Video Recordable DVD Drive

Operating Instructions

VRD-VC30

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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-VC30 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-VC30 is classified as a CLASS 1 LASER PRODUCT.
The CLASS 1 LASER PRODUCT notice is located on the enclosure.

Bei diesem VRD-VC30 handelt es sich um ein Laser-Produkt der Klasse 1.
Das Etikett mit der Aufschrift LASER KLASSE 1 PRODUKT befindet sich auf dem Gehäuse.

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 58. The telephone number below is not for customer service but only for official purposes.

CLASS 1 LASER PRODUCT
LASER KLASSE 1 PRODUKT
LUOKAN 1 LASERLAITE
KLASS 1 LASER APPARAT

Declaration of Conformity
Trade Name: SONY
Model No.: VRD-VC30
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.

Achtung:
Zur Trennung vom Netz ist der Netzsecker aus der Steckdose zu ziehen, welche sich in der Nähe des Gerätes befinden muß und leicht zugänglich 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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• Manufactured under license from Dolby Laboratories.
  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.

☐ Our product warranty is valid only when the supplied accessories (including software) are used in the specified or recommended system environment, in accordance with the documentation, and applies only to this DVDirect. Our customer service and user support apply only under these product warranty conditions.

☐ Please note that we cannot accept responsibility for failure of the computer or other devices, incompatibility with special hardware, operating problems caused by improper installation of software, loss of data, discs or other accidental or incidental damage that might occur when using this product.

☐ The guarantee and user support for this product are valid only within the countries or sales regions specified on the warranty card.

☐ Copyright laws prohibit the copying in part or in full of the supplied software and documentation, or loaning the software, without obtaining permission of the copyright holder.

☐ We cannot accept responsibility for any direct or indirect financial damage or loss of profit that might occur when using the supplied software.

☐ The supplied software can only be used with this product.

☐ Specifications of the supplied software may be changed without notice in the interest of product improvement.

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.
Introducing DVDirect

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.

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**  
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 25
- One Touch Recording (Full Recording)  
  page 28
- Incremental Recording  
  page 32

**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 28
- Consolidation Recording  
  page 35

**Recording videos from DV camcorders**  
Create a DVD using video taken with a DV camcorder.

Available functions:
- One Touch Recording (Full Recording)  
  page 28

**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  
  page 38

* 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 20.
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 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 (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 15).

5 (Eject) button
    Opens and closes the disc tray.

6 DC IN connector
    Connect the supplied AC adaptor here (page 13).
Top panel

1 Display window
Displays input sources, input status, and other information.

2 ↑↓←→ cursor / (Select) button
Selects a function.

3 SET UP button
Switches between the recording mode and Setup mode screens.

4 ◯ (Stop) button
Stops recording.

5 ◯ (Record) button
Starts recording.
Lights red during recording.
**USB connector (Type B)**
Connect the supplied USB cable here when connecting the DVDirect to a computer.

**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.

**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.

**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.

**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.

**DV IN connector (4-pin)**
Connect a DV (i.LINK) cable (not supplied) here when connecting the DVDirect to a digital video camera.
Introducing DVDirect

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 (Power) button again.
Viewing the Display Window

1 Input source
Displays the input source. The DVDirect automatically selects the input source (USB, VIDEO, S-VIDEO, or DV) by detecting the signal coming from the connected camcorder or video device through the input connectors.

The DVDirect selects the input source once the appropriate USB connection settings on a connected HDD or DVD camcorder are configured, or once you start video playback to search for a scene to record from a connected DV camcorder or video device.

Hints
• The selected input source is underlined and a cursor appears in front of it.
• If the correct input source is not selected, you can also manually select it by pressing ↑ or ↓ while [MODE] appears on the left of the display window (recording mode).

2 Recording mode indicator
Appears when the DVDirect is in recording mode.

3 Message display area
Displays various messages and setting items.
The ▲, ▼, ◀, and ▶ icons indicate that the corresponding ↑, ↓, ◀, and ▶ cursor buttons can be pressed to scroll through or select items.

