

Recording videos rom DVD camcorders	USI
Recording videos rom DV camcorders	DV
Recording videos rom miscellaneous video devices	==
Recording photos rom memory cards	<u>ٔ آ</u>

from HDD camcorders

Recording videos

Recording photos

from HDD camcorders

Video Recordable DVD Drive

Operating Instructions



VRD-MC3

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Safety Regulations

WARNING

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture. To avoid electrical shock, do not open the cabinet. Refer servicing to qualified personnel only.

CAUTION:

As the laser beam in the VRD-MC3 is harmful to the eyes, do not attempt to disassemble the cabinet. Refer servicing to qualified personnel only.

The use of optical instruments with this product will increase eye hazard.

The use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

The VRD-MC3 is classified as a CLASS 1 LASER PRODUCT.

The CLASS 1 LASER PRODUCT notice is located on the enclosure.

Bei diesem VRD-MC3 handelt es sich um ein Laser-Produkt der Klasse 1.

Das Etikett mit der Aufschrift LASER KLASSE 1 PRODUKT befindet sich auf dem Gehäuse.

CLASS 1 LASER PRODUCT

LASER KLASSE 1 PRODUKT

LUOKAN 1 LASERLAITE KLASS 1 LASER APPARAT

FCC Compliance:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- · Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/ TV technician for help.

The shielded interface cable recommended in this manual must be used with this equipment in order to comply with the limits for a digital device pursuant to Subpart B of Part 15 of FCC Rules.

Notes:

If you have any questions about this product, visit the user support web site listed in "Support Overview" on page 82. The telephone number below is not for customer service but only for official purposes.

Declaration of Conformity

Trade Name: SONY Model No.: VRD-MC3

Responsible Party: Sony Electronics Inc. Address: 16530 Via Esprillo,

San Diego, CA 92127

U.S.A.

Telephone No.: 858-942-2230

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference received, including interference that may cause undesired operation.

CE Sicherheitsbestimmungen

Diese Ausrüstung erfüllt die Europäischen EMC-Bestimmungen für die Verwendung in folgender / folgenden Umgebung (en):

- · Wohngegenden
- Gewerbegebiete
- Leichtindustriegebiete (Diese Ausrüstung erfüllt die Bestimmungen der Norm EN55022, Klasse B.)

CAUTION:

The mains plug on this equipment must be used to disconnect mains power.

Please ensure that the socket outlet is installed near the equipment and shall be easily accessible.

Achtuna:

Zur Trennung vom Netz ist der Netzsecker aus der Steckdose zu ziehen, welche sich in der Nähe des Gerätes befinden muß und leicht zugänlich sein soll.

Compliance Statements

Disposal of Old Electrical & Electronic Equipment (Applicable in the European Union and other European countries with separate collection systems)



This symbol on the product or on its packaging indicates that this product shall not be treated as household waste. Instead it shall be handed over to the applicable collection point for the recycling of electrical and

electronic equipment. By ensuring this product is disposed of correctly, you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product. The recycling of materials will help to conserve natural resources. For more detailed information about recycling of this product, please contact your local Civic Office, your household waste disposal service or the shop where you purchased the product.

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 Dolby and the double-D symbol are trademarks of Dolby Laboratories.
- Memory Stick and the memory stick logo are trademarks, or registered trademarks of Sony Corporation.

are used in the specified documentation, and app	valid only when the supplied accessories (including software) or recommended system environment, in accordance with the lies only to this DVDirect. Our customer service and user or these product warranty conditions.
devices, incompatibility	not accept responsibility for failure of the computer or other with special hardware, operating problems caused by improper loss of data, discs or other accidental or incidental damage that this product.
☐ The guarantee and user sales regions specified of	support for this product are valid only within the countries or on the warranty card.
1,00	the copying in part or in full of the supplied software and ng the software, without obtaining permission of the copyright
1 1	nsibility for any direct or indirect financial damage or loss of when using the supplied software.
☐ The supplied software c	an only be used with this product.
Specifications of the supproduct improvement.	plied software may be changed without notice in the interest of

Please Record Responsibly

Before copying anything onto a disc, please be sure that you are not violating copyright laws. Most software companies allow you to make a backup or archive copy of software. Check your software's license agreement for details.

Copyrights

Television programs, films, video tapes, discs, and other materials may be copyrighted.
 Unauthorized recording of such material may be contrary to the provisions of the copyright laws. Also, use of this product with cable television transmission may require authorization from the cable television transmitter and/or program owner.

Introduction

Burning video DVDs

- ☐ You can record videos from connected video cameras and AV devices directly onto DVDs without using a computer.
- You can burn the entire contents of your HDD, DVD, or DV camcorder onto a DVD with one touch of the record button.

Burning photo DVDs

- ☐ You can archive photos from a memory card or HDD camcorder directly onto a DVD without using a computer.
- You can also create slideshows of the photos that will be playable on most DVD players.



Auto Setup Navigation

The DVDirect automatically detects inserted memory cards and discs and input signals from connected devices. It then displays a message prompting the next necessary operation. Preparations for recording are made without any complicated button operations.

Direct printing operation

You can print out photos recorded on DVDs or memory cards by connecting the DVDirect to a PictBridge-compatible printer using the supplied USB cable.

Computer-controlled operation

The DVDirect can be used as a high speed DVD/CD drive with Hi-Speed USB (USB 2.0-compatible) interface when connected to a computer via USB cable.

The DVDirect supports high speed recording to the latest format discs such as DVD+R double layer and DVD-R dual layer discs.

Features

Depending on the type of device that is connected, you can perform the following operations with the DVDirect.

In this manual, different icons for each operation appear in section headings and page corners to make sections that relate to the operations you intend to perform easier to find.



Recording videos from HDD camcorders

USB Create a DVD using video taken with an HDD camcorder *(connected via a USB cable).

Available functions:

One Touch Recording Through HDD Camcorder Control (DVD BURN) @ page 28 One Touch Recording (Full Recording) **F** page 31 Incremental Recording ⊕ page 35



Recording videos from DVD camcorders

Create a DVD using video taken with a DVD camcorder (connected via a USB cable) and stored on an 8-cm disc.

Available functions:

One Touch Recording (Full Recording) ₱ page 31 Consolidation Recording **№** page 39



Recording videos from DV camcorders

Create a DVD using video taken with a DV camcorder.

Available functions:

One Touch Recording (Full Recording)

F page 31



Recording videos from miscellaneous video devices

Create a DVD using video taken with an HDD, DVD, DV, or D8 camcorder, or using video from any other video device equipped with a video output connector. To connect a device, use the AV cable supplied with your camera or standard video or S-video cables.

Available functions:

Normal Video Recording

F page 42



Recording photos from memory cards

Create a DVD using photos taken with a digital still camera and stored on a memory card.

Available functions:

Recording Photos Stored on a Memory Card

F page 51



Recording photos from HDD camcorders

Create a DVD using photos taken with an HDD camcorder*.

Available functions:

Recording Photos Stored on an HDD Camcorder

F page 54

* In this manual, "HDD camcorder" refers to the Sony HDD Handycam® and "DVD camcorder" refers to the Sony DVD Handycam[®]. The functions available when a camera is connected via USB cable as described in this manual apply only when the Sony HDD Handycam® or Sony DVD Handycam® is used. For details, see page 23 and 49.

Package Contents

Please confirm that the package contains the following items. If any of these items are missing or damaged, please contact your dealer.

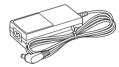
• DVDirect

Hi-Speed USB cable (for PC/Printer connection)





· AC adaptor



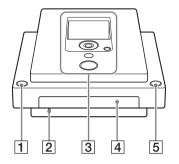
- AC power cord
- Quick Start Guide
- Operating Instructions (this document)
- · Software disc
- · Warranty card

Note

Make sure that you back up the supplied software disc on another disc as the software disc is not sold separately.

Parts and Controls

Front and rear





1 (Power) button

Turns the DVDirect on or off.

2 Emergency eject hole

If you cannot open the disc tray with the (a) (Eject) button, turn off your computer, and then insert a thin, elongated object into this hole to eject the disc tray manually.

3 Top panel

The buttons and display for operating the DVDirect are located here (page 11).

4 Disc tray

Insert a disc here with the label side up (page 17).

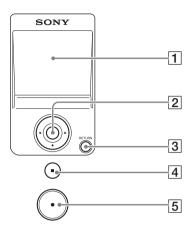
5 (Eject) button

Opens and closes the disc tray.

6 DC IN connector

Connect the supplied AC adaptor here (page 14).

Top panel



1 Display window

Displays a menu screen, images from a playback device, or photos from a memory card.

2 **↑**↓←→cursor / ○ (Select) button

Selects a function.

3 RETURN button

This returns the display to the main menu screen or to the previous screen when navigating menus.

4 (Stop) button

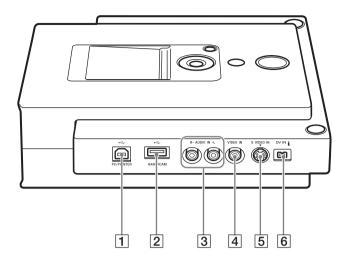
Stops recording.

5 (Record) button

Starts recording.

Lights red during recording.

Left side panel



1 USB connector (Type B)

Connect the supplied USB cable here when connecting the DVDirect to a computer or printer.

2 USB connector (Type A)

Connect the USB cable here when connecting a HDD or DVD camcorder.

Note

Only Sony HDD or DVD camcorder input is supported.

3 AUDIO IN L/R connectors

Connect the audio plugs of an AV cable (not supplied) here when connecting the DVDirect to a video device, such as a video camera or VCR.

4 VIDEO IN connector

Connect the video plug of an AV cable (not supplied) here when connecting the DVDirect to a video device, such as a video camera or VCR.

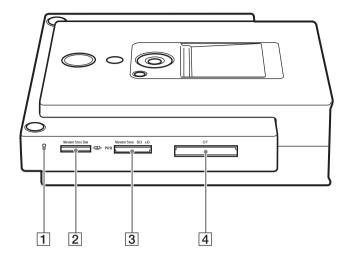
5 S VIDEO IN connector

Connect an S-video cable (not supplied) here when connecting the DVDirect to a video device with an S-video connector, such as a video camera or VCR.

6 DV IN connector (4-pin)

Connect a DV (i.LINK) cable (not supplied) here when connecting the DVDirect to a digital video camera.

Right side panel



1 Memory card LED

Lights amber when accessing the memory card.

