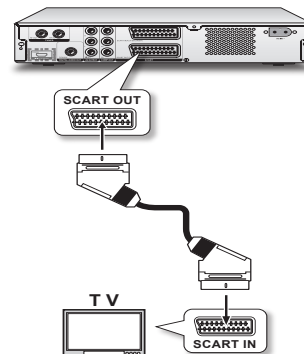
- If you choose option 3 in step 2, set the 'HDMI Output' to 'Video+Audio' in the Setup menu and do not connect the DVD recorder to an audio amplifier or receiver, then you can skip this step.

Introducing System Setup(p.16)

Setting HDMI(p.19)

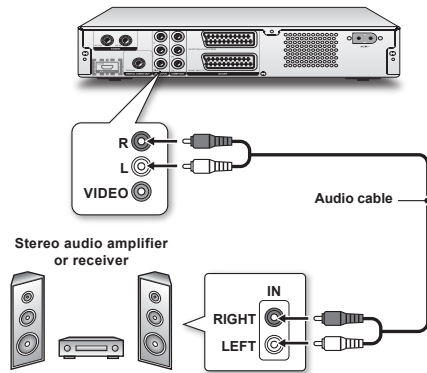
Option 1 Using SCART Cable

Use a SCART cable to connect the SCART OUT jack on the DVD recorder to the SCART IN jack on the television.



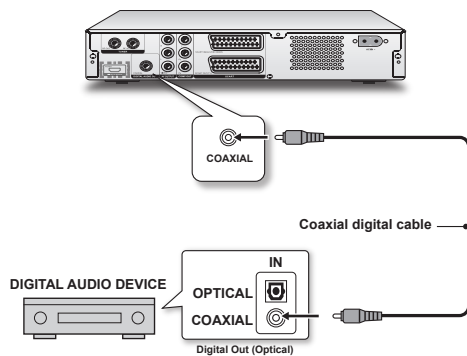
Option 2 Connecting to a Stereo Audio Amplifier or Receiver

Use the audio (red and white) ends of a composite cable to connect the AUDIO OUT jack on the DVD recorder to the AUDIO IN jack on a stereo amplifier or a receiver.



Option 3 Connecting to a Digital Audio Device

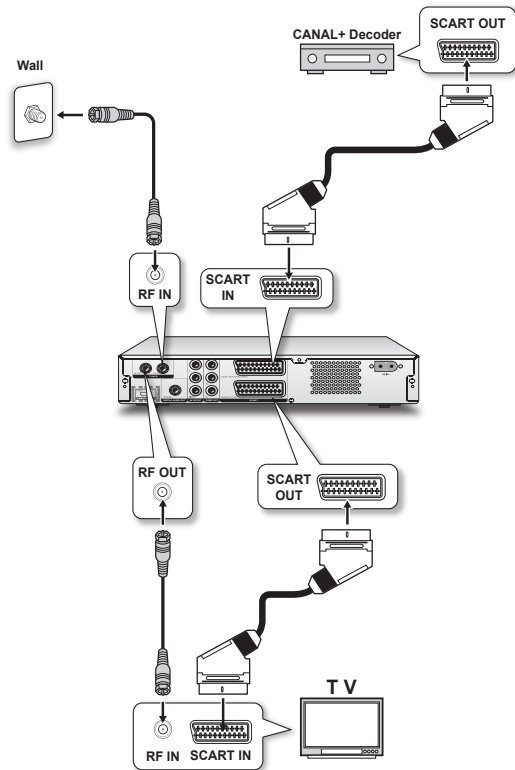
Use a coaxial cable (not supplied) to connect the DIGITAL OUT (COAXIAL) jack on the DVD recorder to the coaxial digital input on a stereo amplifier or a receiver.



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. Use an RF cable to connect the RF IN jack on the DVD recorder to the antenna outlet on the wall.
2. Use an RF cable to connect the RF OUT jack on the DVD recorder to the RF IN jack on the television.
3. Use a SCART cable to connect the SCART IN jack on the DVD recorder to the SCART OUT jack on the CANAL+ decoder.
4. Use a SCART cable to connect the SCART OUT jack on the DVD recorder to the SCART IN jack on the television.

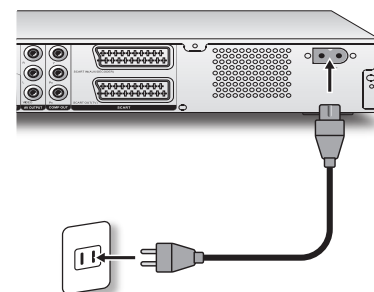


- ⚠ During recording, if you have problem watching programs imported via decoder, you can press TV(MODE) to switch to the SCART Bypass mode. However, you need to first activate the feature through Setup→TV Tuner →TV MODE.

Introducing System Setup(p.16)

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.



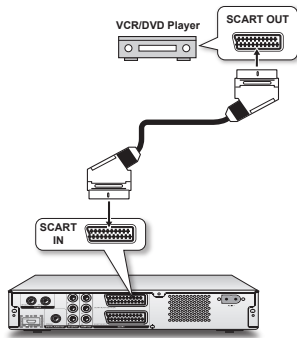
- ⚠ Remember to switch on the DVD recorder and TV.
- ⚠ If you use a model which features attached power cord, you only need to plug the power cord to the outlet at this step.

- ⚠ To have the signal from this DVD recorder shown on TV, switch TV's input source to appropriate AV option (the one connected to this unit). For further information on how to change TV's input source, check the instruction manual provided by your TV manufacturer.

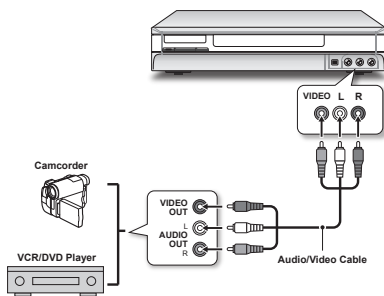
Connecting to External Devices

Connecting to VCR/V8 Camcorder/DVD Player

When connecting via the rear-panel INPUT jacks

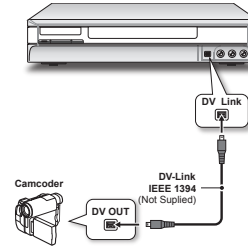


When connecting via the front-panel INPUT jacks



Connecting to DV (Digital Camcorder)

Connects the DV-link jack on the DV to the DV-link jack on this DVD recorder using a IEEE 1394 cable.



- ⚠ The DV-Link INPUT jack on this recorder is for use with DV-compatible camcorders only, and not to be used for connecting any other firewire devices.

- ⚠ To have the signal from this DVD recorder shown on TV, switch TV's input source to appropriate AV option (the one connected to this unit). For further information on how to change TV's input source, check the instruction manual provided by your TV manufacturer.

Getting Started

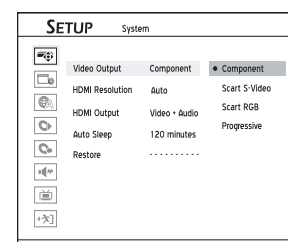
Introducing System Setup

Before using this DVD recorder, you may like to change the system settings such as the language of on-screen display, clock format, and recording mode. Use the Setup menu to complete the process.

In the Setup menu, simply go through three levels of menus to complete a setting. Options in first-level menu are represented by icons, while the ones in second and third levels are represented by text. The table below lists all the options available. Refer to this table and follow the instruction to complete the system settings. For some settings, more detailed descriptions are provided in the latter part of this chapter.

How to set up the settings?


1. Press **SETUP** button on remote control to display the Setup menu.
2. In first- and second-level menu, press **▲ ▼** to select one of the options, then press **▶** or **ENTER** to go to next-level menu.
3. In third-level menu, press **▲ ▼** to select one of the options. If you are required to enter numbers, press **▲ ▼ ◀ ▶** or number buttons (**0-9**). After completed, press **ENTER** to confirm.
4. To return to upper-level menu during setting, press **◀**.
5. To completely exit the Setup menu, press **◀** several times or **SETUP**.



- ✎ For some settings, a dialogue box will appear after making a selection or after pressing **ENTER** in step 3. Select 'Yes' to apply the setting. If you choose 'No' or do not confirm in 5 seconds, the change will be discarded
- ✎ In this section, '→' is used to indicate the movement between different levels of options. For example, the procedure for setting the language of subtitle is written as 'Go through **Language→Subtitle**'.

First- Level Option	Second- Level Option	Third- Level Option	Description/Notice
System	Video Output	<ul style="list-style-type: none"> • Component • SCART S-Video • SCART RGB • Progressive 	<p>The mode of video output transmitted from COMPONENT OUT or SCART OUT jack</p> <ul style="list-style-type: none"> ◆ <i>If you select a video output mode which is different from what you use to connect the DVD recorder to your TV, there will be an instant signal loss on TV screen. If such a condition occurs, please do not press any buttons on the remote control or on the front panel. The DVD recorder will return to the original mode in just a few seconds.</i> ◆ <i>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 switch it on again. After the recorder is switched on, press ▶, 5, 0, 2, 0, on remote control, then press ENTER. The recorder will then be automatically switched off. When you switch on the recorder next time, the video output mode will be restored to default value.</i> ◆ <i>For models feature HDMI, if HDMI resolution is manually set as 576p, 720p or 1080i when you switch Video Output from 'Progressive' to 'Component', 'SCART S-Video' or 'SCART RGB', the setting of HDMI resolution will change to 'Auto' with 5760i as the output resolution. However, please note that your TV may not support 576i. In such case, select 'No' in the confirmation box popping-up to discard the change of Video Output and HDMI resolution.</i>
	HDMI Resolution*	<ul style="list-style-type: none"> • Auto • 576p • 720p • 1080i 	<p>Resolution of video output transmitted by HDMI</p> <p><i>Under the default setting ('Auto'), the DVD recorder outputs optimum resolution that can be supported by your TV, and the Video Output mode changes accordingly without noticing.</i></p> <p><i>(Select models only)</i></p>

First- Level Option	Second- Level Option	Third- Level Option	Description/Notice
System	HDMI Output*	<ul style="list-style-type: none"> • Video + Audio • Video Only • Audio Only 	Output content transmitted by HDMI <i>(Select models only)</i>
	Auto Sleep	<ul style="list-style-type: none"> • Off • 30 minutes • 60 minutes • 90 minutes • 120 minutes 	<i>Desired time slot before the DVD recorder automatically switches to an inactive mode</i>
	Restore		Option for recovering default setup of the DVD recorder
Date/Time	Date		System date of this DVD recorder <i>Date beyond 31/12/2099 (December 31, 2099) CANNOT be set.</i>
	Time		System time of this DVD recorder
	Clock Format	<ul style="list-style-type: none"> • 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/time display format
Language	OSD	Multiple Languages	Language to be displayed on screen <i>Available languages vary depending on model types.</i>
	Menu	Multiple Languages	Language to be displayed on the menu page <i>Available options vary depending on model types and discs being played.</i>
	Audio	Multiple Languages	Language to be adopted for the spoken language <i>Available options vary depending on model types and discs being played.</i>
	Subtitle	Multiple Languages	Your preferred language for subtitle <i>Available languages vary depending on model types and discs being played.</i>
Playback	Aspect Ratio*	<ul style="list-style-type: none"> • 16:9 Wide • 4:3 Pan • 4:3 L.Box 	For selecting a appropriate viewing mode available on users' own television sets
	Parental Lock*	<ul style="list-style-type: none"> • Off • 8: Adult • 7: NC-17 • 6: R • 5: PG-R • 4: PG-13 • 3: PG • 2: G • 1: Kid Safe 	The level of parental control
	Password*		Password for parental control. Default: 0000
	Slide Time	<ul style="list-style-type: none"> • Off • Interval (3-99 Seconds) 	Display interval for each picture
	VCD PBC	<ul style="list-style-type: none"> • On • Off 	For enabling/disabling playback control function on VCD discs which adopt the VCD 2.0 standard
	DivX(R) VOD	<ul style="list-style-type: none"> • Registration Code 	For obtaining the registration code of this DVD recorder <i>(Select models only)</i>

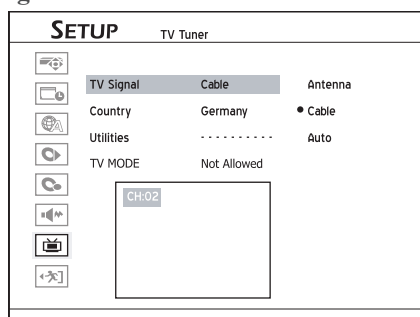
First- Level Option	Second- Level Option	Third- Level Option	Description/Notice
Recording	Mode	<ul style="list-style-type: none"> • HQ • SP • LP • EP • SLP 	Recording mode of different quality and length. See  Recording Mode(p.47)
	Chapter Mark	<ul style="list-style-type: none"> • Off • 5 Minutes • 10 Minutes • 15 Minutes • 20 Minutes • 25 Minutes • 30 Minutes 	The frequency of automatically inserting the chapter mark when recording video titles
Audio	Digital Out	<ul style="list-style-type: none"> • PCM • Bit Stream 	<p>The mode(decoded/encoded) of Dolby digital audio signal transmitted from the digital output jack of the DVD recorder</p> <p>♦Select ‘PCM’ when your amplifier does not have an integrated Dolby Digital decoder. Select ‘Bit Stream’ when your amplifier has an integrated Dolby Digital decoder.</p> <p>♦Some audio language in DVD-Video are recorded using the DTS format. If you have selected one of these languages, there will be no sound during playback. Choose those recorded using the Dolby Digital format instead to enjoy the sound effect.</p>
	MPEG	<ul style="list-style-type: none"> • PCM • Bit Stream 	<p>The mode(decoded/encoded) of MPEG audio signal transmitted from the digital output jack of the DVD recorder</p> <p>Select ‘PCM’ when your amplifier does not have an integrated MPEG audio decoder. Select ‘Bit Stream’ when your amplifier has an integrated MPEG audio decoder.</p>
	HDMI Audio	<ul style="list-style-type: none"> • Auto • PCM 	<p>The mode of audio signal transmitted via HDMI cable.(Select models only)</p> <p>♦Under the default setting ‘Auto’, the DVD recorder output the optimum signal that can be received by TV. However, if there is still sound loss or noise when using a HDMI cable to transmit audio signal, select PCM instead.</p> <p>♦If the HDMI cable is used to connect an equipment incompatible with Dolby digital/MPEG signal, the PCM will be output regardless of the setting of ‘Digital Out’ and ‘MPEG’.</p>
TV Tuner	TV Signal	<ul style="list-style-type: none"> • Antenna • Cable • Auto 	TV signal source
	Country	Multiple Countries	For selecting the appropriate area where you are currently situated Available countries/regions may vary depending on model types.
	Utilities*	<ul style="list-style-type: none"> • Scan Channel • Edit Channel 	For setting/resetting TV channels
	TV MODE*	<ul style="list-style-type: none"> • Bypass Allowed • Not Allowed 	For enabling or disabling the TV MODE/SCART Bypass feature
Exit			

 *Indicates more detailed descriptions are provided in this chapter.