4 Video device status
Displays the current status of the connected video device and DVDirect.
No Signal: Appears when a video signal is not detected from the selected input source.
Recording: Appears when the ○ (Record) button is lit and recording is in progress.
Ready: Appears when the DVDirect is ready to record and the ○ (Record) button can be pressed to start recording onto a disc.

5 Setup mode indicator
Appears when the DVDirect is in Setup mode.
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 (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 (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 [M] or [m] to select an input source to record from, and press the [Enter] (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.
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.

**DVD BURN (One Touch Recording Through HDD Camcorder Control) (page 25)**

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 28)**

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.

![DVD camcorder diagram](image)

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

![DV camcorder diagram](image)

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 32)**
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 35)**

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 38)**

This mode allows you to create a video DVD using the (Record) and (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.
The recording methods available differ as follows, depending on the type of camera or device connected to the DVDirect.

### Supported Camcorders/Video Devices and Recording Modes

<table>
<thead>
<tr>
<th>Type of Device</th>
<th>Interface</th>
<th>DVD BURN</th>
<th>Full Recording</th>
<th>Incremental Recording</th>
<th>Consolida-tion Recording</th>
<th>Normal Video Recording</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sony HDD camcorder1)</td>
<td>USB</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sony DVD camcorder1)</td>
<td>USB</td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DV camcorder2)</td>
<td>DV IN</td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D8 camcorder2)</td>
<td>DV IN</td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HDV camcorder2)3)</td>
<td>DV IN</td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MICROMV camcorder</td>
<td>S VIDEO IN</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>VIDEO IN</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HDD or DVD camcorders from other</td>
<td>S VIDEO IN</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>manufacturers</td>
<td>VIDEO IN</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All camcorders and video devices (analog input)</td>
<td>S VIDEO IN</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>VIDEO IN</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

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

3) Only tapes recorded in DV format are 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.)
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.

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

### 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 still images stored in the camera onto a disc.
- 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 Chapter] setting configured in the Setup mode (page 44).

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

1 Press the \( \odot \) (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 15).
   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).

   ![USB cable (not supplied)](image)

   **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.

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 (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 46).

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 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 recording mode screen 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 \( \text{(Power)} \) button to turn on the DVDirect.
   A message prompting you to insert a disc appears in the display window.

2 Insert a disc (page 15).
   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).

![USB connection diagram]

**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.

Once you touch the button on the camera’s LCD screen, the DVDirect detects the connected camera and selects USB as the input source automatically. [Ready] appears in the display window, indicating that the DVDirect is ready to record.

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 message display area of the display window. For Full Recording, press ← or → until [FULL DUBBING] displays.
The following appears in the DVDirect’s display window:

<table>
<thead>
<tr>
<th>DV camcorder</th>
<th>HDD or DVD camcorder</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type of input</td>
<td></td>
</tr>
</tbody>
</table>

```
USB VIDEO S-VIDEO DV
```

```
FULL DUBBING HQ 01:01:54
```

<table>
<thead>
<tr>
<th>Recording mode</th>
<th>Remaining time</th>
<th>Number of required discs</th>
</tr>
</thead>
<tbody>
<tr>
<td>REC quality</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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.

<table>
<thead>
<tr>
<th>DV camcorder</th>
<th>HDD or DVD camcorder</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type of input</td>
<td></td>
</tr>
</tbody>
</table>

```
USB VIDEO S-VIDEO DV
```

```
Recording
```

<table>
<thead>
<tr>
<th>Recording time</th>
<th>Current disc / Number of required discs</th>
</tr>
</thead>
<tbody>
<tr>
<td>HQ 00:00:30</td>
<td>3% Recorded 1/2 disc</td>
</tr>
</tbody>
</table>

**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 15).
   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).

   ![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.

   ![USB SELECT screen]

   Once you touch the button on the camera’s LCD screen, the DVDirect detects the connected camera and selects USB as the input source automatically. [Ready] appears in the display window, indicating that the DVDirect is ready to record.
6 Press ← or → to switch the recording mode.
Pressing ← or → switches the recording mode displayed in the message display area of the display window. For Incremental Recording, press ← or → until [INCREMENTAL] displays.

![Recording mode and Number of required discs]

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.