2 Memory Stick Duo slot

Insert a "Memory Stick Duo" here.

3 Multi memory card slot

Insert a "Memory Stick," SD Card, or xD-Picture Card here.

4 CompactFlash card slot

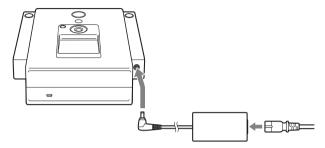
Insert a CompactFlash card here.

Note

You can use the memory card slot for both stand-alone and computer operation.

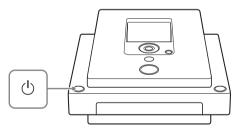
Turning the Power On/Off

- 1 Connect the supplied AC power cord to the AC adaptor.
- 2 Insert the power plug of the AC adaptor into the DVDirect's DC IN connector.
- 3 Insert the power plug of the AC power cord into a power outlet.

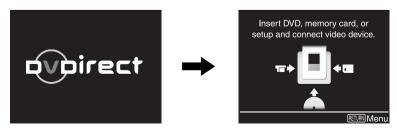


Notes

- Be sure to use the supplied AC power cord.
- Do not use damaged cables, such as cables with deformed connectors.
- **4** Press the () (Power) button.



After the display window lights and the DVDirect logo appears, a different screen appears depending on the DVDirect's current status.

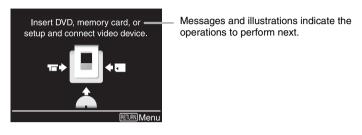


To turn power off

Press the (b) (Power) button again.

Auto Setup Navigation

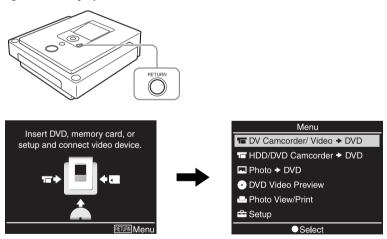
After the power is turned on, the DVDirect automatically detects inserted memory cards and DVD discs and input signals from connected devices. A message indicating how to prepare for recording then appears in the display window. By following this message, you can automatically move on to the recording procedure you intended without complicated button operations.



Accessing functions from the main menu

You can perform recording procedures manually by selecting options from the main menu. You can also go to the setup screen (Setup menu) from the main menu for various settings.

Press the RETURN button when [RETURN] Menu] is displayed at the bottom right of the display window to return to the main menu.



Press \uparrow or \downarrow to select the desired operation, and press the \bigcirc (Select) button.

DV Camcorder/Video → DVD: Create a video DVD from a digital video camcorder

connected via a DV (i.LINK) cable or from a video

device connected via a video or S-video cable

(page 31, 42).

HDD/DVD Camcorder → DVD: Create a video DVD from an HDD or DVD camcorder

connected via a USB cable (page 28, 31, 35, 39).

Photo → DVD: Create a photo DVD (page 48).

DVD Video Preview: Playback a created video DVD (page 46).

Photo View/Print: Display or print out photos (page 58).

Setup: Configure various settings (page 61).

Note

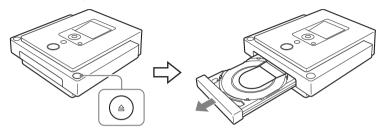
When connecting an HDD or DVD camcorder to the VIDEO IN or S VIDEO IN connector with an AV or S-video cable respectively, select [DV Camcorder/Video → DVD].

Inserting a Disc

To insert a disc, perform the following while the DVDirect is turned on.

1 Press the (Eject) button.

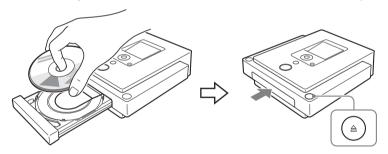
The disc tray ejects.



2 Place the disc in the disc tray with its label facing up, and press the (a) (Eject) button again.

Notes

- Do not touch the recording side of the disc.
- When inserting the disc, make sure it rests flat under the four tabs on the disc tray.



When the (a) (Eject) button is pressed again, the disc tray closes and the DVDirect starts reading the inserted disc.

When a new disc is inserted

When a new disc is inserted, the disc will be formatted automatically. If the new disc inserted is a DVD+R disc, a message prompting you to select an input source appears.



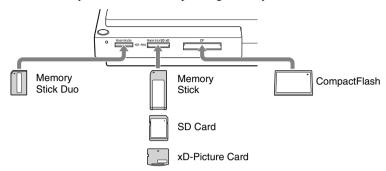
To continue with operations, press \uparrow or \downarrow to select a source to record from, and press the \bigcirc (Select) button.

Note

• If a disc that cannot be recorded on is inserted, an indication message appears. If this occurs, confirm all the compatible discs and replace the disc.

Inserting a Memory Card

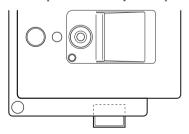
Insert the memory card into its corresponding memory card slot.



Memory Stick Duo Push the "Memory Stick Duo" into the slot until you hear a click. To remove, push the "Memory Stick Duo" and pull out. Memory Stick/SD Card/xD-Picture Card Push the card into the slot until you hear a click. To remove, push the card and pull out. CompactFlash
Push the card into the
CompactFlash slot.
To remove, pull out
the CompactFlash
card.

Notes

- Insert only one memory card into a memory card slot. Furthermore, do not use more than one memory card slot at a time.
- Do not insert another memory card while recording onto a disc is in progress. Doing so may cause a writing error.
- Do not insert a "Memory Stick Duo" with a Memory Stick Duo adaptor into the multi memory card slot.
- The CompactFlash card stays half exposed.



- Never remove the memory card while the memory card LED is lit. Otherwise data in the memory card may be damaged.
- Do not remove the memory card while recording onto a disc.

Creating a Video DVD

You can use the DVDirect as a stand-alone DVD recorder to burn videos directly onto DVDs from a connected HDD, DVD, or DV camcorder or video device such as a VCR or DVR.

You can play the created video DVD on other DVD devices or the DVD drives of computers.

Types of Recording

Five types of recording are available for creating video DVDs: DVD BURN, Full Recording, Incremental Recording, Consolidation Recording, and Normal Video Recording.

This mode allows you to record video from an HDD camcorder onto a disc by simply pressing the DVD BURN button on the camera or Handycam Station (or touching the [DVD BURN] button in the camera's LCD screen).

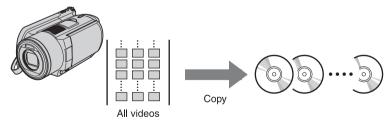
The actual recording process is the same as that of Incremental Recording (see below), and you can record additional video onto a disc that has been previously recorded on.

Full Recording (One touch recording) (page 31) 🖫 🖫

This mode allows you to record video from a digital video camera connected to the DVDirect with a single touch of the (Record) button onto a DVD. The video is recorded as follows:

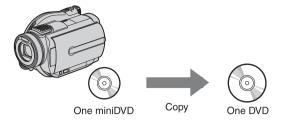
HDD camcorder

The entire video content of the camera is recorded onto a disc. (Several discs may be required depending on the length of the video.)



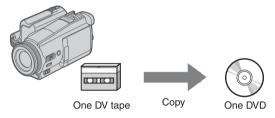
DVD camcorder

The entire video content of the camera's 8-cm disc is recorded onto a 12-cm disc.



DV camcorder

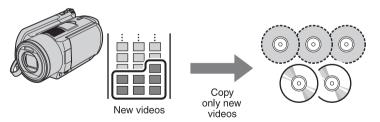
The entire content of the videotape is recorded onto a single disc.



The DVDirect controls the camera during the entire process, and completes creation of the video DVD. The completed DVD is automatically finalized, allowing immediate playback on DVD players.

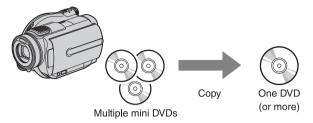
Incremental Recording (page 35)

This mode allows you to record the content of an HDD camcorder connected via a USB cable onto a disc. Using this mode, you can record only the newly taken contents of a camera whose previous contents have already been recorded onto a disc.



Consolidation Recording (page 39)

This mode allows you to record the contents of multiple 8-cm discs from a DVD camcorder onto the corresponding number of 12-cm discs.



Normal Video Recording (page 42) 🔚 🚍

This mode allows you to create a video DVD using the ① (Record) and ② (Stop) buttons on the DVDirect and the play, pause, and stop buttons on the device connected to the DVDirect. You can record from any video device with a video output connector.

Supported Camcorders/Video Devices and Recording Modes

The recording methods available differ as follows, depending on the type of camera or device connected to the DVDirect.

Type of Device	Interface	DVD BURN	Full Record- ing	Incremental Recording	Consolida -tion Recording	Normal Video Recording
Sony HDD camcorder ¹⁾	USB	~	~	~		
Sony DVD camcorder ¹⁾	USB		~		~	
DV camcorder ²⁾	DV IN		~			~
D8 camcorder ²⁾	DV IN		~			~
HDV camcorder ²⁾³⁾	DV IN		~			~
MICROMV camcorder	S VIDEO IN					>
	VIDEO IN					~
HDD or DVD camcorders	S VIDEO IN					~
from other manufacturers	VIDEO IN					~
All camcorders and video	S VIDEO IN					~
devices (analog input)	VIDEO IN					~

¹⁾ Camcorders equipped with HD (AVCHD) format are not supported.

Notes on presetting camcorders

- The "USB SPEED" setting on HDD and DVD camcorders must be set to "AUTO." ("AUTO" is the default setting.)
- The "A/V → DV OUT" setting on DV camcorders must be set to "OFF." ("OFF" is the default setting.)

²⁾ Operation compatibility is confirmed with Sony DV, D8, and HDV camcorders only.

³⁾ Only tapes recorded in DV format are supported.

Notes on time required for recording

When recording from an HDD or DVD camcorder connected via USB cable, the length of time required depends on the REC mode (HQ, SP, or LP) used to shoot the video and the number of scenes the video contains. In general, videos shot in higher image quality modes take longer to be recorded onto a disc. The following provides a general estimate* of the time required to record a 1-hour video containing one scene onto a disc.

When recording from an HDD camcorder

HQ mode: about 30 min (1/2 of the video playback length) SP mode: about 20 min (1/3 of the video playback length) LP mode: about 10 min (1/6 of the video playback length)

When recording from a DVD camcorder

HQ mode: about 60 min (almost equal to the video playback length)

SP mode: about 40 min (2/3 of the video playback length) LP mode: about 20 min (1/3 of the video playback length)

* Depending on circumstances, the length of time required to record may be equal to or more than the video playback length.