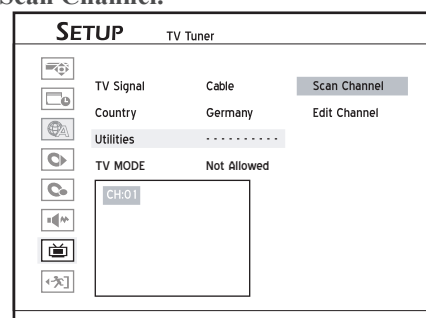
Setting TV Channels

To record the TV program you want to watch, it is important that you set up a list of recognizable channels for the DVD recorder.

1. Press **SETUP** to display the Setup menu.
2. Select TV signal source through **TV Tuner** → **TV signal**.



3. Select the country where you are currently situated through **TV Tuner** → **Country**.
4. Scan TV channels through **TV Tuner** → **Utilities** → **Scan Channel**.



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 are reinstalling this DVD recorder, you may need to go through this process again.

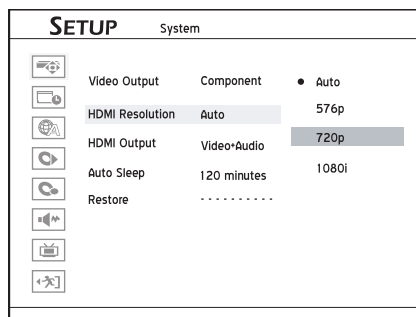
5. To edit listed channels, see **Using Channel Editor (p.21)**

Setting HDMI

(Select Models Only)

HDMI(High-Definition Multimedia Interface) is an all-digital interface which can transmit both audio and video signal via a single cable. Select the output(audio, video or both)to be transmitted by HDMI, and set the resolution of transmitted video.

1. Press **SETUP** to display the Setup menu.
2. Set the resolution of video transmitted by HDMI through **System** → **HDMI Resolution**.



After selecting the resolution by pressing **▲ ▼** and **ENTER**, a dialogue box informing you are about to switch to another HDMI resolution will appear. Select 'Yes' and press **ENTER**.

If you select 'No' and press ENTER, the screen will go back to previous setting menu without any change.

3. A previewing screen in the resolution you chose with a confirmation dialogue box will be brought up.
4. Select 'Yes' and press **ENTER** to apply the setting. If you select 'No' or do not make a selection in 10 seconds, the settings of resolution will be discarded.

If the resolution you set is not supported by your TV, you may lose the signal on the TV.

5. Set the output to be transmitted by HDMI through **System** → **HDMI Output**.

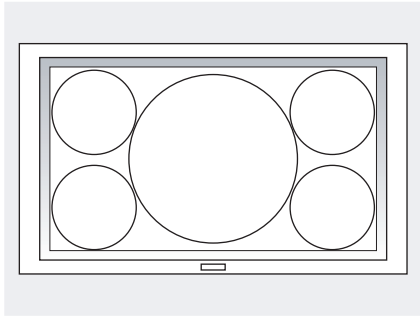
To apply the change of setting, make sure you press ENTER after selection.

- ⚠ Setting HDMI resolution may affect the video output mode of this recorder and the corresponding setting in the Setup menu. When this recorder and your TV are connected up by an HDMI cable: ① If '576p', '720p' or '1080i' is manually selected or automatically set by system as the resolution, 'Video Output' will be switched to 'Progressive' (progressive scan mode). ② If you switch the setting to 'Auto' and 576i is detected as the output resolution, 'Video Output' will be changed to the most recent interlaced scan mode ('SCART S-Video', 'SCART RGB' or 'Component') you set before.
- ⚠ Once the HDMI cable is disconnected, Video Output will change to the most recent interlaced scan mode you set if the setting of HDMI resolution is 'Auto'. Otherwise, Video Output will be 'Progressive'.

Setting Aspect Ratio

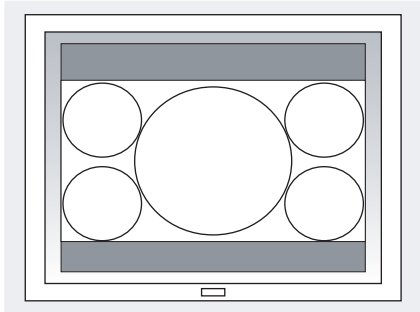
Aspect ratio setting affects how video images are presented. Select the mode which suits your television.

1. Press **SETUP** to display the Setup menu.
2. Change the setting through **Playback** → **Aspect Ratio**.
3. If you connect the DVD recorder to a widescreen(16:9) TV, select '16:9 Wide' (16:9 Widescreen).



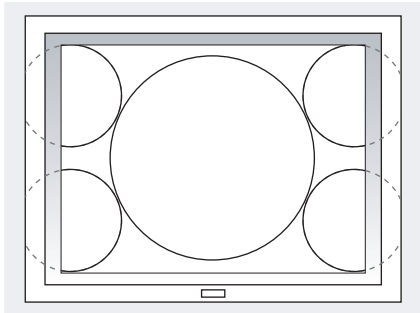
4. If you connect the DVD recorder to a normal (4:3) TV, select either '4:3 L.Box' (4:3 Letter Box) or '4:3 Pan' (4:3 Pan & Scan). However, when playing back a DVD-Video disc recorded in wide picture format, the picture shown on screen is different.

1. If you select '4:3 L.Box':



The picture is shown with black bars at the top and bottom.

2. If you select '4:3 Pan' (4:3 Pan & Scan):



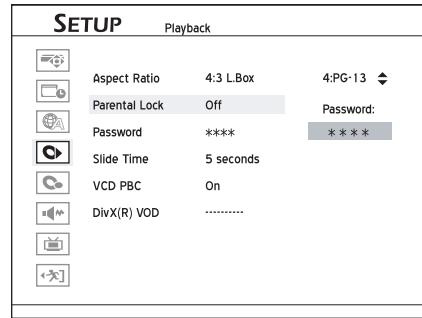
The picture is zoomed to fill the screen vertically, and the left and right sides of the image are chopped off. Please note that depending on the disc, the picture may be shown in the 4:3 L.Box (4:3 Letter Box) mode even if you select the 4:3 Pan (4:3 Pan & Scan) mode.

Setting Parental Control

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 equal to or lower than the one you set can be played back by this DVD recorder.

1. Press **SETUP** to display the Setup menu.
2. Change the level of parental control through **Playback**→**Parental Lock**.
3. If the control level you select is different from the one you set before, an input box asking for password will appear. Enter 4-digit password by pressing number buttons(0-9).

The default password is 0000.



*If you press **◀** or **ENTER** instead of number buttons, you will return to the upper level of the menu without making any change.*

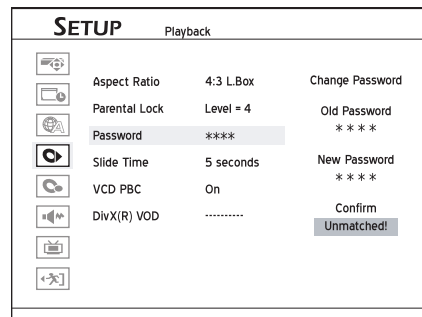
4. If the password you enter is correct, the change you made will be applied. Otherwise, the change will be ignored.
- ↳ If you try to play back a DVD Video disc prohibited by the parental control, you will be asked to enter your 4-digit password. Once the password is correct, the playback will start.

How to Set Password:

1. Press **SETUP** to display the Setup menu.
2. Change the password for parental control through **Playback**→**Password**.
3. Press number buttons(0-9) to enter your 4 -digit password.

The default password is 0000.

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.



*If you press **◀** or **ENTER** instead of number buttons 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.

Advanced System Setup

Before you start...

- Complete the basic system settings introduced in the previous section first.

Using Channel Editor

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

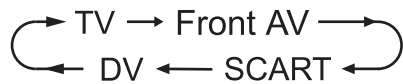
Path 1: Using Setup Menu

1. Press **SETUP** to display the Setup menu.
2. Go through **TV Turner** → **Utilities** → **Edit Channel**.

Path 2: Using Edit Mode While Viewing TV

1. Press **TV(MODE)** or press **SOURCE** to switch to the TV-viewing mode.

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

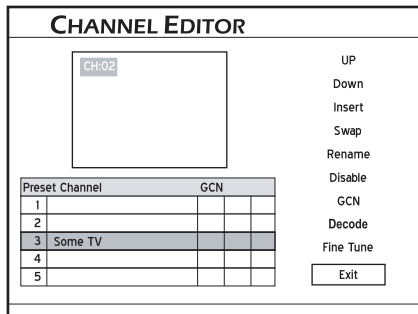


By Default, pressing TV(MODE) allows you to switch to TV directly. However, if you have activated the 'SCART Bypass' mode earlier through Setup menu, you can only press SOURCE to switch to TV.

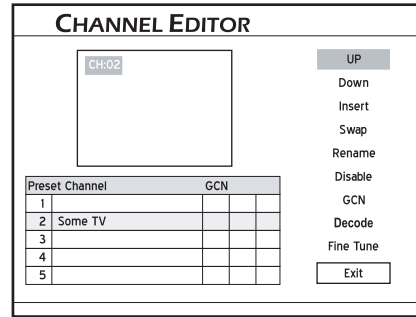
2. Press **EDIT** to activate 'Channel Editor'.

Moving up/down TV Channels

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

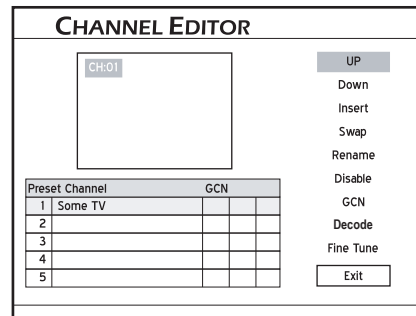


2. Press **▲ ▼** to select 'Up' or 'Down', then press **ENTER**.



The order of the TV channel will be changed.

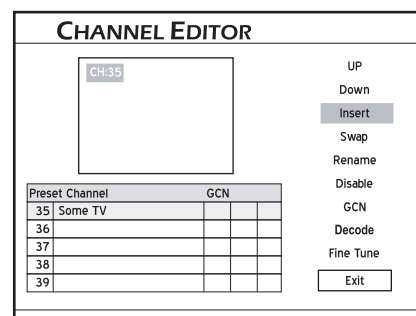
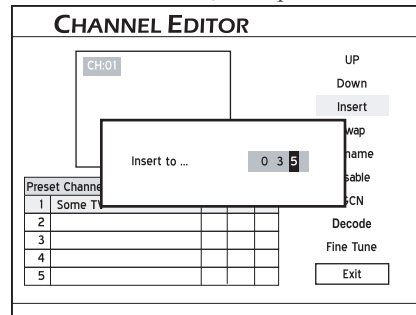
3. Each time when you press **ENTER**, the item changes as follows:



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, press **ENTER**.
2. Press **▲ ▼** to select 'Insert', then press **ENTER**.
3. Press **▲ ▼ ◀ ▶** or the number buttons (0-9) to enter the channel number, then press **ENTER**.



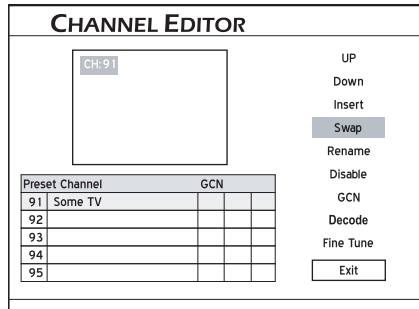
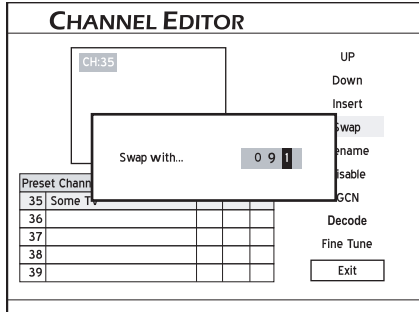
The channel will be moved to the desired location.

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 the number buttons 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 to complete the settings.

Renaming TV Channels

1. Press **▲ ▼** to select a channel from the list, then press **ENTER**.
2. Press **▲ ▼** to select 'Rename', then press **ENTER**.
3. The 'on-screen input keypad' will be displayed. Follow the instruction in '*Using On-Screen Input Keypad*' to enter characters.

You can enter up to 10 characters for a name.

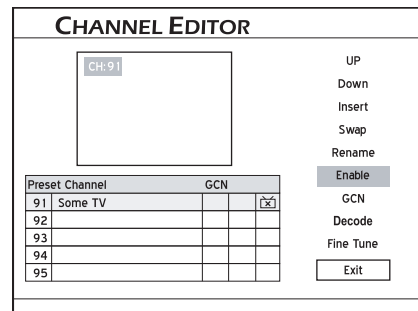
On-Screen Input Keypad (p.28)

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

Enabling/Disabling TV Channels

You can temporarily remove unwanted channel(s) from the list created from automatic scanning process or add the previously disabled channel(s) back to the list.

1. Press **▲ ▼** to select a TV channel which you would like to switch on/off, then press **ENTER**.
2. Press **▲ ▼** to select 'Enable' or 'Disable', then press **ENTER**.



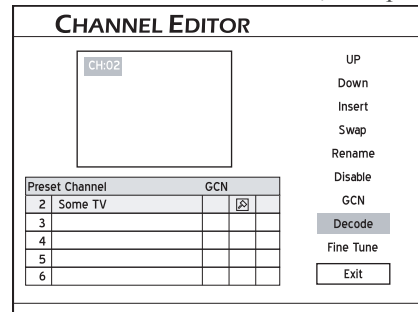
The channel selected will then be switched on or off.

3. To switch on or off other channels, repeat steps 1-2 to complete the settings.

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**.