![Current disc / Number of required discs]

When all of the new content of the HDD camcorder is recorded, recording automatically stops and the (Record) button dims.

**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.
8 Press the (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 46).

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 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 Incremental Recording
Always use the (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 (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 15).
   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).

![USB cable connection diagram]

   USB SELECT screen appears in the camera’s LCD screen.

5 Touch [Comput. PRINT] on the camera’s LCD screen.

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.
Once you touch the button on the camera’s LCD screen, the DVDirect detects the connected camera and selects USB as the input source automatically. [Ready] appears in the display window, indicating that the DVDirect is ready to record.

**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 message display area of the display window. For Consolidation Recording, press ← or → until [CONSOLIDATE] displays.

7 Press the (Record) button to start recording.

During recording, the progress appears in the display window.

Recording automatically stops and the (Record) button dims.

**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 rpress the (Record) button on the DVDirect.
8 Press the (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 46).  
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 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 15).
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.

![Display Window](image)

**Hint**

The DVDirect detects and selects video input signals automatically when you play back video from the connected video device. If the correct input source is not selected, press ↑ or ↓ to select the correct input manually (page 14).

6 Press the  (Record) button to start recording.

![Record Button](image)

Recording of video from the camera or video device starts. During recording, the progress appears in the display window.

![Recording Window](image)

**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 (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 46).

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.
You can change the various settings for creating discs in the Setup mode. The following explains how to use the Setup mode.

1. Turn on the DVDirect.
   The display window turns on.

2. Press the SET UP button.
   Setting items appear in the display window one at a time.

3. Press ↑ or ↓ to scroll through the setting items.

4. Press ← or → to change a setting, and press the ○ (Select) button.

5. Press the SET UP button when you are finished changing the settings.
   The recording mode screen reappears in the display window.
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.

<table>
<thead>
<tr>
<th>Rec Quality</th>
<th>Default setting</th>
<th>Picture quality</th>
<th>Single layer disc</th>
<th>Double layer disc</th>
</tr>
</thead>
<tbody>
<tr>
<td>HQ</td>
<td>✔</td>
<td>High</td>
<td>1 hour</td>
<td>2 hours</td>
</tr>
<tr>
<td>HSP</td>
<td></td>
<td>1.5 hours</td>
<td>3 hours</td>
<td></td>
</tr>
<tr>
<td>SP</td>
<td></td>
<td>Standard</td>
<td>2 hours</td>
<td>4 hours</td>
</tr>
<tr>
<td>LP</td>
<td></td>
<td>3 hours</td>
<td>6 hours</td>
<td></td>
</tr>
<tr>
<td>SLP</td>
<td></td>
<td>Low</td>
<td>6 hours</td>
<td>12 hours</td>
</tr>
</tbody>
</table>

Stop Timer

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

<table>
<thead>
<tr>
<th>Setting</th>
<th>Default setting</th>
<th>Feature</th>
</tr>
</thead>
<tbody>
<tr>
<td>none</td>
<td>✔</td>
<td>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.</td>
</tr>
</tbody>
</table>

Note

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

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.

<table>
<thead>
<tr>
<th>Setting</th>
<th>Default setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>none</td>
<td></td>
</tr>
<tr>
<td>5 minutes</td>
<td>✓</td>
</tr>
<tr>
<td>10 minutes</td>
<td></td>
</tr>
<tr>
<td>15 minutes</td>
<td></td>
</tr>
</tbody>
</table>

**Finalize**

Finalize a disc that was not finalized when ejected (page 46).

**Hint**

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

1. Insert a disc to finalize, press † to select [Finalize], and press the ○ (Select) button.

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

![Sure? [No] Yes](image)

3 Press ← or → to select [Yes], and press the ○ (Select) button.  
The DVDirect starts finalization.  
The following message appears.

![Finalizing...](image)

**Note**  
It takes a few minutes to complete finalizing for a video DVD.  
When finalization is finished, the following screen appears.

![Complete](image)

4 Press the SET UP button.  
The recording mode screen reappears in the display window.
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 mode (page 42)).

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 later).