Writable Discs That Can Be Used for Creating Video DVDs

Compatible disc types for recording differ as follows, depending on the type of video device and connection interface you are using.

Type of Device	Interface	DVD-R	DVD-R DL	DVD-RW	DVD+R	DVD+R DL	DVD+RW
Sony HDD camcorder	USB	~		~	~		
Sony DVD camcorder	USB	~		~	~		
DV camcorder	DV IN	~		~	~	~	>
D8 camcorder	DV IN	~		~	~	~	>
HDV camcorder*	DV IN	~		~	~	~	~
MICROMV camcorder	S VIDEO IN	~		~	~	~	>
	VIDEO IN	~		~	~	~	~
HDD or DVD camcorders	S VIDEO IN	~		~	~	~	>
from other manufacturers	VIDEO IN	~		~	~	~	~
All camcorders and video devices (analog input)	S VIDEO IN	~		~	>	~	>
	VIDEO IN	~		~	~	~	<

Notes on creating video DVDs

- You cannot record videos with copy-protected signals (commercial DVDs, VHS software, some programs from satellite or CATV receivers, etc.).
- You cannot make incremental recordings on discs that have been created using a computer or other DVD recorder.
- When adding video to a video DVD created using a DVD+R disc, you must use
 the same interface used during the previous recording to connect the video
 device and the DVDirect. For example, you cannot add video from a DVD
 camcorder connected via an S-video or video input cable onto a DVD+R disc
 with video dubbed from a DVD camcorder that was connected via a USB cable.
- When recording video from an HDD camcorder onto a disc, only the video images stored in the camera are available for recording. You cannot record both the video and still images stored in the camera onto a disc at the same time.
- When using a DVD camcorder, recording is not possible when the disc inside the DVD camcorder is a DVD-RW disc with video recorded in DVD-VR format.

About Created Video DVDs

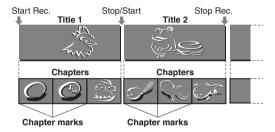
Titles and chapters

The contents of a DVD consist of sections, called titles, and smaller subsections, called chapters. When you create a video DVD with the DVDirect, titles and chapters are created as follows:

For discs created through normal video recording or recording from DV camcorders connected via DV (i.LINK) cable

Titles are created between the points where you start and stop a recording on the DVDirect.

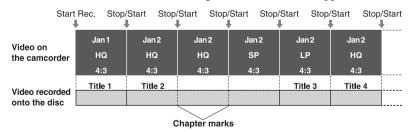
Chapters are created according to the [Auto Chaptering] setting configured in the Setup menu (page 63).



For discs created through recording from HDD or DVD camcorders connected via USB cable

Titles are created at points in the video where the date recorded, REC mode (from HQ or SP to LP or vice versa), and aspect ratio (from 4:3 to 16:9 or vice versa) change.

Chapters are created for each scene taken with the HDD or DVD camcorder. (Scenes are created each time recording is started and then stopped.)



Note

Up to 49 titles per disc and 99 chapters per title can be created. This number may decrease depending on the quality of the videos.

DVD menus

A DVD menu is displayed each time a DVD is inserted into a DVD player and serves as a title page or table of contents for the video DVD.

You can create DVDs that display thumbnail images of titles in their menu screens. You can select from four different menu styles when creating video DVDs with the DVDirect (page 63).















One Touch Recording Through HDD Camcorder Control (DVD BURN)

You can create video DVDs from your HDD camcorder simply by pressing the camera's [DVD BURN] button.

- 1 Press the (b) (Power) button to turn on the DVDirect.

 A message prompting you to insert a disc appears in the display window.
- 2 Insert a disc (page 17).

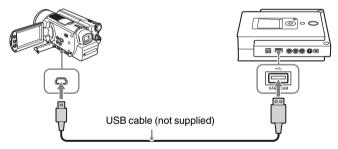
 The DVDirect starts reading the inserted disc.

Hint

When a new DVD+R disc is inserted, a message prompting you to select an input source to record from appears. You do not need to make a selection here as this message will disappear and recording will start automatically when you press the [DVD BURN] button in step 5.

- 3 Turn on the HDD camcorder.
- 4 Connect the camera to the DVDirect.

Connect the camera's USB connector (Type mini B) to the DVDirect's USB connector (Type A) using a USB cable (not supplied).

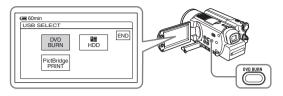


Note

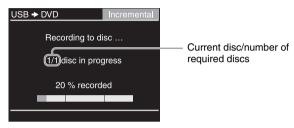
The USB cable supplied with the DVDirect cannot be used to connect to an HDD or DVD camcorder as the shape of the camera's connector is different.

After connecting the USB cable, the USB SELECT screen appears in the camera's LCD screen.

5 Touch [DVD BURN] on the camera's LCD screen, or press the DVD BURN button on the camera or Handycam Station.



Recording starts, and the progress appears in the display window.



When all of the content of the HDD camcorder is recorded, recording automatically stops and the (Record) button dims. Press the RETURN button to go back to the main menu.

Note

When the contents of the HDD camcorder do not fit on a single disc, the disc will be finalized once it becomes full, and a message will appear in the display window. Remove the completed disc, and insert a blank disc. Recording will resume automatically.



6 Press the (a) (Eject) button.

A message asking whether to finalize the disc just recorded on appears.



7 Select whether to finalize the disc.

For details on finalizing discs, see "What is 'finalize disc'?" (page 66).

To finalize the disc:

Select [Yes] and press the \(\) (Select) button. A confirmation message will appear, so select [Yes] and press the \(\) (Select) button again. Disc finalization will begin, and the process may take a few minutes. When finalization is finished, the disc is ejected and the video DVD is completed. You can now play the disc on DVD players or the DVD drives of computers.

To not finalize the disc:

Select [No] and press the \bigcirc (Select) button. The disc will be ejected without finalization. This disc is not completed yet, and it cannot be played with other DVD players or DVD drives of computers.

Hint

If you eject a disc without finalizing after videos have been recorded, you can add videos onto the same disc later.

To stop recording

You cannot stop while recording is in progress. You can only stop recording by pressing the () (Stop) button after a disc becomes full.

Note on recording with the DVD BURN button

This function is only available when the DVDirect is in the following states:

- no button on the DVDirect is pressed after the power is turned on
- the main menu appears in the display window

One Touch Recording (Full Recording)







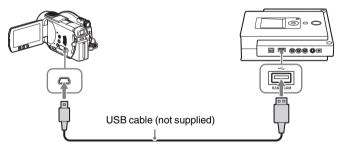
When an HDD, DVD, or DV camcorder is connected to the DVDirect, you can use Full Recording to record the video contents of the camera onto a disc with a single touch of a button.

- 1 Press the () (Power) button to turn on the DVDirect.

 A message prompting you to insert a disc appears in the display window.
- 2 Insert a disc (page 17).

 The DVDirect starts reading the inserted disc.
- **3** Turn on the camera, and set it to playback mode. For most cameras, switch the power/mode button to the playback, PLAY/EDIT, or VTR mode to play the video or perform recording. For details, refer to the operating instructions for your camera.
- **4** Connect the camera to the DVDirect.

When using an HDD or DVD camcorder Connect the camera's USB connector (Type mini B) to the DVDirect's USB connector (Type A) using a USB cable (not supplied).



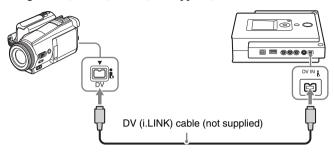
Note

The USB cable supplied with the DVDirect cannot be used to connect to an HDD or DVD camcorder as the shape of the camera's connector is different.

After connecting the USB cable, the USB SELECT screen appears in the camera's LCD screen. Move on to the next step.

When using a DV camcorder

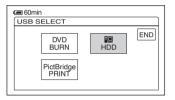
Connect the camera's DV connector to the DVDirect's DV IN connector using a DV (i.LINK) cable (not supplied).



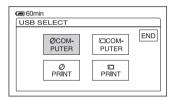
After connecting the camera, skip to step 6.

5 Touch [HDD] (for an HDD camcorder) or [© COMPUTER] (for a DVD camcorder) on the camera's LCD screen.

HDD camcorder



DVD camcorder



Once you touch the button on the camera's LCD screen, the DVDirect detects the connected camera, and the display window on the DVDirect changes.

Note

Depending on the DVD camcorder you are using, the above USB SELECT screen may not appear automatically and settings configuration for USB connection may be required beforehand. Refer to the section on connecting to computers in the operating instructions for your camcorder when configuring settings on the camcorder.

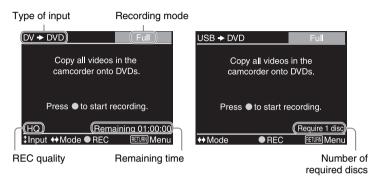
6 Press ← or → to switch the recording mode.

Pressing \leftarrow or \rightarrow switches the recording mode displayed at the top right of the display window. For Full Recording, press \leftarrow or \rightarrow until [Full] displays.

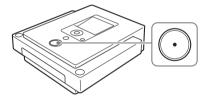
The following appears in the DVDirect's display window

DV camcorder

HDD or DVD camcorder

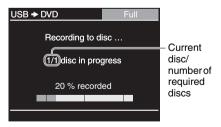


7 Press the () (Record) button to start recording.



The DVDirect starts recording at the same time the camera starts playback or file transfer. [Recording] appears in the display window, and the (Record) button lights up during recording.





Hint

When using a DV camcorder and the video tape is not at its beginning, the tape is automatically rewound and played back from the beginning before the DVDirect starts recording.

When using an HDD camcorder

When the contents of the HDD camcorder do not fit onto a single disc, a disc will be finalized once it becomes full, and a message will appear in the display window. Remove the completed disc, and insert a blank disc. Recording will resume automatically.



When using a DV camcorder.

When a blank portion of the DV tape is reached, recording automatically stops and the ((Record) button dims.

When recording is complete, the disc is automatically ejected. The video DVD is completed, and you can now play it on DVD players or the DVD drives of computers.

To stop recording

When using an HDD camcorder

You cannot stop while recording is in progress. You can only stop recording by pressing the () (Stop) button after a disc becomes full.

When using a DVD camcorder

You cannot stop while recording is in progress.

When using a DV camcorder

Press the $\ \ \, \ \ \,$ (Stop) button. Playback on the DV camcorder will also stop automatically.