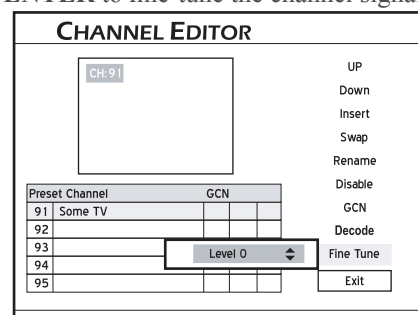
A key icon will appear, indicating that the "Decode" function for the selected channel is switched on.

3. To set on or off the 'Decode' function for other TV channels, repeat steps 1-2.
4. When completed, press **▲ ▼ ◀ ▶** to select 'Exit' or another option to continue, then press **ENTER**.

Fine-Tuning TV Channels

After you have performed the channel scanning, you may like to fine-tune the TV channel signal manually. Follow the steps listed below to complete the function.

1. Press **▲ ▼** to select a channel from the list, then press **ENTER**.
2. Press **▲ ▼** to select 'Fine Tune', then press **ENTER**.
3. Press **▲ ▼** or the number buttons (0-9), then press **ENTER** to fine-tune the channel signal.



- When completed, press \blacktriangle \blacktriangledown \blacktriangleleft \blacktriangleright to select 'Exit' or another option to continue, then press **ENTER**.

Setting the VIDEO Plus+ System

(Select Models Only)

Before you start...

- Check if your model features the VIDEO Plus+ system support.

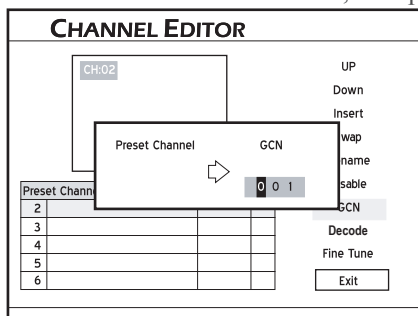
 **Model Comparison Chart (back cover)**

The VIDEO Plus+ 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 PlusCode programming numbers. You can complete the timer recording setup simply by inputting the PlusCode number, which can be found in most newspapers, TV listing magazines or online sources.

Setting up VIDEO Plus+ System

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 step will help you to make use of the VIDEO Plus+ system for future timer recording settings.

- 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 the Setup menu, you can only press SOURCE to switch to TV.
- Press **EDIT** to display the Channel Editor menu.
- Press \blacktriangle \blacktriangledown to select a TV channel, then press **ENTER**.
- Press \blacktriangle \blacktriangledown \blacktriangleleft \blacktriangleright to select 'GCN', then press **ENTER**.



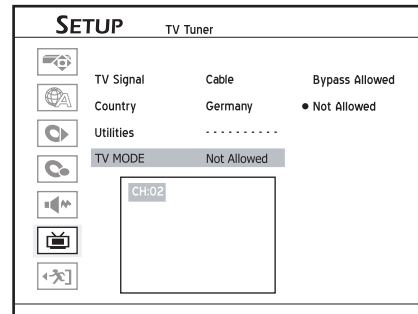
The dialogue box for entering GCN will appear.

- Press the number buttons (0-9) to enter the GCN (guide channel number), which is the channel number used by the VIDEO Plus+ system, then press **ENTER**.
- To set GCN for other channels, repeat steps 3-5.
- When completed, press \blacktriangle \blacktriangledown \blacktriangleleft \blacktriangleright to select 'Exit', then press **ENTER**.

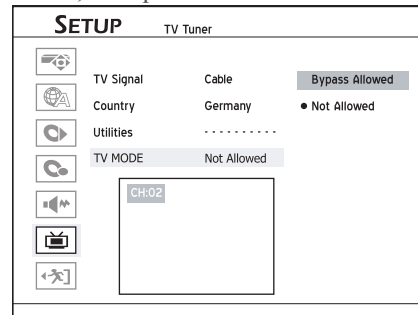
Setting TV MODE/SCART Bypass

When the DVD recorder is switched on, you may need to activate the 'TV MODE/SCART Bypass' feature in order to successfully watch programs imported via the SCART connection.

- Press **SETUP** to display the Setup menu.
- Setting TV Mode/SCART Bypass through **TV Tuner** \rightarrow **TV Mode**.



- Press \blacktriangle \blacktriangledown to select 'Bypass Allowed' or 'Not Allowed', then press **ENTER**.



- You need to activate the feature before using the **TV(MODE)** button on remote control to switch to the SCART Bypass mode.
- After you press **TV(MODE)** to switch to the SCART Bypass mode, buttons on the remote control, except **POWER** and **TV(MODE)**, will not be available to use. You can only press **POWER** to switch off the DVD recorder, or press **TV(MODE)** again to return to previous viewing mode.
- After you press **TV(MODE)** to switch to the SCART Bypass mode, the power indicator (green), play indicator (green) and timer record indicator (orange) on the front panel will start blinking.

Easier Application & Access

Easy Guider

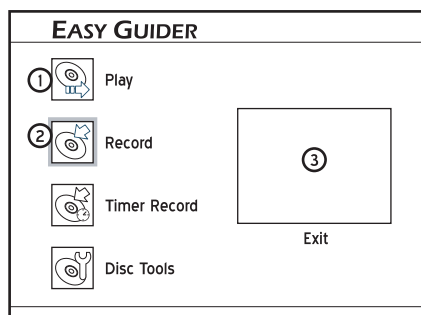
Easy Guider helps you to quickly operate the major functions offered by this DVD recorder. All functions in Easy Guider can be conveniently selected and activated by pressing **▲ ▼ ◀ ▶** and **ENTER** buttons on your remote control. If you would like to exit the Easy Guider menu, press **GUIDER**.

Before you start...

- Correctly connect up all the cables.
 - ✎ **Connecting up Your DVD Recorder (p.12)**
- Make sure the remote control works.

Introducing Easy Guider

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



- ① Shortcuts offered by Easy Guider.
- ② Indicates the function selected. Press to confirm the selection.
- ③ Highlight this window and press **ENTER** to exit Easy Guider. This previewing window also allows you to monitor images shown on your TV.

If you are watching TV...

Image from your selected channel will b.e shown.

If you are watching DVD-Video or VCD...

Image of the disc being played will be shown.

If you are listening to an audio CD...

The display window will be blank.

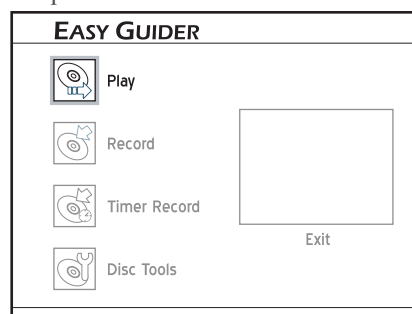
If you are browsing pictures...

The pictures being played will be shown.

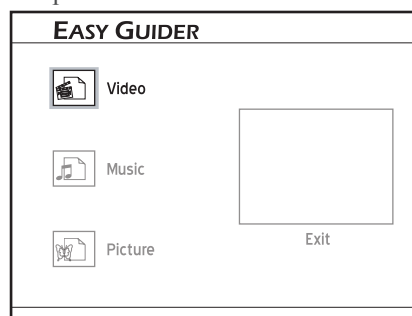
Using Easy Guider: Play

Playing Files

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



2. If you insert a DVD-Video disc, VCD, SVCD or an audio CD, playback will begin automatically. Otherwise, press **▲ ▼** to select 'Video', 'Music' or 'Picture', then press **ENTER**.



3. Playback will then start.
4. If the file being played is not what you wish to view, ...

File Type	To Change Files	To Change Albums
Video or Music	Press PREVIOUS ◀◀ or NEXT ▶▶	Press ALBUM ◀◀ or ALBUM ▶▶ to select a folder which contains the file.
Picture	Press ◀ or ▶	

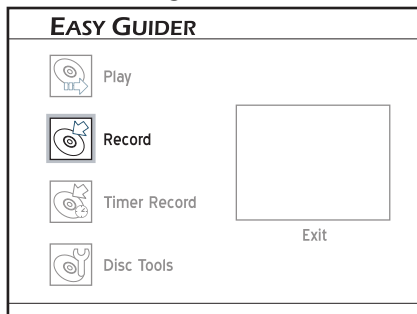
5. Press **|||** **PAUSE/STEP** to pause playback. Press **▶** **PLAY** to resume normal playback. Press **■** **STOP** to stop playback at a marked stop. Press **■** **STOP** again to bring the playback to a full stop.

Using Easy Guider: Record

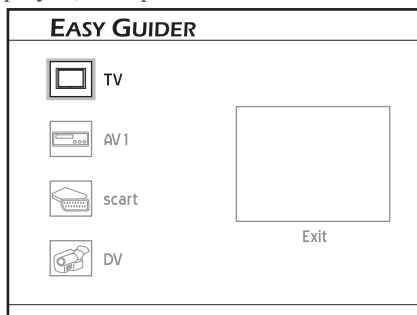
Before you start...

- Choose a recordable disc with enough space.
Check the disc types supported by the DVD recorder you are using.
 - *Model Comparison Chart (back cover)*
 - *Discs Types Supported (p.6)*
- Complete the channel scanning process for your TV.
 - *Setting TV Channels (p.19)*

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



2. Press **▲ ▼** to select the signal source on which the program you would like to record is being broadcast or played, then press **ENTER**.



If you select 'TV', press **▲ ▼** to select the channel you want to record, then press **ENTER**.

3. Press **▲ ▼** to select a recording mode, then press **ENTER**.
 - *Recording Mode (p.47)*
4. Press **◀ ▶** to select 'Go', then press **ENTER**.
Recording will then start.
5. Press **|||▶ PAUSE/STEP** to pause recording.
Press **|||▶ PAUSE/STEP** again to resume recording.
Press **■ STOP** to stop recording.

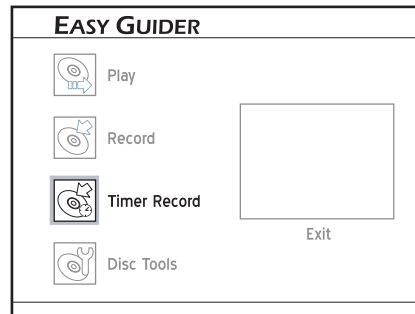
Using Easy Guider: Timer Record

Normal Timer Recording

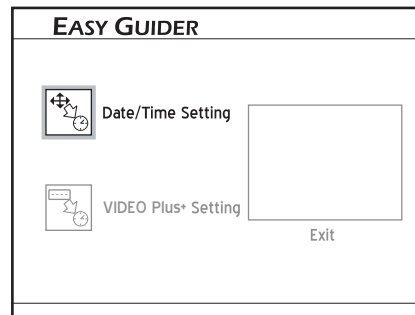
Before you start...

- Refer to 'Using Easy Guider: Record'.

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

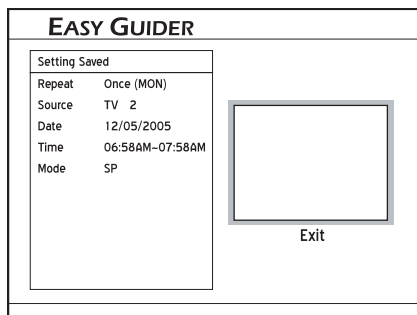


2. Press **▲ ▼** to select 'Date/Time Setting', then press **ENTER**.



This screen will not be displayed, if your DVD recorder does not feature the VIDEO Plus+ system support.

3. Press **▲ ▼** to select the signal source on which the program you would like to record is being broadcast or played, then press **ENTER**.
If you select 'TV', press **▲ ▼** or number buttons **(0-9)** to select the channel you want to record, then press **ENTER**.
4. Press **▲ ▼** to select a recording frequency, then press **ENTER**.
5. Set the date, start time and end time one by one. Press **▲ ▼ ▶ ◀** or number buttons **(0-9)** to insert numbers, then press **ENTER** to confirm your input before going to next setting.
6. Press **▲ ▼** to select a recording mode, then press **ENTER**.
 - *Recording Mode (p.47)*
7. The Timer Program information will appear. Press **ENTER** to exit the Timer Record setting.



- ⓘ You need to switch off the DVD recorder to activate the Timer Record function.
- ⓘ This DVD recorder allows users to enter a maximum of 16 Timer Record programs. If your setting list is full, you will need to delete some of the programs before you can input new ones.
- ⓘ This DVD recorder allows users to enter date up to 2099/12/31 (December 31, 2099). Date beyond this day **CANNOT** be set.

🔗 **Introducing System Setup(p.16)**

Timer Recording through VIDEO Plus+ System

(Select Models Only)



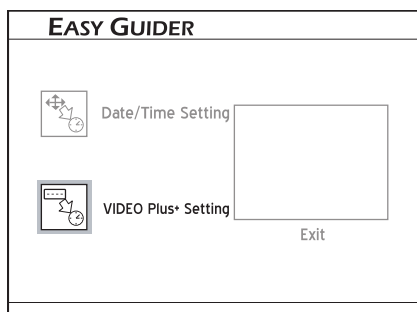
Before you start...

- Check if your model features the VIDEO Plus+ system support and refer to '*Using Easy Guider: Record*'.

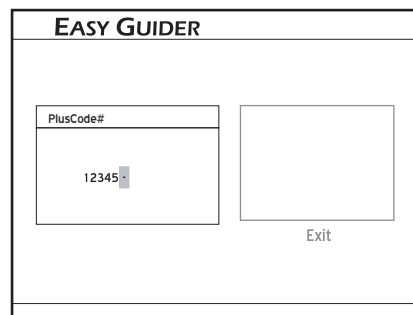
🔗 **Model Comparison Chart (back cover)**

🔗 **Using Easy Guider:Record (p.25)**

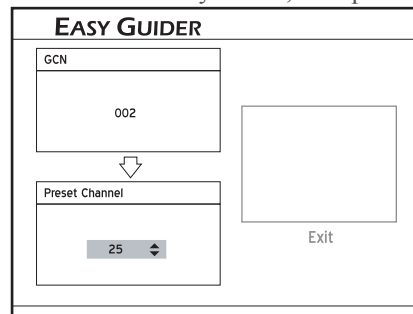
1. On the Easy Guider menu, press **▲ ▼** to select 'Timer Record', then press **ENTER**.
2. Press **▲ ▼** to select 'VIDEO Plus+ Setting', then press **ENTER**.



3. Press **▲ ▼** to select 'Once', 'Daily' or 'Weekly'.
4. Press the number buttons **(0-9)** to enter the PlusCode number, then press **ENTER**.