**Do not finalize the disc**
- when you want to add videos 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.

<table>
<thead>
<tr>
<th></th>
<th>Finalized disc</th>
<th>Unfinalized disc</th>
</tr>
</thead>
<tbody>
<tr>
<td>Playing on standard DVD players</td>
<td>✓</td>
<td>—</td>
</tr>
<tr>
<td>Reading on DVD drives of computers</td>
<td>✓</td>
<td>—</td>
</tr>
<tr>
<td>Adding videos on the same disc later</td>
<td>—</td>
<td>✓</td>
</tr>
</tbody>
</table>

**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 mode.
You can always add videos on a DVD+RW disc with the DVDirect, and the disc can always be played with a DVD player or the DVD drive of a computer.
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 or chapters.

1 Insert a disc to erase, press \( \downarrow \) to select [Erase], and press the \( \bigcirc \) (Select) button.

The following message appears.

2 Press \( \leftarrow \) or \( \rightarrow \) to select [Yes], and press the \( \bigcirc \) (Select) button.

The following message appears.
3 Press ← or → to select [Yes], and press the ⊗ (Select) button.
The DVDirect starts erasing.
The following message appears.

[Image: Erasing...]

When erasing is finished, the following message appears.

[Image: Complete]

4 Press the SET UP button.
The recording mode screen reappears in the display window.

**System Info**

You can check the system software version of the DVDirect.
Press ↓ to select [System Info], and press the ⊗ (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.

**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 may not be selectable depending on the country or region of use.
Using the DVDirect With a Computer

System Requirements

When using the DVDirect with your computer (PC Mode), the computer system should meet the following 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

* 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

1 Connect the DVDirect to a power source using the AC adaptor (page 13).

2 Connect the supplied USB cable to the DVDirect.
3 Press the (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.
   
   (Image of USB cable connected to 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, **** appears 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 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” icon, or start [Nero StartSmart] from the program menu.

Move the cursor onto each icon or application to display a summary in a pop-up 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.

<table>
<thead>
<tr>
<th>Disc type</th>
<th>Logo</th>
<th>Using without computer</th>
<th>Using with computer</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Write</td>
</tr>
<tr>
<td>DVD+R</td>
<td><img src="image1" alt="Logo" /></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>DVD+R DL (Double layer)</td>
<td><img src="image2" alt="Logo" /></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>DVD+RW</td>
<td><img src="image3" alt="Logo" /></td>
<td>✓*</td>
<td>✓</td>
</tr>
<tr>
<td>DVD+RW High speed</td>
<td><img src="image4" alt="Logo" /></td>
<td>✓*</td>
<td>✓</td>
</tr>
<tr>
<td>DVD-R</td>
<td><img src="image5" alt="Logo" /></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>DVD-R DL (Dual layer)</td>
<td><img src="image6" alt="Logo" /></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>DVD-RW</td>
<td><img src="image7" alt="Logo" /></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>CD-R</td>
<td><img src="image8" alt="Logo" /></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>CD-RW</td>
<td><img src="image9" alt="Logo" /></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>CD-RW High speed</td>
<td><img src="image10" alt="Logo" /></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>CD-RW ultra speed</td>
<td><img src="image11" alt="Logo" /></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>CD-RW ultra speed plus</td>
<td><img src="image12" alt="Logo" /></td>
<td>✓**</td>
<td>✓</td>
</tr>
</tbody>
</table>

* Except when recording from HDD or DVD camcorder with USB interface.
**Maximum ×16 speed
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 58 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.

*Playback compatibility is not under warranty.

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 at the fifth time.
* 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.”

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**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.

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**About copy protected DVDs**

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

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**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.

![Compact Disc Digital Audio](image)

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**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.
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 store discs in dusty or humid locations, in direct sunlight, or near heat-generating 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.
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-VC30
- 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:

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

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

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 IN
- 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
**USB port**
- Type A 2), type B
- Hi-Speed USB (USB 2.0 compliant)

1) For DV input from DV or Digital8 camcorder 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) For Sony HDD or DVD camcorder (excluding camcorders supporting AVCHD format) connection only.

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**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 × 65 × 222 mm (W×H×D)

**Weight**
- Approx. 1.75 kg

**Operating temperature**
- 5 ºC to 35 ºC

Design and specifications are subject to change without notice.

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