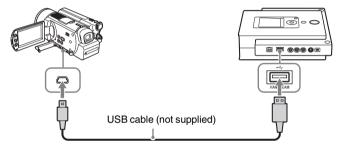
Incremental Recording

After the video contents of an HDD camcorder are recorded onto a disc, additional video taken with the same HDD camcorder can be recorded onto a disc without recording the previous contents again.

- 1 Press the () (Power) button to turn on the DVDirect.

 A message prompting you to insert a disc appears in the display window.
- 2 Insert a disc (page 17).
 The DVDirect starts reading the inserted disc.
- **3** Turn on the HDD camcorder, and set it to PLAY/EDIT mode.
- 4 Connect the camera to the DVDirect.

Connect the camera's USB connector (Type mini B) to the DVDirect's USB connector (Type A) using a USB cable (not supplied).

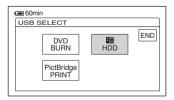


Note

The USB cable supplied with the DVDirect cannot be used to connect to an HDD or DVD camcorder as the shape of the camera's connector is different.

After connecting the USB cable, the USB SELECT screen appears in the camera's LCD screen.

5 Touch [HDD] on the camera's LCD screen.



Once you touch [HDD], the DVDirect detects the connected camera, and the display window on the DVDirect changes.





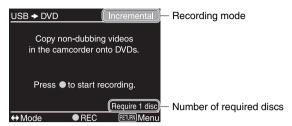




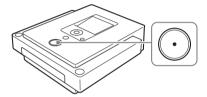


6 Press ← or → to switch the recording mode.

Pressing ← or → switches the recording mode displayed in the top right of the display window. For Incremental Recording, press ← or → until [Incremental] displays.

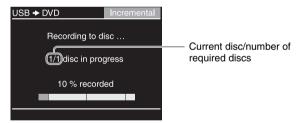


7 Press the () (Record) button to start recording.



Recording begins for the portion of the camera's video content recorded after the previous burning to disc.

During recording, the progress appears in the display window.



When all of the new content of the HDD camcorder is recorded, recording automatically stops and the (Record) button dims. Press the RETURN button to go back to the main menu.

Notes

- If the HDD camcorder does not contain new video (all of the video contents have already been recorded onto a DVD), Incremental Recording is not available. In such a case, only Full Recording is available.
- When the contents of the HDD camcorder do not fit on a single disc, the disc will be finalized once it becomes full, and a message will appear in the display window.
 Remove the completed disc, and insert a blank disc. Recording will resume automatically.





A message asking whether to finalize the disc just recorded on appears.



9 Select whether to finalize the disc.

For details on finalizing discs, see "What is 'finalize disc'?" (page 66).

To finalize the disc:

Select [Yes] and press the \bigcirc (Select) button. A confirmation message will appear, so select [Yes] and press the \bigcirc (Select) button again. Disc finalization will begin, and the process may take a few minutes. When finalization is finished, the disc is ejected and the video DVD is completed. You can now play the disc on DVD players or the DVD drives of computers.

To not finalize the disc:

Select [No] and press the \bigcirc (Select) button. The disc will be ejected without finalization. This disc is not completed yet, and it cannot be played with other DVD players or DVD drives of computers.

Hint

If you eject a disc without finalizing after videos have been recorded, you can add videos onto the same disc later.

To stop recording

You cannot stop while recording is in progress. You can only stop recording by pressing the (a) (Stop) button after a disc becomes full.

Note on Incremental Recording

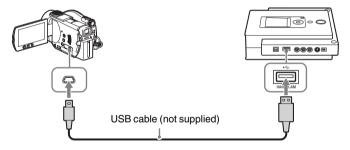
Always use the (b) (Power) button to turn off the DVDirect after Incremental Recording is finished. If you turn off the power by pulling out the AC power cord, the DVDirect will not be able to detect newly taken video properly, and Incremental Recording will not be possible the next time you attempt to perform it.

Consolidation Recording



When you have multiple 8-cm discs containing video taken with a DVD camcorder, you can consolidate and record the video onto the corresponding number of 12-cm discs.

- 1 Press the (b) (Power) button to turn on the DVDirect. A message prompting you to insert a disc appears in the display window.
- 2 Insert a disc (page 17). The DVDirect starts reading the inserted disc.
- **3** Turn on the camera, and set it to playback mode. For most cameras, switch the power/mode button to the playback or PLAY/EDIT mode to perform recording. For details, refer to the operating instructions for your camera.
- 4 Connect the DVD camcorder to the DVDirect. Connect the camera's USB connector (Type mini B) to the DVDirect's USB connector (Type A) using a USB cable (not supplied).

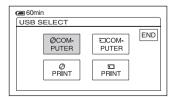


Note

The USB cable supplied with the DVDirect cannot be used to connect to an HDD or DVD camcorder as the shape of the camera's connector is different.

After connecting the USB cable, the USB SELECT screen appears in the camera's LCD screen.

5 Touch [COMPUTER] on the camera's LCD screen.













Once you touch [@COMPUTER], the DVDirect detects the connected camera, and the display window on the DVDirect changes.

Note

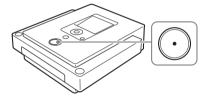
Depending on the DVD camcorder you are using, the above USB SELECT screen may not appear automatically and settings configuration for USB connection may be required beforehand. Refer to the section on connecting to computers in the operating instructions for your camcorder when configuring settings on the camcorder.

6 Press ← or → to switch the recording mode.

Pressing ← or → switches the recording mode displayed in the top right of the display window. For Consolidation Recording, press ← or → until [Consolidation] displays.



7 Press the () (Record) button to start recording.



During recording, the progress appears in the display window.



Recording automatically stops and the ① (Record) button dims. Press the RETURN button to go back to the main menu.

Hint

To consolidate the video contents of another 8-cm disc onto the current disc, replace the 8-cm disc in the DVD camcorder with the other 8-cm disc, and press the (Record) button on the DVDirect.

8 Press the (a) (Eject) button.

A message asking whether to finalize the disc just recorded on appears.



9 Select whether to finalize the disc.

For details on finalizing discs, see "What is 'finalize disc'?" (page 66).

To finalize the disc:

Select [Yes] and press the \bigcirc (Select) button. A confirmation message will appear, so select [Yes] and press the \bigcirc (Select) button again. Disc finalization will begin, and the process may take a few minutes. When finalization is finished, the disc is ejected and the video DVD is completed. You can now play the disc on DVD players or the DVD drives of computers.

To not finalize the disc:

Select [No] and press the \bigcirc (Select) button. The disc will be ejected without finalization. This disc is not completed yet, and it cannot be played with other DVD players or DVD drives of computers.

Hint

If you eject a disc without finalizing after videos have been recorded, you can consolidate videos recorded on other 8-cm DVDs onto the same disc later.

Note

You cannot stop while recording is in progress. Wait until it stops automatically.

Normal Video Recording 🔚 🚍

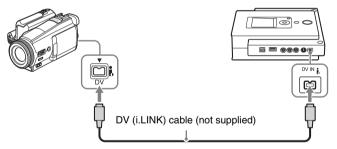




To burn video from a video device such as a VCR or DVR onto a disc, connect the device to the DVDirect via an S-video or AV cable. Operate the video device to play back the portion you want to record, and use the (Record) and (Stop) buttons on the DVDirect to record. You can use the same operation to record from a DV camcorder connected to the DVDirect via a DV (i.LINK) cable.

- **1** Press the () (Power) button to turn on the DVDirect. A message prompting you to insert a disc appears in the display window.
- 2 Insert a disc (page 17). The DVDirect starts reading the inserted disc.
- 3 Turn on the camera or video device, and set it to playback mode. For most cameras, switch the power/mode button to the playback, PLAY/ EDIT, or VTR mode to play the tape or perform recording. For details, refer to the operating instructions for your camera.
- 4 Connect the camera or video device to the DVDirect.

When connecting a DV camcorder using a DV (i.LINK) cable Connect the camera's DV connector to the DVDirect's DV IN connector using a DV (i.LINK) cable (not supplied).



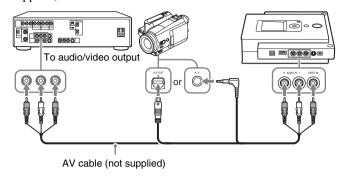
When connecting a video device using an AV or S-video cable Use an AV or S-video cable (both not supplied) when connecting a video device such as a VCR or DVR to the DVDirect.

Note

Regardless of which of the two cables is used, recording is always performed with normal video recording.

For AV cables:

Connect the video device's audio/video output connectors to the DVDirect's AUDIO IN/VIDEO IN connectors using the AV cable (not supplied).

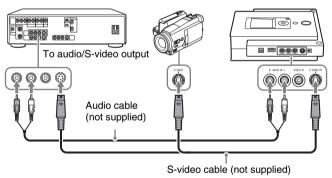


Hint

The connectors on a video device differ depending on the device. Refer to the operating instructions for your device, and use the appropriate AV cable.

For S-video cables:

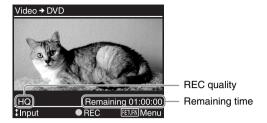
Connect the video device's S-video out connector to the DVDirect's S VIDEO IN connector using the S-video cable (not supplied). You must also connect an audio cable for audio input.



Hint

If your video device has an S-video connector, use an S-video cable for improved picture quality (compared to video cable quality).

5 Operate the camera or video device to start playback of video. The following appears in the DVDirect's display window.



Hint

The DVDirect detects and selects video input signals automatically when you play back video from the connected video device. You can view the video playback in the display window with the selected input source displayed in the top left.

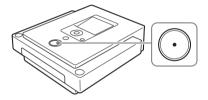
DV → DVD: DV IN is detected.

Video → DVD: VIDEO IN is detected.

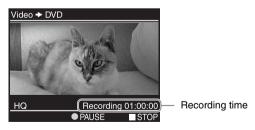
S-Video → DVD: S VIDEO IN is detected.

If the correct input source is not selected (or if the video playback does not display), press ↑ or ↓ to select the correct input manually.

6 Press the (Record) button to start recording.



Dubbing from the camera or video device starts. During recording, [Recording] appears in the display window as the video is played back.



Note

If you stop playback on the camera or video device during recording (or the video signal is interrupted), the DVDirect pauses recording and the () (Record) button flashes slowly. To resume recording, restart playback on the video device. If no video signal is detected for 2 minutes, recording stops.