5. The 'Preset Channel' dialogue box will then appear, if the DVD recorder fails to find information of a corresponding channel. Press **▲ ▼** to enter the channel number shown on your TV, then press **ENTER**.



To make use of the VIDEO Plus+ system for timer recording, you need to match the GCNs (guide channel numbers) used by the VIDEO Plus+ system with the channel numbers shown on your TV, so that the relevant information can be correctly assigned to the programs you would like to record.

6. Press **▲ ▼** to select a recording mode, then press **ENTER**.
7. The Timer Program information will appear. Press **ENTER** to exit the Timer Record setting.

- ⓘ You need to switch off the DVD recorder to activate the Timer Record function.
- ⓘ This DVD recorder allows users to enter a maximum of 16 Timer Record programs. If your setting list is full, you will need to delete some of the programs before you can input new ones.

Using Easy Guider: Disc Tools

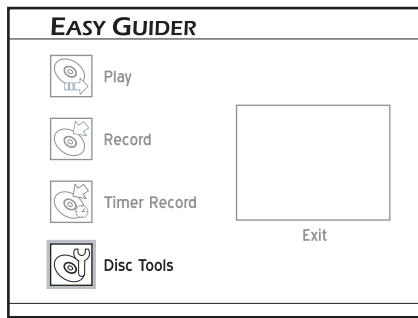
Disc Tools offers a quick access to completing post-production tasks. With Disc Tools, you can easily erase materials on discs, and finalize discs when necessary.

Erase

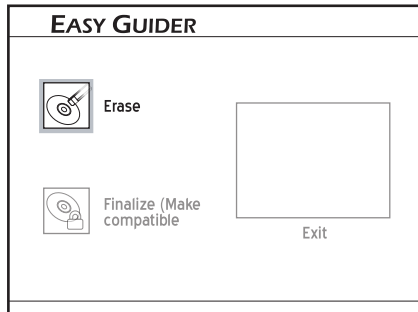


Before you start, make sure all your important files are safely backed up.

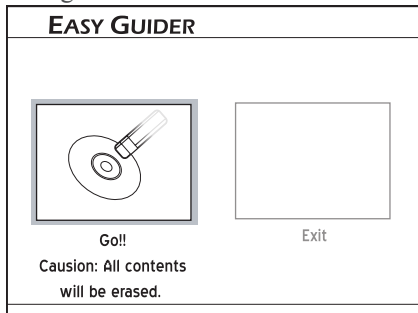
1. On the Easy Guider menu, press **▲ ▼** to select 'Disc Tools', then press **ENTER**.



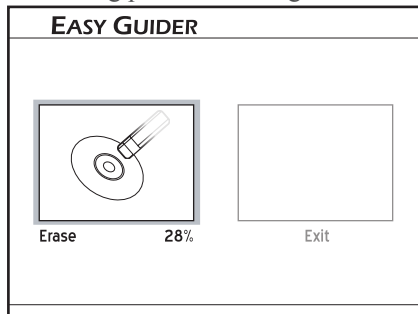
2. Press **▲ ▼** to select 'Erase'.



3. Press **◀ ▶** to select 'Go', then press **ENTER** to start erasing.



4. The erasing process will begin.



5. When completed, select 'Exit', then press **ENTER**.

Finalize (Make Compatible)

For DVD+R, DVD-R and DVD-RW(formatted in 'Quick Preparation' mode), finalization is a necessary step if you want the discs to be played back on other compatible devices.

1. Refer to the table in this section to check if the disc you use needs finalization.
2. On the Easy Guider menu, press **▲ ▼** to select 'Disc Tools', then press **ENTER**.
3. Press **▲ ▼** to select 'Finalize (Make Compatible)'.
4. Press **◀ ▶** to select 'Go', then press **ENTER** to start finalizing.
5. The finalizing process will begin.
6. When completed, select 'Exit', then press **ENTER**.

Disc	Content Type	Finalization		Recording after Finalization
DVD-R	Data file	Not required		-
	DVD+VR	Required		No
DVD-RW	Data file	Not required		-
	DVD+VR	Full Preparation	Not Required	-
Quick Preparation*		Required	Yes	
DVD+R	Data file	Not required		-
	DVD+VR	Required		No
DVD+RW	Data file	Not required		-
	DVD+VR	Not required		-

- *'Quick preparation' is a technology of formatting which saves much time compared to traditional 'Full Preparation' method. It creates a temporary area on the DVD-RW disc to mark the end of the recording data. When you apply editing functions or add new recordings, this temporary area is erased so the data can be written to the disc.
- Only discs used to record video titles require finalization. Discs containing other types of media files are considered as data; there is no need to finalize these discs.
- The finalized disc may not be able to be played back on certain devices (e.g. older model DVD player) due to technical incompatibility.

On-Screen Input Keypad

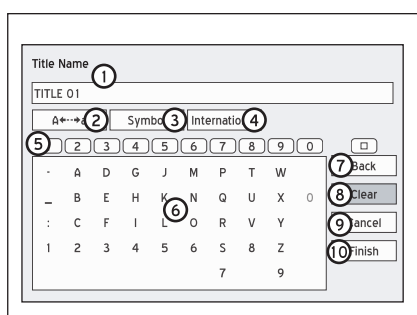


Before you start...

- Make sure the video signal of this DVD recorder is correctly displayed on your TV screen.
 - 🔗 **Connecting up Your DVD Recorder (p.12)**
- Make sure the remote control works.

Introducing On-Screen Input Keypad

On-screen input keypad offers you a simple way to enter file names. Simply press the ▲ ▼ ◀ ▶ and ENTER buttons on the remote control to enter your desired characters.



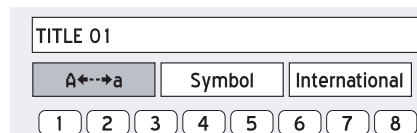
- ① Area for entering title names.
- ② Input option of uppercase or lowercase letters. Press to switch between two sets of characters.
- ③ Input option of numbers, signs and punctuation marks.
- ④ Input option of accented letters.
- ⑤ Corresponding buttons on remote control. Press one of the buttons to quickly move to the column where your desired characters, symbols or function buttons are situated.

For example, press '3' once, the highlighted cursor will move to the letter 'D' on screen. Press '3' twice, the cursor will move to the letter 'E'.
- ⑥ Available characters or symbols.
- ⑦ **Back**: to delete characters one by one in a backward direction.
- ⑧ **Clear**: to delete all characters shown on the entry bar.
- ⑨ **Cancel**: to discard changes and returning to the previous page.
- ⑩ **Finish**: to saving the settings and exiting the screen.

Using On-Screen Input Keypad

Naming a New Title or File

1. When the keypad screen is displayed, press ▲ ▼ ◀ ▶ and ENTER to select one of the input options.



2. Press ▲ ▼ ◀ ▶ to select desired letters, numbers or punctuation marks, then press ENTER.

You can enter up to 30 characters for a title name.
3. If you want to make changes during the process, select 'Back' and press ENTER to delete character by character in a backward direction. Or select 'Clear' and press ENTER to delete all the characters you have entered.
4. When completed, press ▲ ▼ ◀ ▶ to select 'Finish', then press ENTER.
 - ⚠ The entry bar **CANNOT** be left blank. If such a condition occurs, you will not be able to exit the keypad screen. Please follow the instruction given in the pop-up dialogue box, and go back to complete the process.

Renaming a Title or File

1. In the case of renaming, when the keypad screen is displayed, the 'Clear' button will be automatically highlighted. Press ENTER to clear the entry bar, or press ▲ ▼ to select 'Back'; and delete the old title name character by character.
2. Follow step 1-2 in '*Naming a New Title or File*' to enter a new name for a title or file.

Recording



- 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 (e.g. set in 'Copy-Once' or 'Copy-Never' modes)..
- 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.

Recording: Step by Step

Follow the steps to start your first recording.

Step 1. Correctly connect all the cables

- [Connecting up Your DVD Recorder \(p.12\)](#)
- [Connecting to External Devices\(p.15\)](#)

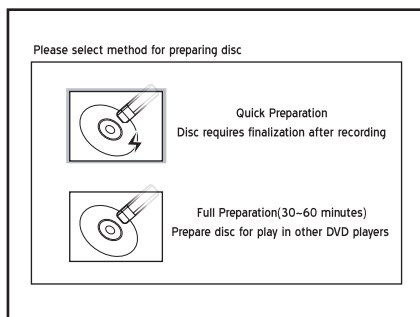
Step 2. Choose a recordable disc with enough space

Check the disc types supported by the DVD recorder you are using.

- [Model Comparison Chart \(back cover\)](#)
- [Discs Types Supported \(p.6\)](#)
- [Recording Mode \(p.47\)](#)

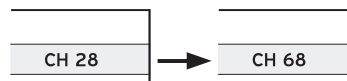
Step 3. Prepare the disc

If the DVD recorder you are using supports recording on minus (-) DVD discs, and you use blank DVD-RW discs to record, you will need to format the discs before recording. Press \blacktriangle \blacktriangledown to select 'Quick Preparation' or 'Full Preparation', then press **ENTER**.



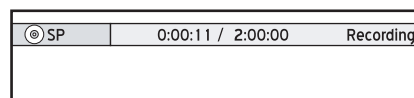
Step 4. Start recording

For Example, to record from TV, you need to select a channel first. Press **TV(MODE)** or **SOURCE** to select 'TV' as the signal source, then press **CH \blacktriangle** and **CH \blacktriangledown** to select a desired channel. If you have activated the 'SCART Bypass' mode earlier through Setup menu, you can only press **SOURCE** to switch to TV.



You can select a channel by pressing number buttons (0-9) and **ENTER**. (For Channel 6, press 6, then **ENTER**. For Channel 55, press 5, 5 and **ENTER**.)

Press \bullet **RECORD** to start recording.



To pause recording, press \parallel **PAUSE/STEP**.

For recording from other source, see the rest part of this chapter.

Step 5. Stop recording

Press \blacksquare **STOP** to stop recording. To start another recording session, press \bullet **RECORD** again after the previous recording is stopped.

Each new recording session is placed after the previous session unless a certain recording title is set to be overwritten.

- [Overwriting a Title \(p.42\)](#)

Step 6. Finalize the disc

For DVD+R, DVD-R and DVD-RW(formatted in 'Quick Preparation' mode), finalization is a necessary step if you want the discs to be played back on other compatible devices. Use the 'Disc Tool' in 'Easy Guider' to complete the process.

- [Using Easy Guider: Disc Tools \(p.26\)](#)

You need to complete the channel scanning process before recording from TV.

- [Setting TV Channels \(p.19\)](#)

Before recording, you can set the recording mode through **Recording** \rightarrow **Recording Mode** in the Setup menu.

- [Recording Mode \(p.47\)](#)


Recording from TV

1. Refer to 'Recording: Step by Step' for the procedures of recording on a disc from TV.

 **Recording: Step by Step (p.29)**

- ↳ 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 Devices

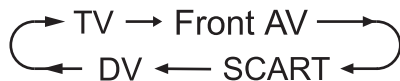
 **Before you start...**

- Refer to 'Recording: Step by Step' for the basic procedures of recording on a disc.

 **Recording: Step by Step (p.29)**

Recording from VCR/V8 Camcorder/DVD Player

1. Press **SOURCE** repeatedly to select the correct signal source.



2. Cue the external device and start playback at the beginning of the scene you wish to record.
3. Follow the general operation procedure in 'Recording: step by step' to start the recording.

Recording from DV (Digital Camcorder)



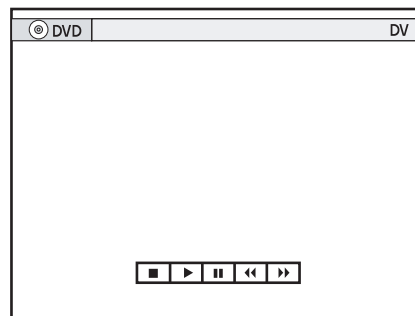
- The DV-Link INPUT jack on this recorder is for use with DV-compatible camcorders only, and not to be used for connecting any other firewire devices.
- Only DV signals can be input to the DV-Link jack on this DVD recorder.
- Do not connect a MICRO MV format video camcorder to the DV-Link jack.

- Despite the technology endeavour with which this DVD recorder is built, it is still likely that your DV may not be fully supported by the unit. If you still experience problem using the DV-Link for recording, please connect your DV via S-Video or composite cables to this DVD recorder.
- The DVD recorder is equipped with a camcorder control (Play, Stop, FF or FR) feature via the DV-Link connection. Simply move the screen cursor to the desired function on the DV input screen, then press **ENTER** on the remote control.

1. Press **SETUP** to display the Setup menu.
Select recording mode through **Recording** → **Recording Mode**.

 **Recording Mode (p.47)**

2. When completed, press **SETUP** to exit the Setup menu.
3. Press **SOURCE** repeatedly to select 'DV' as the signal source.



The DV Control panel will be displayed.

4. Cue the DV and start playback at the beginning of the scene you wish to record.
5. Follow the general operation to start recording.

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.

- ↳ 'One-Touch Recording' will start with the DVD recorder's default settings, if you do not make any setting changes before activating this function.
- ↳ The overall recording time depends on the selected recording mode and the storage capacity available on the disc.
- ↳ Recording will stop automatically when there is no more space on the disc. If you are using models which support double-layer DVD recording, please be reminded that 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.

Inserting Chapter Mark during Recording

During recording, you can manually insert extra chapter marks in addition to those created by system default setting.

1. Press **SOURCE** repeatedly to select the signal source.
2. Press **●RECORD** to start recording.
3. During recording, press **EDIT** to insert chapter mark at your desired point.
4. To add more chapter marks, repeat step 3.



Recording

Timer Recording



- 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 (e.g. set in 'Copy-Once' or 'Copy-Never' modes).
- 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.



Before you start...

- Refer to '**Recording: Step by Step**' for the basic procedures of recording on a disc.
 - Recording: Step by Step (p.29)**
- Correctly set the system date and time of the DVD recorder.
 - Introducing System Setup (p.16)**
- Complete the channel scanning process for your TV.
 - Setting TV Channel (p.19)**
- If you would like to use VIDEO Plus+ mode for your timer program setting, check if your model features the VIDEO Plus+ System support.
 - Model Comparison Chart (back cover)**
 - Setting up the VIDEO Plus+ System(p.23)**

Introducing Timer Record Menu

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

If your model supports the VIDEO Plus+ system, you can press **▶** on a highlighted program to switch between the 'Date/Time Setting' mode and the 'VIDEO Plus+ Setting' mode.