- **7** Press the () (Stop) button to stop recording. Wait a moment until the display window changes.
- **8** To record additional video, repeat steps 5 to 7.
- **9** When you are finished recording, press the RETURN button to go back to the main menu, and press the (a) (Eject) button. A message asking whether to finalize the disc just recorded on appears.



Hint

This message will not appear when using a DVD+RW disc. (DVD+RW discs are automatically finalized and ejected.)

10 Select whether to finalize the disc.

For details on finalizing discs, see "What is 'finalize disc'?" (page 66).

To finalize the disc:

Select [Yes] and press the () (Select) button. A confirmation message will appear, so select [Yes] and press the () (Select) button again. Disc finalization will begin, and the process may take a few minutes. When finalization is finished, the disc is ejected and the video DVD is completed. You can now play the disc on DVD players or the DVD drives of computers.

To not finalize the disc:

Select [No] and press the () (Select) button. The disc will be ejected without finalization. This disc is not completed yet, and it cannot be played on other DVD players or the DVD drives of computers.











Previewing a Video DVD

You can play back and check a video DVD burned with the DVDirect in the display window on the top of the unit.

Notes

- Sound cannot be heard when previewing the disc on the DVDirect.
- You cannot output video images to external devices such as TVs.
- You cannot play back a disc recorded on a device other than the DVDirect or with commercial DVD software.
- 1 Press the () (Power) button to turn on the DVDirect. The display window turns on.
- 2 Press ← to display the main menu. Press ↑ or ↓ to select [DVD Video Preview], and then press the (Select) button.

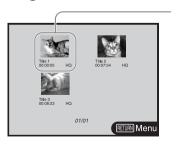


3 Insert a video DVD created with the DVDirect.

After the disc is finished being read, its contents are displayed in the display window.

When a finalized disc is inserted:

The video titles recorded on the disc appear in the display window. Press \uparrow , \downarrow , \leftarrow , or \Rightarrow to select the title you want to view, and press the \bigcirc (Select) button. The selected title starts to play. To stop playback, press the \bigcirc (Stop) button.



Selected title (highlighted in yellow)

When a disc that has not been finalized is inserted: The last title on the disc starts to play automatically.



Current title number/total title number

Press \longleftarrow or \Longrightarrow to select the title you want to view. To stop playback, press the \bigcirc (Stop) button.

Hints

- When a DVD+RW disc is inserted, the video titles appear in the display window, as in the case of finalized discs.
- If you insert a finalized video DVD immediately after turning on the DVDirect, auto setup navigation activates and the video titles recorded on the disc appear in the display window automatically.
- For details on titles, see "Titles and chapters" (page 26).











Creating a Photo DVD

You can easily record photos taken with your digital camera from a memory card onto a DVD. You can also create a slideshow DVDs.

Still images stored on an HDD camcorder can also be recorded onto a disc.

Notes

- When recording still images from an HDD camcorder onto a disc, only the still images stored in the camera are available for recording. You cannot record both the video and still images stored in the camera onto a disc at the same time.
- Still images taken with a DVD camcorder and stored on an 8-cm disc cannot be recorded onto a disc with the DVDirect.

Types of Recording

Two types of recording are available for creating photo DVDs: all photo recording and photo select recording.

All photo recording 🔚 🖪

This method allows you to select at once all of the photos (taken with a digital camera) stored on a memory card or all of the photos on the hard disk of an HDD camcorder and record them onto a DVD with one touch. (Up to 2000 photos can be recorded.)

Photo select recording 🖺

This method allows you to select only the photos (taken with a digital camera) that you want to record from a memory card and record them onto a disc.

Types of Photo DVD

The following types of photo DVD can be created with the DVDirect. You can decide which to create at a message prompt that appears when ejecting the disc.

Photo backup DVD (page 51, 54) 📠 👨

Photo backup DVDs allow you to store photos (JPEG files) taken with a digital camera or HDD camcorder on a DVD disc. You can view the photo backup DVD created with the DVDirect in the display window or view it using the DVD drive of a computer.

Slideshow DVD (page 53, 56) 🖪 🖪

In addition to storing photos (JPEG files) taken with a digital camera or HDD camcorder, slideshow DVDs allow you to view these photos as a slideshow. You can play the slideshow DVD with commercial DVD players and even include background music.

Supported Memory Cards and Camcorders

The recording methods available differ as follows, depending on the type of camera or storage device connected to the DVDirect.

The picture quality of the photos played back in a slideshow is equivalent to that of video

Type of device	Interface	All photo recording	Photo select recording
Sony HDD camcorder	USB	~	_
Memory card ("Memory Stick Duo," "Memory Stick," SD Card, xD-Picture Card, or ComapactFlash card)	Memory card slots on the DVDirect	~	,
Other devices connected to the DVDirect's USB port (DVD camcorders, digital still cameras, USB storage devices, etc.)	USB	Not av	ailable

Writable Discs That Can Be Used for Creating Photo DVDs

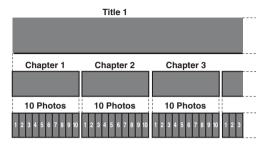
Compatible disc types for recording differ as follows, depending on the type of device you are using.

Type of device	DVD-R	DVD-R DL	DVD-RW	DVD+R	DVD+R DL	DVD+RW
Sony HDD camcorder	~		~	~		~
Memory card	~		~	~		~

About Created Photo DVDs

Slideshow DVDs

The contents of a DVD consist of sections, called titles, and smaller subsections, called chapters. When you create a slideshow DVD with the DVDirect, a chapter is created for every 10 photos as shown in the following.



Note

Up to 99 chapters per title can be created. This number may decrease depending on the quality of the photos.

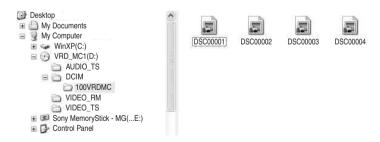
You can select from four different tunes for background music when creating slideshow DVDs with the DVDirect (page 63).

As with video DVDs, you can also select from four different menu styles when creating slideshow DVDs (page 63).

Storage locations on photo DVDs

The following shows the folders and files of a photo DVD as shown on a computer screen.

All photos are stored in the folder "100VRDMC."



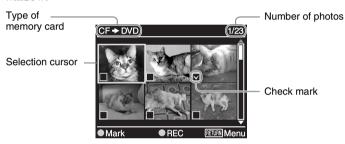
Hint

File names are automatically created when the photo DVD is created.

Recording Photos Stored on a Memory Card 🔚

- **1** Press the () (Power) button to turn on the DVDirect. A message prompting you to insert a disc appears in the display window.
- 2 Insert a disc (page 17). The DVDirect starts reading the inserted disc.
- 3 Insert the memory card into its corresponding memory card slot (page 19).

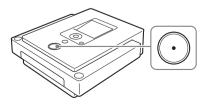
The photos stored on the memory card are displayed in the display window.



4 If you do not want to record all of the photos on the memory card. remove the check marks from the photos you do not want to record.

The check marks on the thumbnails indicate photos that will be recorded. All of the thumbnails are checked when the photos are first loaded from the memory card. If you want to record only a portion of the photos, remove some of the check marks.

- 1) Press \uparrow or \downarrow to scroll through the photos.
- 2) Select a photo and press the () (Select) button to remove the check mark.
- 3) Press the (Select) button again to put the check mark back.
- **5** Press the (•) (Record) button to start recording.













During recording, the progress appears in the display window, and the () (Record) button remains lit.



Note

Do not insert another memory card while recording onto a disc is in progress. Doing so may cause a writing error.

When all of the photos are recorded onto the disc, recording automatically stops, and the (Record) button dims. Press the RETURN button to go back to the main menu.

Hint

You can continue to add photos from another memory card onto the same disc. To do this, change the memory card and press the (Record) button after the new photos are displayed in the display window.

6 Press the (a) (Eject) button.

A message asking whether to finalize the disc just recorded on appears.



Hint

This message will not appear when using a DVD+RW disc.

7 Select whether to finalize the disc.

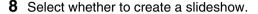
For details on finalizing discs, see "What is 'finalize disc'?" (page 66).

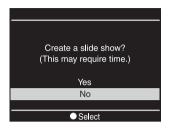
To finalize the disc:

Select [Yes] and press \bigcirc (Select) button. A confirmation message will appear, so select [Yes] and press the \bigcirc (Select) button again. A message asking whether to create a slideshow appears. Move on to the next step.

To not finalize the disc:

Select [No] and press \bigcirc (Select) button. The disc will be ejected without finalization. This disc is not completed yet, and it cannot be played with other DVD players or DVD drives of computers.





Press \uparrow or \downarrow to select whether to create a slideshow, and press the \bigcirc (Select) button.

To complete the disc as a photo backup DVD, select [No]. To complete the disc as a slideshow DVD, select [Yes].

Notes

- When a slideshow is created on a disc, you cannot record additional photos onto the same disc.
- It takes a few minutes to complete finalizing for a photo backup DVD. The amount of time it takes to complete a slideshow DVD depends on the number and size of the photos. (For example, it may take 20 minutes or more to record 100 files (5-megapixel photos) onto a DVD.)

When you press the \bigcirc (Select) button, the disc is processed according to your selections in steps 7 and 8. When all of the processing is complete, the disc is ejected and the photo DVD is complete.

To record more photos

If you eject a disc after recording photos without finalizing, you can add photos on the same disc later. Insert the disc and the memory card with additional photos into the DVDirect, and then repeat from step 4.

To create a slideshow DVD with a single button touch

When [Slideshow Creation] is set to [ON] in the Setup menu (page 64), the disc is finalized and a slideshow is created on the disc automatically after recording the photos. The procedures from steps 6 to 8 are processed automatically, and the slideshow DVD is complete.

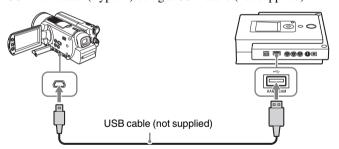
Recording Photos Stored on an HDD Camcorder

- 1 Press the (b) (Power) button to turn on the DVDirect.

 A message prompting you to insert a disc appears in the display window.
- 2 Insert a disc (page 17).

 The DVDirect starts reading the inserted disc.
- **3** Press the RETURN button to display the main menu.
- 4 Press ↑ or ↓ to select [Photo → DVD], and then press the (Select) button.
- 5 Press ↑ or ↓ to select [HDD Camcorder], and then press the (Select) button.
- **6** Turn on the HDD camcorder, and set it to PLAY/EDIT mode.
- 7 Connect the camera to the DVDirect.

 Connect the camera's USB connector (Type mini B) to the DVDirect's USB connector (Type A) using a USB cable (not supplied).

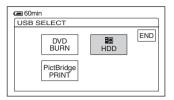


Note

The USB cable supplied with the DVDirect cannot be used to connect to an HDD or DVD camcorder as the shape of the camera's connector is different.

After connecting the USB cable, the USB SELECT screen appears in the camera's LCD screen.

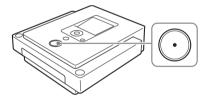
8 Touch [HDD] on the camera's LCD screen.



Once you touch [HDD], the DVDirect detects the connected camera, and the display window on the DVDirect changes.



9 Press the () (Record) button to start recording.



During recording, the progress appears in the display window, and the (Record) button remains lit.



When all of the photos are recorded onto the disc, recording automatically stops, and the ((Record) button dims. Press the RETURN button to go back to the main menu.











10 Press the (a) (Eject) button.

A message asking whether to finalize the disc just recorded on appears.



Hint

This message will not appear when using a DVD+RW disc.

11 Select whether to finalize the disc.

For details on finalizing discs, see "What is 'finalize disc'?" (page 66).

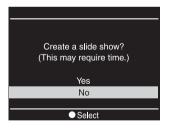
To finalize the disc:

Select [Yes] and press (Select) button. A confirmation message will appear, so select [Yes] and press the (Select) button again. A message asking whether to create a slideshow appears. Move on to the next step.

To not finalize the disc:

Select [No] and press \bigcirc (Select) button. The disc will be ejected without finalization. This disc is not completed yet, and it cannot be played with other DVD players or DVD drives of computers.

12 Select whether to create a slideshow.



Press ↑ or ↓ to select whether to create a slideshow, and press the ○ (Select) button.

To complete the disc as a photo backup DVD, select [No].

To complete the disc as a slideshow DVD, select [Yes].

Notes

- When a slideshow is created on a disc, you cannot record additional photos onto such discs.
- It takes a few minutes to complete finalizing for a photo backup DVD. The amount of time it takes to complete a slideshow DVD depends on the number and size of the photos. (For example, it may take 20 minutes or more to record 100 files (5-megapixel photos) onto a DVD.)

When you press the \bigcirc (Select) button, the disc is processed according to your selections in steps 11 and 12. When all of the processing is complete, the disc is ejected and the photo DVD is complete.

To create a slideshow DVD with a single button touch

You can create a slideshow DVD with a single touch of the ① (Record) button when [Slideshow Creation] is set to [ON] in the Setup menu (page 53, 64).











Viewing and Printing Photos

You can view and check the photos recorded on DVDs or stored on memory cards in the display window on the top panel of the DVDirect. You can also print these photos by connecting the DVDirect to a PictBridge-compatible printer.

Note

You cannot output the photo images to external devices such as TVs.

- 1 Press the () (Power) button to turn on the DVDirect.
- 2 Insert the memory card or disc containing the photos you want to view/print.

To insert a memory card, see page 19.

To insert a photo DVD created with the DVDirect, see page 17.

Hint

When you insert a finalized photo DVD, the auto setup function (page 15) activates and the photos on the disc will be displayed automatically. In this case, skip to step 5.

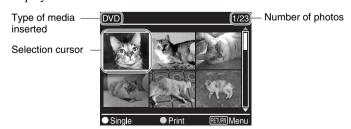
3 Press the RETURN button.

The main menu appears in the display window.



4 Press ↑ or ↓ to select [Photo View/Print], and then press the ○ (Select) button.

Thumbnail images of the photos stored on the inserted media appear in the display window.

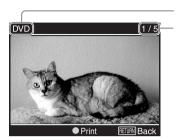


5 Press ♠, ♣, ←, or → to move the selection cursor to the photo you want to view or print, and press the ○ (Select) button.

A larger display of the selected photo appears in the display window.

Hint

You can also print images directly from the thumbnail display screen. To do this, skip to step 6 after moving the cursor to the photo you want to print.

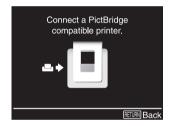


Type of media inserted

Number of photos

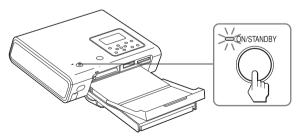
6 Press the ① (Record) button.

The following message appears.

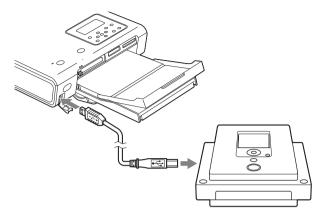


7 Turn on the printer and prepare it for printing.

For details on preparation, refer to the operating instructions for your printer. (Refer to the section on connection with a PictBridge-compatible device.)



8 Connect your printer to the DVDirect using the supplied USB cable.



The printer starts printing.



The message [Printing] will disappear when printing is finished.

Hint

To continue printing other photos, press \uparrow , \downarrow , \leftarrow , or \Rightarrow to scroll and display the photo you want to print, and then press the \bigcirc (Record) button.

Notes on viewing and printing photos

- You cannot view or print photos from a photo DVD created on a device other than the DVDirect (such as a computer).
- You can view and print JPEG-format photos taken with digital still cameras. Any other photo files (JPEG files created, edited, or finished on a computer for example) are not guaranteed to display or print using the DVDirect.

Using the Setup Menu

You can change the various settings for creating discs in the Setup menu screen.

The following procedure displays the Setup menu.

- **1** Press the (b) (Power) button to turn on the DVDirect. The display window turns on.
- 2 Press the RETURN button.

The main menu appears.



Hint

Whenever [RETURN] is displayed in the bottom left during operation of the DVDirect, the main menu returns when you press the RETURN button.

3 Press **↓** to select [Setup], and press the ○ (Select) button. The Setup menu appears.



Move the cursor by pressing \uparrow or \downarrow to select items or options to change, and press the \bigcirc (Select) button to confirm.



Rec Quality 🖫 🚍

Select the recording quality to use when creating a video DVD. This setting only applies to Full Recording (DV camcorder) and Normal Video Recording modes.

Default		Picture	Recording time (approx.)		
Rec Quality	setting	quality	Single layer disc	Double layer disc	
HQ	~	High	1 hour	2 hours	
HSP		1	1.5 hours	3 hours	
SP		Standard	2 hours	4 hours	
LP		1	3 hours	6 hours	
SLP		Low	6 hours	12 hours	

Auto Stop Timer 🖫 🚍

Select the preset time used to stop recording automatically when creating a video DVD. This setting only applies to Full Recording (DV camcorder) and Normal Video Recording modes.

Setting	Default setting	Feature
OFF	~	
30min to 8h		Recording automatically stops when the preset time has passed after recording starts. 30 min, 60 min, 90 min, 2h, 3h, 4h, 6h, 8h are available.

Note

The [Auto Stop Timer] setting is cancelled when the recording is completed, the (Stop) button is pressed during recording, or the power is turned off.

Auto Chaptering 🖫 🚍

Specify a time interval at which to create chapter marks automatically on a video DVD. This setting only applies to Full Recording (DV camcorder) and Normal Video Recording modes.

Setting	Default setting
OFF	
5min	>
10min	
15min	

DVD Menu 🖫 🖫 🖫 🖪

Select the type of menu to apply to a video DVD created with the DVDirect.

Setting	Default setting	Feature
Menu 1 to 4	1	Applies the selected menu to the video DVD's menu screen.

Slideshow BGM 🖪 🖭

Select whether to record background music onto a photo DVD (slideshow DVD).

Setting	Default setting
OFF	
Relaxation	~
POP	
Whistle	

Slideshow Creation 🖪 🖪

Select whether to display a message prompting slideshow creation when you press the $(\stackrel{\circ}{=})$ (Eject) button after recording for a photo DVD.

Setting	Default setting	Feature
ON		After the photos are recorded onto the disc, a slideshow is created and the disc is finalized automatically allowing immediate playback on a DVD player.
OFF	~	When you press the (a) (Eject) button after recording to a disc, a message asking whether to create a slideshow always appears in the display window.

PC Connect

Select whether to use the DVDirect as a DVD/CD drive for your computer.

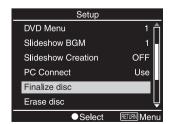
Setting	Default setting	Feature
Not use	~	Select this when you are not connecting the DVDirect to a computer.
Use		Select this when using the USB connector (Type A) to connect the DVDirect to a computer. When the DVDirect is connected to the computer, [PC Mode] appears in the display window, and you can use the DVDirect as a DVD/CD drive.

Finalize disc

Finalize a disc that was not finalized when ejected (page 66).

Hint

When using a DVD+RW disc, you do not need to finalize it.



The following message appears.



2 Press ↑ or ↓ to select [Yes], and press the ○ (Select) button. The following message appears.



- **3** Press ♠ or \blacktriangledown to select [OK], and press the \bigcirc (Select) button.
- 4 The DVDirect starts finalization.

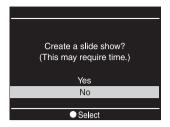
For video DVDs

The following message appears.



For photo DVDs

The following message appears.



To complete the disc as a photo backup DVD, select [No]. To complete the disc as a slideshow DVD, select [Yes].

Notes

- It takes a few minutes to complete finalizing for a video DVD or photo backup DVD.
- The amount of time it takes to complete a slideshow DVD depends on the number and size of the photos. (For example, it may take 20 minutes or more to record 100 files (5megapixel photos) onto a DVD.)

After finalizing is completed, the disc can be ejected.

What is "finalize disc"?

To finalize the disc means to make the created disc playable on other DVD devices.

When ejecting a disc immediately after recording, the DVDirect asks you if you want to finalize the disc or not.

You can select to finalize the disc or not depending on your purpose.

(You can also finalize the disc from the Setup menu (page 61)).

Generally, you complete the disc by finalizing.

The finalized disc can be used like DVD-Video or DVD-ROM discs on a DVD device.

See the following to check if finalizing is necessary for your intended purposes.

Finalize the disc

- to create a disc playable on standard DVD players.
- to create a disc readable on standard DVD drives of computers.
- to create a disc to be distributed to others.
- to create a 100% complete disc (you do not intend to add videos or photos later).

Do not finalize the disc

- when you want to add videos to the same disc with the DVDirect later.
- when you want to add photos to the same disc with the DVDirect later.
- when you are not finished creating the disc (not yet playable on other DVD devices).

The following shows the differences between a finalized disc and an unfinalized disc.