Date/Time Mode

TIMER RECORD					
①	1h00m--SP	②	12/04/05	Sunday	
		③	08:09PM		
⑤	Time Overlap !!		④	Page 1/2	
	Source ⑦	Repeat ⑧	Date ⑨	Time ⑩	⑪
	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	△
⑥	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	
	TV 7	Once	19/04/05	05:00PM-07:00PM	
			⑫	Next Page	⑬

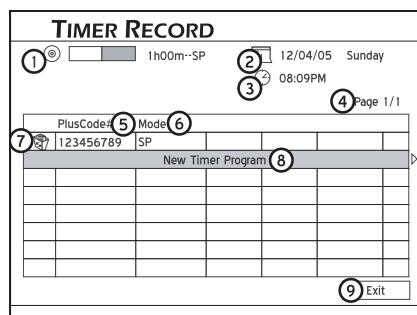
- Storage capacity available on the destination disc for a particular recording mode
- Current system date
- Current system time
- The page you are viewing
- Error message bar
- Indicate function of canceling designated program setting. Highlight this icon and press **ENTER** to clear settings
- Recording source
- Recording frequency
- Recording date
- Recording time slot
- The status of preset timer program(s)
 - ☑ : Timer Program successfully activated
 - △ : Timer Program not successfully activated
- Next Page: Press to switch to the next page
- Exit: Press to exit the Timer Record menu

The timer program list is automatically sorted by system according to the start time of each program, regardless of its recording mode, recording frequency, or the order you enter the timer settings.

You can set up a maximum of 16 programs for timer recording, which will be displayed on two separate pages. If the number of preset programs is less than eight, only one page will be displayed, and the 'Next Page' button will not be shown.

VIDEO Plus+ Mode

(Select Models Only)



- ① Storage capacity available on the destination disc for a particular recording mode.
- ② Current system date.
- ③ Current system time.
- ④ The page you are viewing.
- ⑤ The PlusCode number of your desired TV program(s).
- ⑥ Recording mode.
- ⑦ Indicate function of canceling designated program setting. Highlight this icon and press **ENTER** to clear settings.
- ⑧ Indicates a new Timer Program. Press to start setting a Timer Program.
- ⑨ Exit: Press to exit the Timer Record menu.

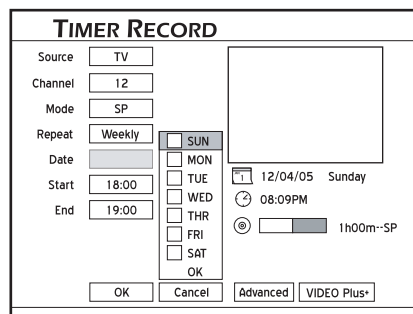
Setting Timer Program (Date/Time Mode)

1. Press **TIMER** to display the Timer Record menu.
2. Press **ENTER** to start a new setting, or press **▲ ▼** to select a previous setting which you would like to modify.
3. Set 'Source' (Signal Source), 'Mode' (recording mode), 'Repeat' (recording frequency) 'Start' (Start Time) and 'End' (End Time) for the timer program. Press **▲ ▼** to select one of the settings, then press **ENTER** to go to the sub-menu. Press **▲ ▼** to select, then press **ENTER** to confirm your selection. To enter numbers, press number buttons (0-9) or **▲ ▼ ◀ ▶**.
4. If 'TV' is selected as the signal source, you will need to enter a TV channel. Press **▲ ▼** or number buttons (0-9) to select 'Channel' (TV Channel), then press **ENTER** to go to the sub-menu. Press **▲ ▼** to select, then **ENTER** to confirm your selection.
5. For 'Repeat' (recording frequency), if you select...
 - 1 Once**
You need to set the date. Go to 'Date', then press **ENTER**. Press number buttons (0-9) or **▲ ▼ ◀ ▶** to enter the date.
 - 2 Daily**
The Timer Record program will be automatically set for each day until the setting is cancelled or the destination medium has no more storage capacity.

3 Weekly

A weekly calendar will be displayed on screen. Select desired day(s), then press **ENTER** to confirm your selection. When completed, select "OK", then press **ENTER**.

You can select more than one day for the weekly mode. For example, if your desired programs are broadcast every Thursdays and Fridays, you can assign the timer setting only once by selecting both Thursday and Friday.



*If you select 'Daily' or 'Weekly' as the recording frequency, it is suggested to proceed with further setting to your Timer Programs. Press **▲ ▼ ◀ ▶** to select 'Advanced', then press **ENTER**. If you would like to designate a period of time to the timer program, select 'With Restriction'. Otherwise, select 'Without Restriction'. For the recording result of setting restriction, see:*

Timer Recording Frequency (p.47)

6. When completed, select 'OK', then press **ENTER** to save the setting and return to the Timer menu, or select 'Cancel', then press **ENTER** to discard current setting. *If there is any setting invalid (except overlap of timer programs), the 'OK' button will be disabled. Press **▲ ▼ ◀ ▶** to modify your settings. For overlap of timer programs, see:*
 - Notice for Timer Recording (p.34)**
7. On the Timer Record menu, select another item on the list, then press **ENTER**, if you would like to set up more timer programs. If not, select 'Exit', then press **ENTER**. Or press **TIMER** to exit the Timer Record menu.
8. Switch off the DVD recorder to activate the timer recording function.
4. If you would like to delete a timer program set previously, go to Timer Record menu, highlight the bin icon located in the first column of the entry you want to delete, then press **ENTER**.

Setting Timer Program (VIDEO Plus+ Mode)

(Select Models Only)

There are two ways to set up timer programs using VIDEO Plus+ system. For more information on how to set up the system, see 'Setting up the VIDEO Plus+ System'.

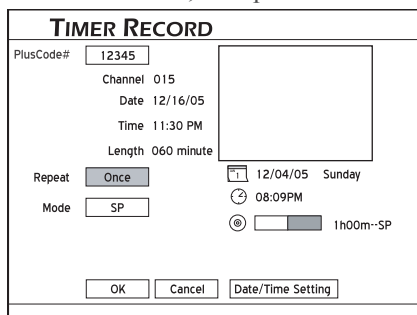
Path 1:

1. Press **VIDEO Plus+** button to display the VIDEO Plus+ menu.

Path 2:

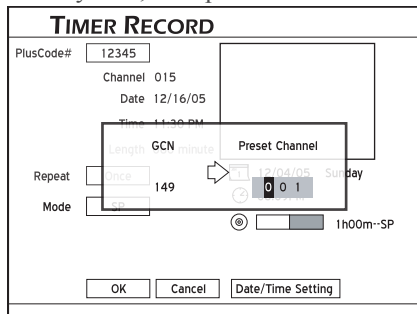
1. Press **TIMER** to display the Timer Record menu.
2. Press **ENTER** to start a new setting, or press **▲ ▼ ◀ ▶** to select a previous setting which you would like to modify, then press **ENTER**.
3. Press **▲ ▼ ◀ ▶** to go to the 'VIDEO Plus+' button, then press **ENTER** to display the VIDEO Plus+ setup menu.

1. Press number buttons (0-9) or **▲ ▼ ◀ ▶** to enter the PlusCode number, then press **ENTER**.



Details of the preset program will be displayed.

2. The 'Preset Channel' dialogue box will then appear, if the DVD recorder fails to find information of a corresponding channel. Press **▲ ▼ ◀ ▶** or number buttons (0-9) to enter the number of channel which corresponds to the guide channel number designated by the VIDEO Plus+ system, then press **ENTER**.



To make use of the VIDEO Plus+ system for timer recording, you need to match the GCNs (guide channel numbers) used by the VIDEO Plus+ system with the channel numbers shown on your TV, so that the relevant information can be correctly assigned to the programs you would like to record.

3. Set 'Mode' (recording mode) and 'Repeat' (recording frequency).

Press **▲ ▼** to select one of the setting, then press **ENTER** to go to the sub-menu. Press **▲ ▼** to select, then press **ENTER** to confirm your selection.

4. Follow step 6-8 in 'Setting Timer Program [Date/Time Mode]' to complete the setting.

If you want to return to the Date/Time mode, press **▲ ▼ ◀ ▶** to select 'Date/Time Setting', then press **ENTER**. However, please note that all the settings you have entered will be cleared once you exit the present setup screen.

If you would like to delete a timer program set previously, go to Timer Record menu, highlight the bin icon located in the first column of the entry you want to delete, and press **ENTER**.

Notice for Timer Recording

1. To stop a timer-recording session:

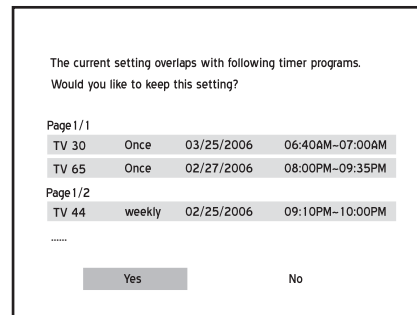
Press **■ STOP** to cease the timer recording. Please note that it may take a few seconds before the program is completely brought to an end.

2. To check the recording status while 'Timer Record' is active:

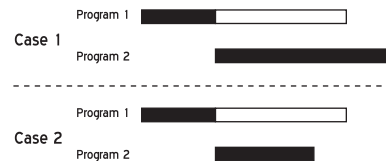
Press **DISPLAY** to bring up the Timer Record information on screen.

3. About the overlap of timer programs

1. Each time after you complete and save the settings of a timer program, the DVD recorder will check if this program overlaps with other ones you set previously.
2. If the current timer program does overlap with one or more than one programs, a window asking if you would like to keep current setting will appear.





3. If you select 'Yes', the screen will go back to Timer Record menu. Under this circumstance, the later program takes priority, which means the DVD recorder stops recording the earlier program at the start time of the later program.



4. If you select 'NO', the screen will go to the setting page. You need to change or discard the setting of this program.

Playback

- You may not be able to play back discs recorded in other DVD recorders.
- This DVD recorder can only play DVD-Video discs marked with the same region code as printed on its rear panel (example of region code: ) , or all-region discs which are labeled with the icon . If you try to play discs with different region code(s), a message saying 'Invalid Region Code' will appear on screen.

Playback: Step by Step

Follow the steps to start playing back media files. For some types of files, there are extra features available and instructions are provided after this section.

Step 1. Place a disc in the DVD recorder

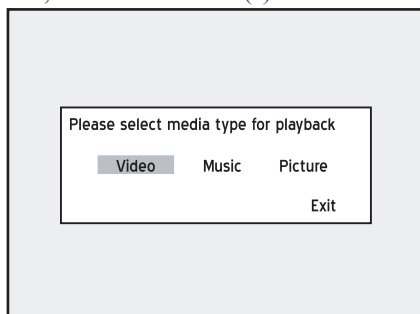
Press **▲ OPEN/CLOSE** to open the disc tray. Carefully place the disc on the tray with the label side facing up, then press **▲ OPEN/CLOSE**.

Step 2. Start playback

For DVD-Video, VCD/SVCD and audio CD, playback will start automatically. If not, press **▶ PLAY** to begin playback.

For DVD-Video disc, a menu might appear when the disc is in playback mode.

For video/music/picture files recorded on discs, a dialogue box will appear. Select the type of the file you are going to play. If there are no video/music/picture files on the disc, the related button(s) will be disabled.



Step 3. Change the item you want to play

For DVD-Video disc, press **▲ ▼ ◀ ▶** to select, then press **ENTER**. If the titles and chapters are numbered, press number buttons (0-9) to select a menu item and confirm with **ENTER**.

For audio CD, music files, audio files and VCD/SVCD disc, press **◀ PREVIOUS** or **▶ NEXT** to select your desired track/file.

For music and video files recorded on discs, you can also press **ALBUM ◀** or **ALBUM ▶** to select a folder which contains the desired file.

For picture files recorded on discs, see 'Playing Picture File'.

Step 4. Stop playback

For DVD-Video disc/VCD/SVCD disc, and video file,..

Press **■ STOP** to stop playback at a marked stop.
Press **▶ PLAY** to resume playback from a marked stop.
Press **■ STOP** again to bring the playback to a full stop.

For audio CD and music file, ...

Press **■ STOP** to stop playback.
Press **▶ PLAY** to resume playback.

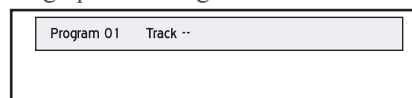
Step 5. Remove the disc

Press **▲ OPEN/CLOSE**.

- For DVD-Video, you can bring up the DVD menu by pressing **MENU** on the remote control.
- In some cases, the disc recorded on other recorders need to be finalized before it can be played back on this DVD recorder.
- This DVD recorder supports music files in .mp3 and .wma formats.

Programmed Playback for Audio CD

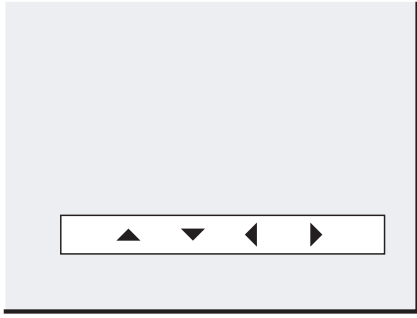
- During the playback of a audio CD, press **EDIT** to bring up the editing bar.



- Press number buttons (0-9) to enter the number of track you would like to play.
- When completed, press **▶ PLAY** to start the programmed playback.
Press **■ STOP** to stop playback.
Press **▶ PLAY** to resume playback.

Playing Picture File

- Follow the general operation procedure in 'Playback: Step by Step' to start the playback of a disc containing picture files.
- When playback starts, a tool bar appears on the screen. Press **◀** or **▶** to go to previous or next picture. Press **▲** repeatedly to rotate the picture clockwise or press **▼** to rotate the picture counterclockwise.



Introducing Navigation Menu

During playback, press **NAVI.** button on the remote control to display the Navigation menu.

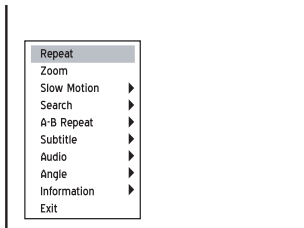
The options shown on the Navigation menu vary depending on the media types (e.g. DVD, audio CD, VCD, etc.) as well as the supporting features offered by the media being played.

Unavailable options will be disabled.

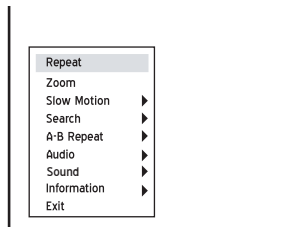
General operation

1. Press **▲▼◀▶** to select one of the functions, then press **ENTER** to go to sub-menu. Press **▲▼** to select one of the choices and confirm with **ENTER**.
2. To enter number, press **▲▼◀▶** or number buttons (0-9), then press **ENTER**.
3. To exit the Navigation menu, press **NAVI.** or repeatedly press **◀**.

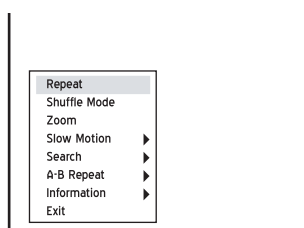
When playing DVD-Video discs or video titles ...



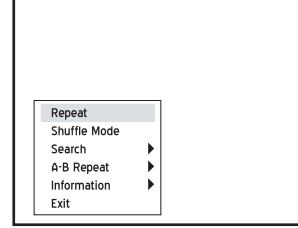
When playing VCD or SVCD ...



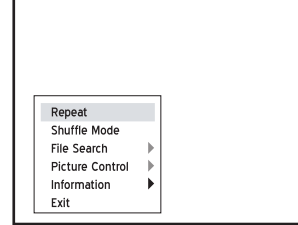
When playing video files...



When playing audio CDs or music files...



When playing pictures...



Repeat

The 'Repeat' feature allows you to repeat a track, title, file or disc, depending on the media type.

1. Select 'Repeat', then press **ENTER** repeatedly to choose a repeat mode.

Content Type	Repeat Mode
DVD-Video / Video Title	Repeat One Repeat Off
VCD/SVCD Picture	Repeat All Repeat Off
Video File Audio CD Music File	Repeat One → Repeat All Repeat Off

Shuffle Mode

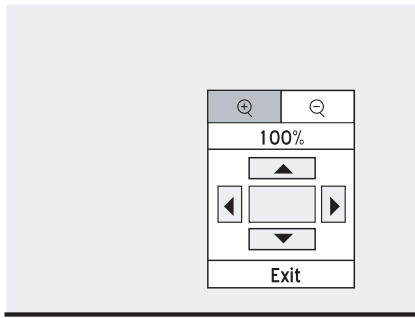
1. Select 'Shuffle Mode' and choose to switch on or off this function.

Zoom (For DVD-Video/Video Title)

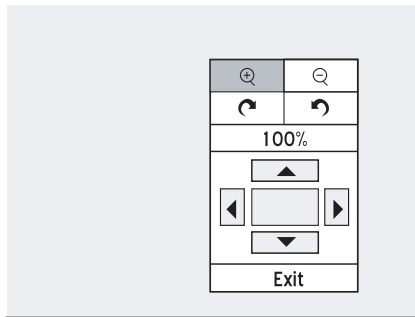
Picture Control (For Pictures)

The 'Zoom'/'Picture Control' feature allows you to enlarge the video/picture image and to pan through the enlarged image.

1. Select 'Zoom'/'Picture Control', then press **ENTER**. A control pad will appear.



Control pad for 'Zoom' function



Control pad for 'Picture Control' function

- Press \blacktriangle \blacktriangledown \blacktriangleleft \blacktriangleright to select the 'zoom in' icon, then press **ENTER** repeatedly to enlarge the image gradually. Or, select the 'zoom out' icon, then press **ENTER** repeatedly to reduced the image gradually.

The percentage rate of zoom in/zoom out:

	Video Image	Picture
Zoom in	100%, 200%, 300% , 400%	100%, 150%, 200%
Zoom out	-	100%, 75%, 50%

- To resume the normal image size, press \blacktriangle \blacktriangledown \blacktriangleleft \blacktriangleright to select '100%', then press **ENTER**.
- To view different sections of the enlarged image, go to the on-screen control pad. Press \blacktriangle \blacktriangledown \blacktriangleleft \blacktriangleright to select the direction you would like to apply, then press **ENTER**. Press **ENTER** repeatedly, if necessary, to move the image.
- When completed, press \blacktriangle \blacktriangledown \blacktriangleleft \blacktriangleright to select 'Exit', then press **ENTER**.

Slow Motion

- Press \blacktriangle \blacktriangledown \blacktriangleleft \blacktriangleright to select 'Slow Motion', then press **ENTER** to go to the sub-menu.
- Press \blacktriangle \blacktriangledown \blacktriangleleft \blacktriangleright to select from the options: +1/2x, +1/4x, -1/2x or -1/4x, then press **ENTER**.
- Press \blacktriangleright **PLAY** to resume normal playback.

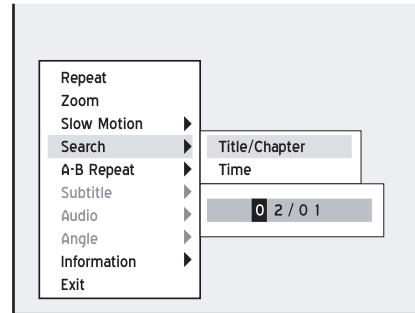
Search

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 offered when you play back audio CDs or other supported music files.

To perform the function when playing video files/titles, press \blacktriangle \blacktriangledown to select 'Search', then press **ENTER** to go to the sub-menu.

To search by title/chapter number:

- Select 'Title/Chapter', then press **ENTER**.



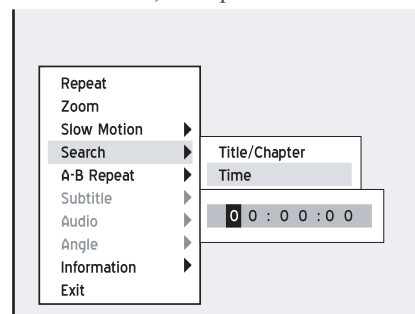
The bar for entering the title/chapter number will appear.

- Enter the chapter/title numbers, then press **ENTER**.
If during the process you would like to revise the number you enter, press \blacktriangleleft to re-edit the last digit(s) when necessary.

- If the number you enter exceeds the total title/chapter number, an invalid icon will appear, and the recorder will keep playing back the disc.
- If you would like to view the total number of title/ chapter, please go to 'Information' on the Navigation menu.
- For DVD-Video or other digital videos, disc contents are usually divided into individual titles. Some titles may be further divided into a smaller unit called 'chapter'. To view the disc contents, , press **MENU** on the remote control to go to disc menu.

To search by time:

- Select 'Time', then press **ENTER**.
- Enter the time, then press **ENTER**.

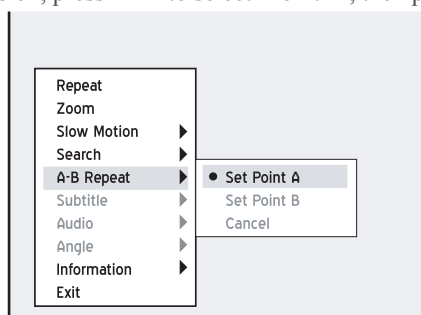


If during the process you would like to revise the number you enter, press \blacktriangleleft to re-edit the last digit(s) when necessary.

- 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. Select 'A-B Repeat', then press **ENTER**.
2. When playback reaches the beginning of your desired session, press **▲ ▼** to select 'Point A', then press **ENTER**.



3. When playback reaches the end of the desired session, press **▲ ▼** to select 'Point B', then press **ENTER**. Repeat from point A to point B will start.
4. To cancel the repeat mode, press **▲ ▼** to select 'Cancel', then press **ENTER**.

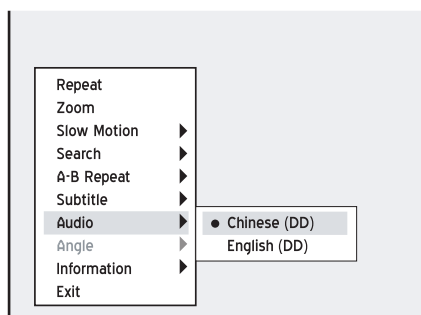
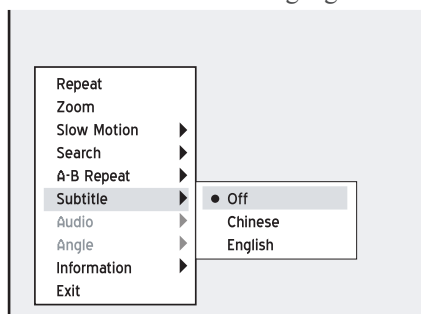
- ⓘ If you exit the function, setting only point A, the preset point A will still be valid when you enter the 'A-B Repeat' function next time.
- ⓘ The 'Cancel' function is only available when both point A and point B are set.
- ⓘ The 'A-B Repeat' setting will be canceled when you bring the program to a marked stop or a full stop.

Subtitle/Audio [DVD]

Some pre-recorded DVD discs have more than one subtitle/audio language. The language initially selected for playback will be the one you select when you first set up the DVD recorder. Nevertheless, you can change the subtitle/audio language of the disc at any time.

Introducing System Setup (p.16)

1. Select 'Subtitle'/'Audio', then press **ENTER**. All the available subtitle/audio languages will be displayed.



2. Select a language, then press **ENTER**.

Audio [SVCD]

If the SVCD being played is recorded with multi-tracks (containing different languages or different types of sound), you can change the tracks during playback.

Available numbers of track vary depending on the SVCD you are watching.

Sound [SVCD] [VCD]

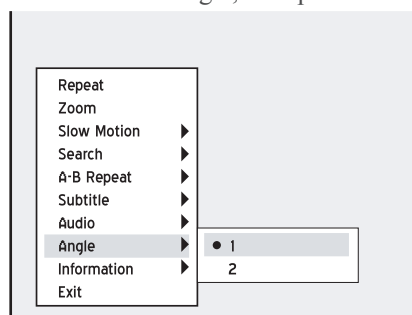
You can select the output speaker(s) of the sound of a VCD or SVCD. Select 'Normal', if you would like the sound comes from both left and right speaker.

1. Select 'Sound', then press **ENTER**.
2. Select from 'Normal', 'Left' or 'Right', then press **ENTER**.

Angle

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

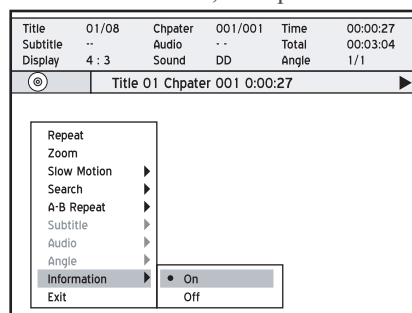
1. Select 'Angle', then press **ENTER**.
2. Select a camera angle, then press **ENTER**.



Information

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

1. Select 'Information', then press **ENTER**.
2. Select 'On' or 'Off', then press **ENTER**.



If you select 'On', disc information will be displayed on the top of the screen.

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

Digital Video Support

MPEG-4



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.

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 listed below to see whether your MPEG-4 files are supported by this DVD recorder.

MPEG-4 File Formats Supported

Category		Codec Standard/Format	File Type (File Extension)
Movie	Video	• DivX • XviD	.AVI, .DIVX*, .DIV*
	Audio	• MP3 • AC3 • LPCM	
Subtitle		• MicroDVD • SubRip	.SUB, .SRT, .TXT**

*Indicates supported by select models only.

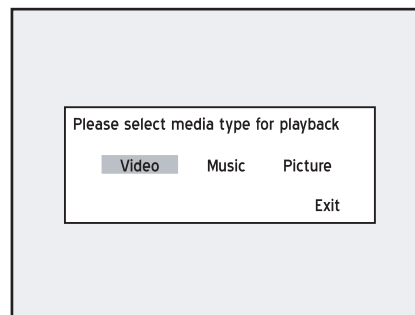
[Model Comparison Chart](#)(back cover)

**Subtitle files suffixed with one of these extensions but in format other than 'MicroDVD' and 'SubRip' are not supported by this DVD recorder.

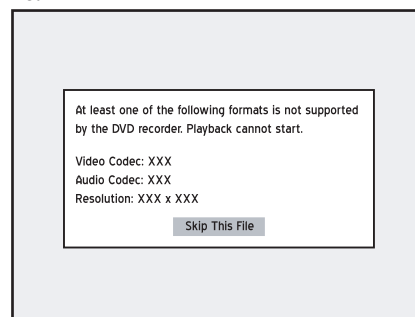
Bitmap-based subtitles, such as idx+sub, are not supported by this DVD recorder.

Playing MPEG-4 Files

- Follow '*Playback: Step by Step*' to place the disc in the DVD recorder.
- A dialogue box offering the file-type options will appear. Press **◀ ▶** to select 'Video', then press **ENTER**.



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



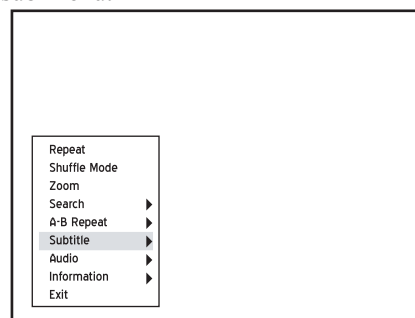
- If the disc contains other files, the DVD recorder will start playing back the next file.
- Press **■ STOP** to stop playback at a marked stop. Press **▶ PLAY** to resume playback from a marked stop.

Subtitle of MPEG-4 Files

This DVD recorder supports the text-based subtitles when playing back MPEG-4 videos. Activating the function through 'Navigation Menu' during playback..

Introducing Navigation Menu(p.36)

- Select 'Subtitle', then press **ENTER** to go to the sub-menu.



- Press **▲ ▼** to switch on or off the subtitle function, or to select an appropriate coding system for displaying the subtitle correctly, then press **ENTER**.
- Press **NAVI**, again or repeatedly press **◀** to exit the Navigation menu.



If you would like the subtitle to be automatically displayed when playback starts, please make sure you have:

- *Not set the preference of subtitles to be "Off" in Setup menu*
- *Given a correct file name.*

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.*

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.

DivX® VOD (Select Model Only)

DivX® VOD (video-on-demand) allows you to download video files to your PC, which you can watch either 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 on-line authorization process. To watch DRM-protected video files, you need to complete the registration procedure.