	Finalized disc	Unfinalized disc
Playing on standard DVD players	~	_
Reading on DVD drives of computers	~	_
Adding videos on the same disc later	_	✓
Adding photos on the same disc later	_	~

Note

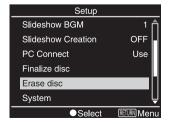
When using a DVD+RW disc, finalizing is unnecessary; no message prompting finalization appears when ejecting the disc, and there is no need to finalize from the Setup menu. You can always add videos or photos on a DVD+RW disc (excluding slideshow DVDs) with the DVDirect, and the disc can always be played with a DVD player or the DVD drive of a computer.

Erase disc

Erase all data recorded on a DVD+RW or DVD-RW disc. The erased disc is reusable as a blank disc.

Notes

- Be aware that this operation erases all data.
- You cannot erase individual titles, chapters, or photos.
- 1 Insert a disc to erase, press ↓ to select [Erase disc], and press the (Select) button.



The following message appears.



2 Press ★ or ★ to select [Yes], and press the ○ (Select) button. The following message appears.



3 Press ♠ or ♣ to select [Yes], and press the ○ (Select) button.

The DVDirect starts erasing.

After erasing is completed, the disc can be ejected.

System

You can check the system software version of the DVDirect.

Press \blacktriangleright to select [System], and press the \bigcirc (Select) button to display the software version in the display window.

Hint

The system software is the built-in software that makes the DVDirect work.

Demo

Select whether to enable the demo.

Setting	Default setting	Feature
ON	~	Enables the demo. When the DVDirect is not operated for a set period of time, the demo automatically appears in the display window.
OFF		Disables the demo.

Color System

Displays the color system used to create discs with the DVDirect. A created disc cannot be played if there is a difference between the color system of the disc and that of the DVD player.

Note

The appropriate color system is preset or the setting way not be selectable depending on the country or region of use.

Language

Select the language display for the display window.

Note

Available languages may differ or the setting may not be selectable depending on the country or region of use.

system should meet the following requirements.*

System Requirements

□ CPU: Pentium III, 800 MHz or higher (Pentium 4, 2 GHz or higher recommended)
 □ RAM: 256 MB (512 MB or more recommended)
 □ 1 GB (10 GB for DVD creation) free hard disk space or more recommended
 □ Operating system:
 Windows 2000 SP4 or Windows XP Home/Professional SP2
 □ Hi-Speed USB (USB 2.0 compliant) port

When using the DVDirect with your computer (PC Mode), the computer

^{*} The above requirements are the minimum necessary requirements to write to disc normally. Under actual operating conditions, the requirements imposed by your software must also be met. For details, refer to your software documentation.

Setting Up the Computer

Installing the Software

1 Insert the supplied software disc into a drive on the computer. The installer will start automatically.

Note

If the "Language Selection" screen appears, click a language button, and then click [Application Install] to continue installation.

2 Click [Nero 7 Essentials] to install the software.





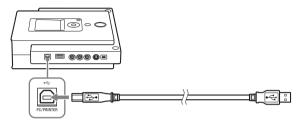
3 After installation is completed, continue to install other options, or click [EXIT] to finish installation.

Connecting the DVDirect to a Computer

Note

Before using the DVDirect with a computer, set [PC Connect] in the Setup menu (page 64) to [Use], Please note that this is not the default setting.

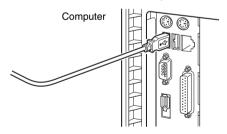
- 1 Connect the DVDirect to a power source using the AC adaptor (page 14).
- 2 Connect the supplied USB cable to the DVDirect.



- **3** Press the (b) (Power) button to turn on the DVDirect.
- **4** Turn on your computer.
- **5** Connect the other end of the USB cable to your computer. [PC Mode] appears in the display window.

Note

Please connect the DVDirect directly to a USB connector on the computer.



Click [My computer] and make sure the DVDirect icon has been added. You can now use the DVDirect with your computer.

Disconnection

The disconnection procedure varies depending on your OS.

When your computer detects the DVDirect successfully, sappears on the Windows task bar. If you want to disconnect the DVDirect, you must first stop it by clicking this icon.

- 1 Click on the task bar, and select to disconnect the DVDirect in the shortcut menu.
- **2** Follow the messages that appear, if any.
- 3 Disconnect the USB cable.

Note

If you disconnect the USB cable without performing the procedure above, your computer may operate erratically or data may be damaged. Be sure to perform the procedure above before disconnecting the USB cable.

Using Memory Card Slots

If you insert a memory card into the memory card slot when using the DVDirect as an external DVD drive, you can use the memory card as a removable disc for the computer. The memory card is displayed as a "removable disk" icon in the "My Computer" folder of the Windows display.

Notes

- Insert only one memory card into the memory card slot. Furthermore, do not use more than
 one memory card slot at a time.
- Do not connect the DVDirect and a USB memory card adapter to the computer at the same time, as the DVDirect may not work properly.

Using the Bundled Software

Use the bundled software to create or play back CDs and DVDs on your computer with the DVDirect.

Launching "Nero StartSmart"

Using "Nero StartSmart," your central starting point for all your audio, video, data, backup, and recording tasks, you can choose a task from several categories, launch Nero applications, use tools, and view manuals. (Refer to the manuals or the online help for each application for details on their operation.)

To launch "Nero StartSmart," double-click the "Nero StartSmart" aicon, or start [Nero StartSmart] from the program menu.



Move the cursor onto each icon or application to display a summary in a popup window. Click any of the icons or applications that you intend to use.

Notes on Using Other Software With the DVDirect

- Using software other than the bundled software (such as commercially available software, shareware, or freeware) to write data to disc with the DVDirect is not under warranty, and Sony provides no customer service for such use.
- Make sure that the bundled writing software and other writing software do not coexist on your computer. In particular, if another packet writing software* exists in your computer, the software and/or computer may operate erratically.

^{*} Such as Drag-to-Disc (ROXIO), Direct CD (ROXIO), B's CLIP (BHA), or DLA (Sonic).

About Discs

Compatible Writable Discs

The following writable discs are compatible with the DVDirect.

Disc type	Logo	Using without computer		Using with computer	
		Video DVD creation	Photo DVD creation	Write	Read/ Playback
DVD+R	RW DVD+R	~	~	>	<
DVD+R DL (Double layer)	RUD DVD+R DL	~		>	>
DVD+RW	DVD-ReWritable	~ *	~	>	>
DVD+RW High speed	DVD - ReWritable	~ *		>	~
DVD-R	DVD R	~	~	~	~
DVD-R DL (Dual layer)	RDL			>	~
DVD-RW	RW	~	~	~	~
CD-R	COMPACT COMPACT Fecordable			>	~
CD-RW	COMPACT COMPAC			>	~
CD-RW High speed	COMPACT De			>	~
CD-RW ultra speed	COMPACT DO SOLO SOLO SOLO SOLO SOLO SOLO SOLO S			>	~
CD-RW ultra speed plus	COMPACT SCORES OF THE PROPERTY			✓ **	~

^{*} Except when recording from HDD or DVD camcorder with USB interface.

^{**}Maximum ×16 speed

	Disc diameters	Read	Write
DVD	12 cm	✓	→
	8 cm	~	_
CD	12 cm	~	~
	8 cm	~	✓

Note

Only round discs should be used with the DVDirect. Never use odd-shaped discs (stars, hearts, card shape, etc.), as they may damage the DVDirect

Recommended Writable Discs

We strongly recommend that you only use discs for which operation has been guaranteed. You can obtain the latest list of writable discs for which operation with the DVDirect has been guaranteed on the user support web site. See page 82 for details.

Note

You can safely use most disc formats that comply with conventional standards with the DVDirect. However, bear in mind that some commercially available discs do not comply with the quality or performance standards necessary for use with the DVDirect. If you use such discs, the DVDirect may automatically adjust the writing speed, or it may not be able to write at all. Even if discs are successfully written on, they may cause errors when read.

Writable Discs and Compatibility

CD-R discs

Data can be written on this type of disc only once, and once it has been written, it cannot be erased. Music CDs created on this media can be played on standard CD players.

CD-RW discs

Data can be written on and erased from this type of disc repeatedly. Typically, a new CD-RW disc can be rewritten about 1,000 times.

Music CDs created on this media cannot be played on a CD player unless it is CD-RW compatible.

DVD+R, DVD-R, DVD+R DL, and DVD-R DL discs

Data can be written on this type of disc only once, and once it has been written, it cannot be erased.

DVD+R DL (double layer) and DVD-R DL (dual layer) discs have two layers on one side of the disc and have double the capacity conventional one-layer discs.

DVD+RW and DVD-RW discs

Data can be written on or erased from this type of disc repeatedly. Typically, a new DVD+RW or DVD-RW disc can be rewritten about 1.000 times.

About playback/reading compatibility

CD-R and CD-RW discs created with the DVDirect can be read on most CD-ROM drives. However, some older CD-ROM drives cannot read CD-RW discs.

In addition, CD-R music discs created and finalized with the DVDirect can be played on most CD players, but there are some CD players and automobile CD players that do not support or guarantee playback of CD-R discs. Because of the differences in quality and characteristics between various CD-ROM drive, CD player, CD-R disc, and CD-RW disc manufacturers, playback may not be possible depending on the combination.* DVD-Video discs created and finalized with the DVDirect can be played back on most standard DVD players. In addition, DVD-ROM discs created and finalized with the DVDirect can be played back on almost all DVD drives. However, depending on the combination of the type of player/drive and the disc, playback/reading may not be supported or possible. For example, some drives do not support multi-session/multi-border DVD-ROM discs. In such cases, the drive may only read the first session/border of the disc. Further, because of the differences in quality and characteristics between various DVD drive, DVD player, and disc manufacturers, playback/reading may not be possible depending on the combination.

Precautions on Writing/Playing Discs

Write speed and compatible discs

- When writing data to disc at high speeds, you must use the appropriate type of disc.
- Set the writing speed with your writing software. For details on configuring the setting, refer to your writing software documentation.
- Writing speed may be adjusted automatically depending on the quality of the disc used. In addition, writing speed may be limited by the transfer rate of the computer, or the DVDirect may limit writing speed to preserve a good reading quality.

DVD region codes

The playback of DVD-Video (DVD discs) is protected and controlled by a region code setting. To use the DVDirect to play back DVD-Video on your computer, the region code on the DVD, DVDirect, and DVD-Video playback software must be identical.

The region code on the DVDirect can be changed up to five times, including the initial assignment (RPC phase 2^* standard). After changing the region code five times, the setting becomes permanent and can no longer be changed. From that point on, you can only play back DVD-Video whose region code matches the one set on the fifth time.

^{*}Playback compatibility is not under warranty.

* Region Playback Control (RPC) standard.

Do not attempt to make unauthorized changes to the region code. Any problems resulting from doing so are not covered by the warranty.

Hint

- You can change the region code of the DVDirect from it's properties dialog box which is accessible from the Device Manager.
- DVDs created in stand-alone operation have the region code "All."

Playing back DVD-Video

DVD-Video disc playback conditions are sometimes determined by software manufacturers. Because the drive plays back discs as determined by software manufacturers, some drive functions may not always perform as expected. When playing back DVD-Video, refer to the documentation accompanying each disc.

About copy protected DVDs

Most DVD-Video discs on the market are protected against unauthorized copy. Attempting to copy protected discs violates copyright laws.

About copy controlled CDs

The DVDirect is designed to play back discs conforming to the Compact Disc (CD) standard. Audio CDs encoded with copyright protection technology are now marketed by various record companies. Be aware that some of these discs do not conform to the CD standard, and you may not be able to play them back with the DVDirect. When using the DVDirect as an audio CD player, only use audio CDs with the following mark. Some of these discs are encoded in such a way as to prevent sampling and/or copy, while others can only be played back under certain conditions. For details, refer to the documentation for your audio CD.



Note on DualDiscs

A DualDisc is a two sided disc which mates DVD recorded material on one side with digital audio material on the other side.

However, since the audio material side does not conform to the Compact Disc (CD) standard, playback on the DVDirect is not guaranteed.

About Memory Cards

About "Memory Stick"

A "Memory Stick" is a compact, portable IC recording medium. The types of "Memory Stick" that can be used with the DVDirect are listed in the table below. However, proper operation is not guaranteed for all "Memory Stick" functions.

"Memory Stick" type	Read/Write	
Memory Stick	0	
Memory Stick (MagicGate/High- speed data transfer compatible)	O*	
Memory Stick Duo	0	
Memory Stick Duo (MagicGate/ High-speed data transfer compatible)	O*	
MagicGate Memory Stick	O*	
MagicGate Memory Stick Duo	O*	
Memory Stick PRO	O*	
Memory Stick PRO Duo	O*	

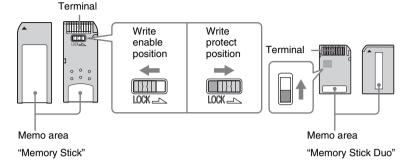
^{*} Reading/writing of data that requires MagicGate functions cannot be performed with the DVDirect.

Note

When formatting a "Memory Stick," use the format function of your digital camera. You can also use "Memory Stick Formatter" on the supplied software disc. To install "Memory Stick Formatter" onto your computer, start the installer, "MSfmtInst240.exe," located in the folder, "MSfmt," on the software disc. To launch "Memory Stick Formatter" after installation, access the "Memory Stick Utility" folder in the program menu of Windows. However, a "Memory Stick" formatted on a computer may not be usable depending on the digital camera. In this case, the "Memory Stick" needs to be formatted again on the digital camera.

Notes on using "Memory Stick"

• If you slide the write-protect switch to LOCK with a fine-tipped object, you cannot record, edit, or delete images.



- The position and shape of the write-protect switch may differ depending on the "Memory Stick" you use.
- Do not remove the "Memory Stick" while reading or writing data.
- Data may be corrupted in the following cases:
 - when the "Memory Stick" is removed or the DVDirect is turned off during a read operation
 - when the "Memory Stick" is used in locations subject to static electricity or electrical noise

About the CompactFlash/SD/xD-Picture Cards

With the multi memory card slot of the DVDirect, you can use a "Memory Stick," SD Card, and xD-Picture Card. With the CompactFlash Card slot of the DVDirect, you can use a CompactFlash Storage Card (Type I/Type II) and CF+Card (Type I/Type II)-compatible CompactFlash Storage Card. Not all the memory card operations are supported.

Notes on use

- You cannot use CompactFlash Cards with a power specification of 3V (3.3V or less) only. Do not insert other types of CompactFlash Card into the DVDirect's insertion slot. The DVDirect may be damaged.
- When using the CompactFlash Card adaptor, the write-protected card may not work properly.
- You cannot read the data of a SD Card subject to copyright protection.

Precautions

Operation and storage conditions

Avoid using or storing the DVDirect in hot or humid locations, or places where it might be subject to severe vibration or direct sunlight.

Transportation

- Please repack the DVDirect in its original carton when shipping by itself.
- If the DVDirect is to be shipped, remove any disc beforehand.

Moisture condensation

Do not expose the DVDirect to sudden temperature changes. Do not use the DVDirect immediately after moving it from a cold to warm location or raising the room temperature suddenly, as condensation may have formed within the DVDirect. If the temperature changes suddenly while using the DVDirect, keep the power on, but stop using it for at least an hour.

Handling discs

• Handle discs only by the edges. Never touch the recording surface.



· Do not affix labels on discs.



 Do not store discs in dusty or humid locations, in direct sunlight, or near heatgenerating devices.

- To protect important data, always keep discs in their cases.
- Do not wipe writable discs using a disc cleaner before recording data. Instead, use a blower to remove any dust.
- Data may not be recorded properly if there are scratches or dust on the unrecorded area of writable discs. Handle discs very carefully.

Handling memory cards

- Do not drop, bend, or submit the memory cards to external shock.
- Do not disassemble or modify the memory cards
- Avoid touching the terminal of a memory card or touching it with a metal object.
- Avoid getting liquids on a memory card or using them in areas subject to high humidity.
- Avoid using or storing a memory card in a location subject to:
 - extremely high temperature, such as the interior of a car, outdoors exposed to direct sunlight, or near a heater.
 - direct sunlight
 - high humidity
 - corrosive substances
 - excessive dust
 - electrostatic or electronic noises
 - magnetic fields
- When storing or carrying a memory card, keep it in its original case to ensure protection of important data.
- Avoid removing a memory card from its slot or turning off the power button while the DVDirect is accessing it, as data may be rendered unreadable.

Support Overview

User Support Web Site

You can find the following information on this web site. The information is periodically updated, so we recommend that you visit regularly.

- · Information about the DVDirect
- Latest system software (firmware)
- · Frequently asked questions
- Troubleshooting guide
- Compatible discs
- Supported camcorders
- · Operating instructions
- Others

Accessing the user support web site

Sony Storage Support web sites (As of August, 2006)

http://sony.storagesupport.com/
* Information in English only.

About the Bundled Software

Detailed information about the supplied software is available on the web site of the software manufacturer.

http://www.nero.com

System Software Updates

We recommend using the DVDirect with the latest system software (also referred to as firmware) as some problems encountered when using the DVDirect can be solved simply by updating the system software. The system software updates are available on the user support web site. Access the site, make sure that there is an update for your DVDirect, and follow the instructions on the screen to proceed with download and installation.

Technical Support

Please visit the web sites on this page for technical support and other information on the DVDirect and the supplied software. When asking questions by telephone or e-mail, please have the following information available:

- Model number: VRD-MC3
- · Serial number
- Date and place of purchase
- Computer maker and model number
- Computer specifications (CPU speed, memory size, OS version, etc.)
- Writing software used (version, etc.)

Local technical support is only available in specified sales regions. The customers in these regions should be provided with a warranty card for this product. For contact information, refer to the warranty card.

Note that technical support conditions may vary according to the locality, and that charges and/ or limited service may apply in some regions.

Sony Global Sites Information (As of June, 2006)

Product purchased in the USA:* http://sony.storagesupport.com/

Product purchased in Canada: http://www.sony.ca/

Product purchased in Australia or New Zealand:

http://www.sony.com.au/

Product purchased in Europe:* http://www.sonyisstorage.com/

Product purchased in Hong Kong:* http://www.sony.com.hk/Electronics/cp

Product purchased in China:*

http://www.sony.com.cn/ed/cp

Product purchased in Singapore:

http://www.sony-asia.com/storage/

Product purchased in Taiwan:*

http://www.sony.com.tw/ds/

Product purchased in Korea:*

http://www.sony.co.kr/cp

Product purchased in Brazil:

http://www.sony.com.br/eletronicos

Product purchased in the Middle East:

http://www.sony-mea.com/

* Local Web sites for computer peripheral products

Specifications

Stand-alone operation

Recordable discs

DVD+R

DVD+R DL

DVD+RW

DVD-R

DVD-RW

Video encoding

MPEG-2

Audio encoding

Dolby Digital (2ch)

Supported photo file (photo backup)

JPEG, DCF2.0 compliant

Printing

PictBridge compliant, printer connection via USB port

DVD/CD rewritable drive

Maximum write speed*/Recordable discs

DVD+R DL 8x, DVD+R 16x, DVD+RW 8x, DVD-R DL 8x, DVD-R 16x, DVD-RW 6x, CD-R 40x, CD-RW 24x

Maximum read speed

DVD-ROM 16x, DVD-Video 6x, CD-ROM 40x, CD-DA 8x

Buffer capacity

2 MB

* Use discs appropriate to each writing speed.

Interface

DV IN1)

4-pin i.LINK (IEEE1394), S100, DVC-SD input

VIDEO input

1 Vp-p/75 ohms

S VIDEO input

Y: 1 Vp-p/75 ohms

C: 0.286 Vp-p/75 ohms

AUDIO input

2 Vrms, Impedance more than

47 kilohms

Memory Card slot

Memory Stick Duo, Memory Stick²⁾, SD Memory Card²⁾, xD-Picture Card²⁾, CompactFlash

USB port

Type A ³⁾, type B Hi-Speed USB (USB 2.0 compliant)

 For DV input from DV or Digital8 camcorders only.

You cannot record video from MICROMV or HDV camcorders (HDV format) and other digital video devices having the i.LINK connector. You cannot use the DVDirect by connecting it to a computer with an i.LINK connector.

- 2) Multi card slot
- 3) For Sony HDD or DVD camcorder (excluding camcorders supporting AVCHD format) connection only.

General

Power

DC 12 V (supplied from the DC IN jack)

Consumption

Max. 2.5 A

AC adaptor*

Type: MPA-AC1 Input: 100 V - 240 V Output: DC 12 V/3 A

* Use an AC power cord appropriate to the region or country of use.

Size

Approx. $204 \times 65 \times 222 \text{ mm (W×H×D)}$

Weight

Approx. 1.75 kg

Operating temperature

5 °C to 35 °C

Design and specifications are subject to change without notice.

Screen displays in this manual may not be the same as those of the product.