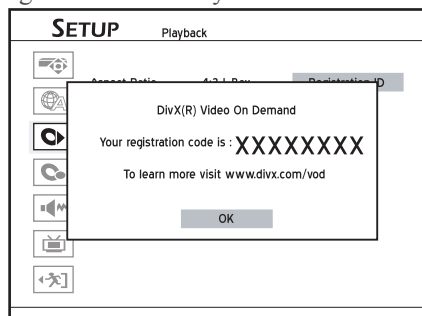
- To complete the procedure of registration, you would need to burn data to a disc.

Step 1: Applying for a User Account

Register a user account on the DivX® website: <http://www.divx.com/vod>.

Step 2: Registering Your DVD Recorder

1. Press **SETUP** to display the Setup menu.
2. Go through **Playback** → **DivX(R) VOD** to display the registration code of your DVD recorder.



The code seen above serves as an example only

3. When completed, press **SETUP** to exit the Setup menu.
4. 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 disc.
5. Follow '**Playback: Step by Step**' to start playing back the information disc created in step 4 on your DVD recorder.
 - **Playback: Step by Step(p.35)**
6. Your DVD recorder is then officially registered when playback stops.

Step 3: Selecting Video Files

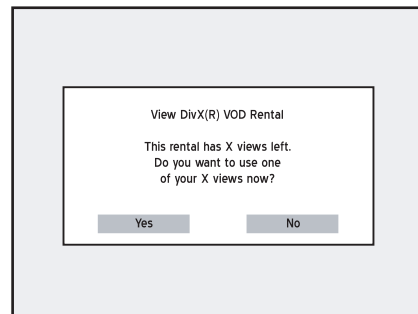
Select the video files you would like to watch from various online rental shops. Normally, users pay to get the viewing rights of these video files, which are downloaded to users' PCs. If you would like to watch them on your TV, you need to transfer these files to the recordable CD or DVD discs.

- Conditions of viewing rights vary depending on the service providers.

Step 4: Playing Video Files

1. Follow '**Playback: Step by Step**' to place the disc in the DVD recorder.
2. A dialogue box offering the file-type options will appear. Press **◀ ▶** to select 'Video', then press **ENTER**.
3. If the file is not protected by the DRM system, playback will then begin.

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.
4. If you have purchased the file, playback will then start. 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**.



Editing



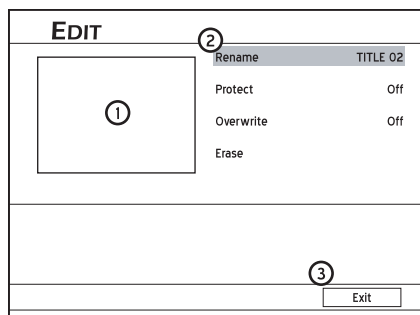
- The editing function applies to video titles stored on recordable and rewritable DVD discs only; however, available functions may vary depending on the disc format (minus or plus).
- You **CANNOT** apply editing functions to finalized DVD+R, DVD-R and DVD-RW discs (except DVD-RW discs previously formatted in 'Quick Preparation' mode). Finish all editings before finalizing the types of disc mentioned above.

Finalize (p.27)

- You may not be able to edit titles recorded with other DVD recorders.

Introducing Edit Menu

You can activate the Edit menu by pressing the **EDIT** button on your remote control during playback. On the Edit menu, press **▲ ▼ ◀ ▶** to move the focus, and **ENTER** to confirm your selection.



- ① Preview window: the last image of the disc being played is shown.
- ② Editing options.
- ③ Exit: press to exit the Edit menu.

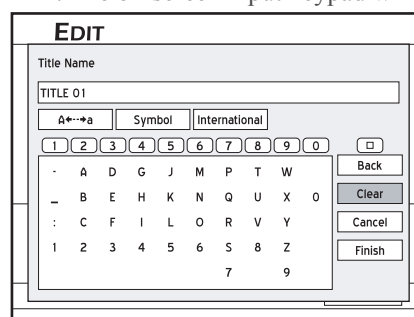
Editing Titles

Editing video title can only be done during playback. Follow the instruction in '*Playback: Step by Step*' to select the video title you would like to edit and start the playing. Then press **EDIT** to display the Edit menu.

Playback: Step by Step (p.35)

Naming a Title

1. On the Edit menu, select 'Rename', then press **ENTER**. The on-screen input keypad will be displayed.



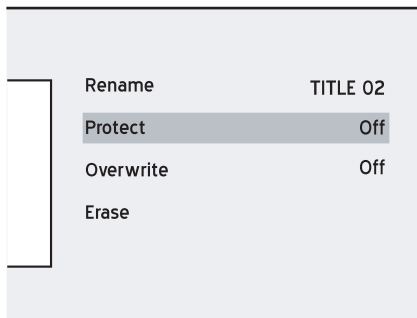
On-Screen Input Keypad (p.28)

2. Select 'Clear' first, then press **ENTER** to delete the default title.
 3. Refer to the instruction in '*On-Screen Input Keypad*' to enter a new title name.
If you decided not to change the original title name, press **▲ ▼ ◀ ▶** to select 'Cancel', then press **ENTER**.
 4. When completed, press **▲ ▼ ◀ ▶** to select 'Finish', then press **ENTER**.
- ⚠ The entry bar **CANNOT** be left blank. If such a condition occurs, you will not be able to exit the keypad screen. Please follow the instruction given in the pop-up dialogue box, and go back to complete the process.
 - ⚠ This DVD recorder does not inhibit you from entering same names for different titles.

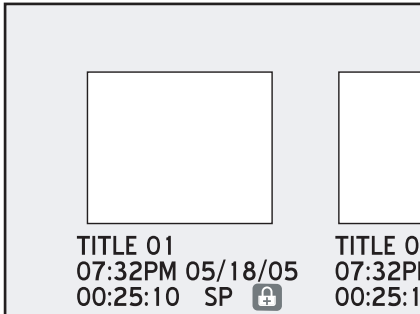
Protecting a Title

You can protect the title from accidental erasure or unplanned 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, select 'Protect', then press **ENTER** to switch on or off the 'Protect' function.



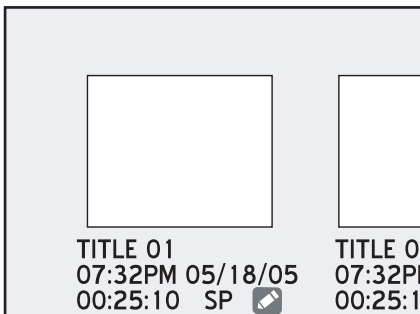
2. To exit the setting, select 'Exit', then press **ENTER**.
3. If you switch on the function, a lock icon will be shown next to the protected title on the disc menu.



Overwriting a Title

- ✎ This function is applicable to titles saved on rewritable DVD discs only.
- ✎ When you apply the function to a title, it will be deleted and overwritten when you record new title/program next time.

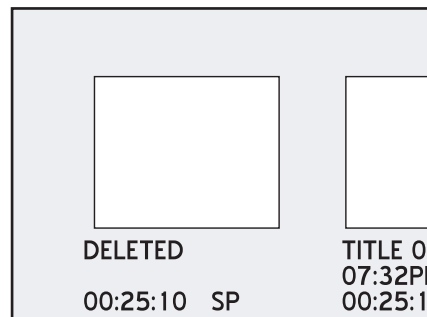
1. On the Edit menu, press **▲ ▼** to select 'Overwrite', then press **ENTER** to switch on or off the 'Overwrite' function.
2. To exit the setting, select 'Exit', then press **ENTER**.
3. If you switch on the function, a pen icon will be shown next to the overwritten title on the disc menu.



- ✎ After the 'Overwrite' function is switched on, new recording will be saved in the slot previously occupied by the overwritten title. If the new program lasts longer than the old one, it will be recorded continuously. To prevent accidental erasure, it is suggested that you activate the 'Protect' function for the title immediately following the overwritten one.
- ✎ Available recording time shown for the overwritten slot may not be exact, as it is likely to be affected by the recording mode of the overwritten title.

Erasing a Title

- ✎ Once a title is erased, it **CANNOT** be retrieved.
 - ✎ Please note that applying the 'Erase' function to DVD-R and DVD+R discs will not free up disc space already used.
 - ✎ You **CANNOT** erase protected title(s).
1. On the Edit menu, press **▲ ▼** to select 'Erase', then press **ENTER**.
 2. Press **ENTER** to confirm your setting. The title selected will be erased.
 3. To erase another title, start playing back of the titles you would like to erase and repeat step 1 to 2. To exit the setting, select 'Exit', then press **ENTER**.
 4. After you complete the process, a deleted title will be shown on the disc menu, if you use a DVD+RW or DVD-RW disc.



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 remains, please contact our service point near you. For more information, please visit the website shown on the back cover.

	Problem	Possible Solution
Picture	No image shown on the television screen.	<ul style="list-style-type: none"> • Make sure the TV set is connected to the appropriate AUDIO/VIDEO, SCART, S-VIDEO, HDMI or COMPONENT VIDEO OUT jacks on this recorder. • Make sure TV's input source is switched to appropriate AV option. • Make sure the input setting of your TV set is correct. • Make sure a disc is properly placed on the disc tray, and is compatible with your local TV system (NTSC or PAL). • Check whether the recorder is set to 'progressive mode' with an incompatible TV. Reset the recorder by pressing ▶ (direction button), '5', '0', '2', '0', ENTER on the remote control.
	Image shown with noises.	<ul style="list-style-type: none"> • 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/VIDEO combination 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 output.
	Image imported from an external device is distorted.	<ul style="list-style-type: none"> • If the video signal from the external device is copyright-protected, you need to connect the device directly to your TV.
	No image but a pop-up window warning that the HDCP connection is failed appears on the TV screen (Select Models Only)	<ul style="list-style-type: none"> • Press ◀ and ENTER to make the system to build the connection again. Or disconnect the HDMI cable and use another kind of video cable to connect your TV and the DVD recorder.
Recording	Cannot record.	<ul style="list-style-type: none"> • Make sure you have inserted a recordable disc with enough space. • Make sure the disc you insert has been formatted or prepared for recording. • Make sure the disc has not been finalized. • Check whether you inserted a disc which has already been used for recording on other DVD recorders. • If you use a double-layer disc for recording, make sure one recording session do not exceed 8 hours .
	Recording does not start immediately after pressing ● RECORD button	<ul style="list-style-type: none"> • This occurs as disc preparation process is taking place, which will last for a short time.
Timer Recording	Timer recording does not work properly.	<ul style="list-style-type: none"> • Check whether the system time is correct. • Check whether the timer program is accurately set to desired time slot or channel. • Check whether you have inserted a recordable disc. • Make sure you switch off the DVD recorder to activate the Timer Record function.
	Recording result is not completed.	<ul style="list-style-type: none"> • Check whether there is a schedule overlap. If so, go to the Timer Record menu to make correction. • Check whether there is enough space on your disc.

	Problem	Possible Solution
Timer Recording	The timer program remains even after recording finishes.	<ul style="list-style-type: none"> • The system does not delete timer program records. You have to manually delete the records on the Timer Record menu.
Sound	No sound.	<ul style="list-style-type: none"> • Check whether the audio cable is well connected. • Check if the audio cable is damaged. • Check whether the input source setting on the amplifier is correct. • Check whether the disc or video title being played is recorded in DTS format. DTS format is not supported by this DVD recorder. • If you use a DVI-to-HDMI cable to connect the DVD recorder to your TV, you need to connect the audio cable for the transmission of audio signal. • There is no sound when playback is paused or is under scanning mode 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 System Setup menu) for the digital audio output are correct.
	The sound from the recorder is not presented properly or is distorted.	<ul style="list-style-type: none"> • Check whether the audio cable is well connected. • Check if 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.
Playback	Cannot play back recordings using this recorder or other players	<ul style="list-style-type: none"> • Check if the disc is required to be finalized. • Discs recorded with copy-once material cannot be played on non-CPRM compatible players.
	The recorder starts playing the disc automatically.	<ul style="list-style-type: none"> • DVD-Video disc features an auto playback function.
	No playback on DVD recorder.	<ul style="list-style-type: none"> • Check whether there is any recording on the disc. • Check whether the disc inserted contains playable files. • Check whether an unplayable disc is inserted. • 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 code for the function: 0000) • Check whether the cables between TV and DVD recorder are well connected.
TV channels	TV channels cannot be changed.	<ul style="list-style-type: none"> • Switch the input signal source of the recorder to 'TV'. • Check whether the channel scanning process for your TV is completed.
Others	The disc tray does not open/close.	<ul style="list-style-type: none"> • Contact your local dealer or local authorized service point.
	The recorder fails to respond to any commands.	<ul style="list-style-type: none"> • Switch the recorder off and switch it on again. If the recorder still does not respond to any commands, unplug the power cord, reconnect it and switch the recorder on again. Contact your local dealer or authorized service point, if the problem remains.

Specifications

General	Power Supply	• AC 100~240V 50/60 Hz
	Power Consumption	• Approx. 36W (operation)
	Operating Temperature	• +5°C to +40°C (+36°F to +104°F)
	Operating Humidity	• 5% to 80% RH
	Dimensions (W/H/D)	• 280 x 52 x 250 mm
	Net Weight	• Approx. 2 kg
Connections (Front Panel)	Video Input	• Cinch (yellow) x 1
	Audio L/R Input	• Cinch (white/red) x 1
	DV Input	• IEEE 1394 4-pin x 1
Connections (Rear Panel)	RF Input	• Coaxial x 1
	RF Output	• Coaxial x 1
	SCART Input	• CVBS in, Decoder x 1
	SCART out	• CVBS/S-video/RGB out x 1
	Video Output	• Cinch (yellow) x 1
	Audio L/R Input	• Cinch (white/red) x 1
	Audio L/R Output	• Cinch (white/red) x 1
	Component Video Output	• Y/Pb/Pr (green/blue/red) x 1 Progressive Scan Output: 576p output
	Digital Audio Output	• Coaxial x 1
	HDMI Output*	• HDMI Output x 1
Tuner	TV Format	• PAL-B/G, PAL-I/I, SECAM-L
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
Video Recording Format	DVD+VR (HQ/SP/LP/EP mode)	• MPEG 2
	DVD+VR (SLP mode)	• MPEG 1

Video Recording Mode	Media	Mode	Recording Time
	4.7 GB Recordable & Rewritable DVD	HQ (High Quality)	• 1 hour
		SP (Standard Play)	• 2 hours
		LP (Long Play)	• 3 hours
		EP (Extended Play)	• 4 hours
		SLP (Super Long Play)	• 6 hours
		Just Fit**	• Variable
	8.5 GB Double-Layer Recordable DVD*	HQ (High Quality)	• 114 minutes
		SP (Standard Play)	• 224 minutes
		LP (Long Play)	• 332 minutes
		EP (Extended Play)	• 443 minutes
		SLP (Super Long Play)	• 665 minutes
		Just Fit **	• Variable
Audio Performance	DA Converter		• 24-bit/96KHZ
	AD Converter		• 24-bit/96KHZ
	Signal-Noise (1kHz)		• ≥ 90 dB
	Dynamic Range (1kHz)		• ≥ 80 dB
	Channel Separation (1kHz)		• ≥ 110 dB
	Total Harmonic Distortion (1kHz)		• ≤ -65 dB
Audio Recording Format	DVD+VR (HQ/SP/LP/EP/SLP mode)		• Dolby Digital 2-channel
Audio Format Supported - Playback	Playable Formats		<ul style="list-style-type: none"> • MP3 • WMA (protected WMA and lossless WMA files are not supported) • LPCM • Dolby Digital 2-channel • Dolby Digital 5.1 channel (digital out only)
Disc Types Supported	Playback		<ul style="list-style-type: none"> • DVD-Video • DVD-R/-RW • DVD+R/+RW • DVD+R Double Layer* • Video CD (VCD) • Super Video CD (SVCD) • Audio CD • CD-R/RW(JPEG/MP3/WMA/MPEG-1/MPEG-2/ MPEG-4*)
	Recording		<ul style="list-style-type: none"> • DVD+R/+RW • DVD-R/-RW* • DVD+R Double Layer*

🔗 The specifications and design of this product are subject to change without notice.

🔗 * indicates feature which is available in select models only.

🔗 **The 'Just Fit' mode is available for timer recording only. If you are using models which support double-layer DVD recording, please be reminded that 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.

Reference

Guide to Recording Options

Recording Mode & Recording Time

Recording Mode	4.7 GB Recordable & Rewritable DVD	8.5 GB Double-Layer Recordable DVD*
HQ (High Quality)	1 hours	114 minutes
SP (Standard Play)	2 hours	224 minutes
LP (Long Play)	3 hours	332 minutes
EP (Extended Play)	4 hours	443 minutes
SLP (Super Long Play)	6 hours	665 minutes
Just Fit **	Variable	Variable

ⓘ *For models support double-layer recording only. 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.

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

Timer Recording Frequency

Recording Frequency	Suitable Applications	Advanced Option	Recording result
Once	To record program broadcast during specific time slot.	-	-
Daily	To record program broadcast every day during specific time slot.	With restriction	The preset program will be recorded every day during the designated period of time
		Without restriction	The preset program will be recorded every day continuously.
Weekly	To record program broadcast on certain day(s) every week during specific time slot.	With restriction	The preset program will be recorded on certain day(s) every week during the designated period of time.
		Without restriction	The preset program will be recorded on certain day(s) every week continuously.

Glossary

480i/480p

Indicates the number of scanning lines and scanning format of an image signal.

480i indicates 480 scanning lines with interlace format, and 480p indicates 480 scanning lines with progressive format.

576i/576p

Indicates the number of scanning lines and scanning format of an image signal.

576i indicates 576 scanning lines with interlace format, and 576p indicates 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 TV is 16:9. The letter box allows you to enjoy a picture with a wider perspective.

Bitstream

The digital form of multi-channel audio data (e.g., 5.1-channel) before it is decoded into its various channels.

Chapter / Title

Chapter is the smallest division and title is the largest division on a DVD VIDEO. A chapter is a division of a title and similar to a track for Video CD or Audio CD.

Component video

Video signals with three channels of separate information that makes up the picture. There are some 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.

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.

DVD-R

DVD-R is a recordable disc that is the same size as a DVD-Video. Contents can be recorded only once to a DVD-R, and will have the same format as a DVD-Video.

DVD-RW

DVD-RW is a recordable and rewritable disc that is the same size as a DVD-Video. DVD-RW has two different modes: VR mode and Video mode. DVD created in video mode has the same format as a DVD-Video, while discs created in VR (Video Recording) mode allow the contents to be programmed or edited.

DVD+R

DVD+R is a recordable disc that is the same size as a DVD-Video. Contents can be recorded only once to a DVD+R, and will have the same format as a DVD-Video.

DVD+RW

DVD+RW is a recordable and rewritable disc. Recording can be erased and you can record on the same disc again for the maximum of 1,000 times. DVD+RW use a recording format that is comparable to a DVD-Video format.

HDCP

HDCP stands for 'High-bandwidth Digital Content Protection' which is developed by Intel Corporation to ensure the integrity of digital content transmitted via HDMI/DVI interface.

HDMI

HDMI is short for 'High-Definition Multimedia Interface'. It 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.

Interlace output

NTSC, the video signal standard, has 480 interlaced (I) scan lines. The Interlaced scanning system places lines of the second half of the picture in-between lines of the first half of the picture.

JPEG

A popular file format for still image compression and storage. JPEG stands for 'Joint Photographic Experts Group'. There are two sub-types of the JPEG format as follows.

Baseline JPEG: used for digital cameras, the web, etc.

Lossless JPEG: an old type, rarely used now.

Linear PCM audio

PCM stands for 'Pulse Code Modulation'. Linear PCM is the usual method for digitally encoding audio without compression, and is used for the audio tracks on DVD VIDEO discs, Audio CDs, etc.

MP3

MP3 (MPEG1 audio layer 3) is a compressed audio file format. Files are recognized by their file extension .mp3 or .MP3.

MPEG

MPEG stands for 'Motion Picture Experts Group'. This is an international standard for compression of moving images. On some DVDs, digital audio has been compressed and recorded in this format.

NTSC (National Television System Committee)

The initials stand for National Television Standards 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.

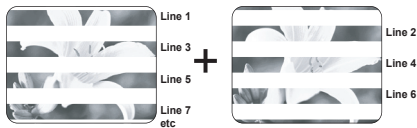
Progressive Scan

‘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



Interlaced Scan Mode



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

WMA stands for ‘Windows Media Audio’, 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

No.	Brand	Manufacturer ID	Media Speed
1	PHILIPS	CMC MAG E01	2.4x
2	CMC	CMC MAG E01	2.4x
3	Imation	RICOHJPNR00	2.4x
4	RICOH	RICOHJPNR00	2.4x
5	TDK	RICOHJPNR00	2.4x
6	RITEK(4x)	RITEK M02	2.4x
7	CMC	CMC MAG F01	4.0x
8	RICOH	RICOHJPNR01	4.0x
9	BeALL	BEALL000 P40	4.0x
10	MBI	MBIPG101 R05	4.0x
11	OPTODISC	OPTODISC OR4	4.0x
12	PRODISC	PRODISC R02	4.0x
13	Gigastorage	GSC502	4.0x
14	INFOMEDIA	INFODISC R10	4.0x
15	MPO	MPOMEDIA 40	4.0x
16	RITEK(4X)	RITEK R02	4.0x
17	TAIYO YUDEN	TY T02	8.0x
18	Mitsubishi 8x	MCC 003	8.0x
19	MAXELL	MAXWELL 002	8.0x
20	CMC	CMC MAG E01	8.0x
21	RICOH	RICOHJPN R02	8.0x
22	SONY	SONY D11	8.0x
23	LITEON	RICOHJPNR02	8.0x
24	BeALL	BEALL000P80	8.0x
25	MBI	MBIPG101 R04	8.0x
26	NANYA	NANYA CLX	8.0x
27	DAXON	DAXON AZ2	8.0x
28	PRODISC	PRODISC R03	8.0x
29	Gigastorage	GSC503H01	8.0x
30	OPTODISC	OPTODISC CR8	8.0x
31	Mitsubishi	MCC 004	16.0x
32	TDK	TDK 003	16.0x
33	RICOH	RICOHJPN R03	16.0x
34	Philips	PHILIPS C16	16.0x
35	MAXELL	MAXELL 003	16.0x
36	CMC	CMC MAG M01	16.0x

No.	Brand	Manufacturer ID	Media Speed
37	RITEK	RITEK R04	16.0x
38	MBI	MBIPG101 R06	16.0x
39	OPTODISC	OPTODISC R16	16.0x
40	PRODISC	PRODISC R04	16.0x
41	PRODISC	PRODISC R05	16.0x
42	NANYA	NANYA FLX	16.0x
43	NANYA	NANYA ALX	16.0x
44	DAXON	DAXON AZ3	16.0x
45	INFOMEDIA	INFOME R30	16.0x
46	INTERAXIA AG	VDSPMSAB 4	16.0x
47	Lead Data	AML 003	16.0x

DVD+RW

No.	Brand	Manufacturer ID	Media Speed
1	Mitsubishi 2.4x	MCC A01	2.4x
2	CMC	CMC MAG E01	2.4x
3	RIDATA	RICOHJPN R00	2.4x
4	INFOMEDIA	INFODISC A01	2.4x
5	RITEK	RICOHJPN W11	4.0x
6	PHILIPS	PHILIPS 041	4.0x
7	CMC	CMC MAG W02	4.0x
8	MBI	MBIPG101 W04	4.0x
9	OPTODISC	OPTODISC OP4	4.0x
10	PRODISC	PRODISC W02	4.0x
11	NANYA (1x~4x)	NANYA DRW	4.0x
12	NANYA	NANYA DRW	4.0x
13	DAXON	DAXON D42	4.0x
14	INFOMEDIA	INFODISC A01	4.0x

DVD-R

No.	Brand	Manufacturer ID	Media Speed
1	RITEK	RITEK M02	4.0x
2	RITEK	RITEK G04	4.0x
3	MAXELL	MXL RG02	4.0x
4	TDK	TTG01	4.0x
5	MITSUBISHI	MCC01 RG02	4.0x
6	TAIYO YUDEN	TYG01	4.0x
7	TAROKO	TAROKO - MX4	4.0x
8	Yi Jha	yi jha n001	4.0x
9	DST	VDSPMS AB01	4.0x
10	DST	Dvsn A 001	4.0x
11	GIGASTORAGE	GSC001	4.0x
12	Princo	PRINCO	4.0x
13	OPTODISC	OPTODISCR004	4.0x
14	PRODISC	PRODISC S03	4.0x
15	MBI	MBI 01RG20	4.0x
16	NEW STAR DIGITAL	INFODISC R01	4.0x
17	UmeDisc Ltd.	UME01	8.0x
18	TAROKO	TAROKO -MX8	8.0x
19	KINGPRO	DKMZ01	8.0x
20	MJC	MJC ME	8.0x
21	POSTECH	POSG06	8.0x
22	Lead Data	LEADDA S03	8.0x
23	DST	Dvsn-8	8.0x
24	DAXON	DAXON0 08S	8.0x
25	Gigastorage	GSC004	8.0x
26	Gigastorage	GSC003	8.0x
27	NANYA	NAN.YA A01	8.0x
28	BeALL	BeALL G80001	8.0x
29	CMC	CMC MAG AE1	8.0x
30	MAXELL	MXL RG03	8.0x
31	SONY	SONY08 D1	8.0x
32	TDK	TTG02	8.0x
33	MITSUBISHI	MCC02 RG20	8.0x
34	TAIYO YUDEN	TYG02	8.0x
35	PRODISC	PRODISC F02	16.0x
36	MAXELL	MXL RG0104	16.0x

DVD-RW

No.	Brand	Manufacturer ID	Media Speed
1	SONY	SONY000000U9	1.0x
2	TDK	TDK501	1.0x
3	JVC, SONY	JVC_Vi ctorW7	2.0x
4	JVC	JVC0Vi ctorD7	4.0x
5	TDK	TDK601 saku	4.0x
6	RITEK	RITEKW 04	4.0x

Recording on DVD-R/DVD-RW is supported by select models only.

 **Model Comparison Chart (back cover)**

Recommended Disc List

Model Comparison Chart

Some supporting features vary depending on model types.
Please check the following chart before you consult relevant sections to find your desired information.

Supported Function	Recording on DVD+R/+RW discs	Recording on DVD-R/-RW discs	Recording on DVD+R Double-Layer disc	VIDEO Plus + Programming System	DivX [®] VOD	HDMI
DP-A100GX	✓	✗	✓	✓	✓	✗
DP-A200GX	✓	✗	✓	✓	✓	✓
DD-A100	✓	✓	✓	✗	✗	✗
DD-A100G	✓	✓	✓	✓	✗	✗
DD-A100X	✓	✓	✓	✗	✓	✗
DD-A101X	✓	✓	✓	✗	✓	✗
DD-A100GX	✓	✓	✓	✓	✓	✗
DD-A110	✓	✓	✗	✗	✗	✗
DD-A110G	✓	✓	✗	✓	✗	✗
DD-A110X	✓	✓	✗	✗	✓	✗
DD-A110GX	✓	✓	✗	✓	✓	✗
DD-A200GX	✓	✓	✓	✓	✓	✓

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

- Remote Control (1)
- AA Batteries (2) or LITHIUM Battery (1)
(Depends on the remote control included)
- Audio/Video Cable (1)
- Power Cord (1)(Not available in all models)
- Antenna Cable (1)
- HDMI Cable (1)(Not available in all models)
- Quick Start Guide (1)
- User's Manual

Hotline Service

Belgium	027001725	France	0171230455
Germany	06950073897	Ireland	1850882017
Italy	0269682194	Netherlands	0202015094
Switzerland	018009687	Spain	914533459
United Kingdom	02073652401		

Head Office:

Lite-On IT Corp.
12F, 392, Ruey Kuang Road, Neihu,
Taipei 114, Taiwan
Tel: 886-2-8798-2886 Fax: 886-2-8798-2825
Customer Call Center: 886-3-578-7722#2604/2605
Service e-mail: dc_support@liteonit.com

USA:

Lite-On Sales and Distribution Inc.
42000 Christy Street, Fremont, CA 94538
Tel: 1-510-687-1800 Fax: 1-510-687-1900
Customer Call Center: 1-510-824-0088(English/Spanish)
1-510-824-0079(French)
Service e-mail: dc_support@liteonit.com

Europe:

Lite-On IT BV
Meerenakkerplein 16, 5652 BJ EINDHOVEN,
The Netherlands
Tel: 31-40-2508000 Fax: 31-40-2508092
Service e-mail: dceu_support@liteonit.com

P/N 7819901563B

<http://www.liteonit.com>