

SONY[®]

4-134-523-13(1)

DVD Writer

Operating Instructions
DVDirect Express
VRD-P1

Safety Regulations

WARNING

To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.

To prevent fire or shock hazard, do not place objects filled with liquids, such as vases, on the apparatus.

Do not install this equipment in a confined space such as a bookshelf or similar unit.

CAUTION

The use of optical instruments with this product will increase eye hazard. As the laser beam used in this DVD writer is harmful to eyes, do not attempt to disassemble the cabinet. Refer servicing to qualified personnel only.

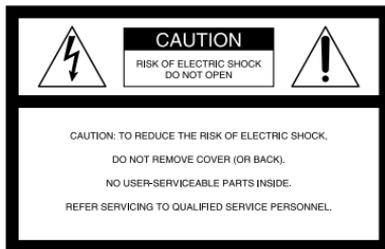
This appliance is classified as a CLASS 1 LASER product. The CLASS 1 LASER PRODUCT MARKING is located on the bottom exterior.

CLASS 1
LASER PRODUCT
LASER KLASSE 1
PRODUKT

LUOKAN 1 LASERLAITE
KLASS 1 LASER APPARAT

This label is located on the laser protective housing inside the enclosure.

CAUTION • CLASS 1 LASER PRODUCT WHEN OPEN. AVOID DIRECT EXPOSURE TO THE BEAM.
ATTENTION • CLASSE 1 LASER PRODUIT QUAND LA COUVERTEUSE EST OUVERTE. ÉVITEZ L'EXPOSITION DIRECTE AU FASCEAU.
VARNING • KLASS 1 LASER APPARAT NÄR OMSÄTTNINGEN ÖPPNAS. UNDGÅ DIREKT UTSÄTTNING FÖR LASERSTRÅLEN.
VARO • KLASS 1 LASER TUOTE KUNNAA OLLA VAARALLINEN, JOS LAITTEEN SUOJA-OSIIN OSAKSI AVOINNA.
VARNING • LASERSTRÅLEN KAN VÄRAN SKADLIG FÖR ÖGONEN. UNDGÅ DIREKT UTSÄTTNING FÖR LASERSTRÅLEN.
ATTENTION • CLASSE 1 LASER PRODUIT QUAND LA COUVERTEUSE EST OUVERTE. ÉVITEZ L'EXPOSITION DIRECTE AU FASCEAU.
VARNING • KLASS 1 LASER APPARAT NÄR OMSÄTTNINGEN ÖPPNAS. UNDGÅ DIREKT UTSÄTTNING FÖR LASERSTRÅLEN.
警告 • 打开时存在激光辐射危险。请勿直视激光束。
警告 • 打开时存在激光辐射危险。请勿直视激光束。



This symbol is intended to alert the user to the presence of uninsulated “dangerous voltage” within the product’s enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

This graphical symbol is located on the bottom of the unit.

Power source is supplied by UL listed equipment.

Important Safety Instructions

- 1) Read these instructions.
- 2) Keep these instructions.
- 3) Heed all warnings.
- 4) Follow all instructions.
- 5) Do not use this apparatus near water.
- 6) Clean only with dry cloth.
- 7) Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- 8) Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- 9) Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- 10) Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- 11) Only use attachments/accessories specified by the manufacturer.
- 12) Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
- 14) Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.



- 13) Unplug this apparatus during lightning storms or when unused for long periods of time.

FCC Compliance Statements

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.

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

The manufacturer of this product is Sony Corporation, 1-7-1 Konan Minato-ku Tokyo, 108-0075 Japan. The Authorized Representative for EMC and product safety is Sony Deutschland GmbH, Hedelfinger Strasse 61, 70327 Stuttgart, Germany. For any service or guarantee matters please refer to the addresses given in separate service or guarantee documents.

The nameplate is located on the bottom of the unit.

For Customers in U.S.A

Owner's Record

The product label is located on the bottom of the unit. Record the serial number in the space provided below. Refer to them whenever you call upon your Sony dealer regarding this product.

Model: VRD-P1

Serial Number: _____

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Also refer to the operating instructions of your Handycam®

This unit can be used only by connecting to a Handycam®. For details on operation, also refer to the operating instructions of your Handycam®.

In this document, “Handycam®” refers to a Sony camcorder.

Read this first

Supplied items

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

- Operating instructions (this document)
- Warranty card

Notes on use

Operation and storage conditions

- Do not apply shock or vibration to the unit. The unit may not operate properly.
- Do not use the unit in very loud areas. The unit may not operate properly.
- When connecting the unit's USB cable to the Handycam[®], be sure to insert the connector plug in the correct way. Pushing the plug forcibly into the terminal may damage the terminal and may result in a malfunction of the unit or the Handycam[®].

On recording

- Television programs, movies, video tapes, and other materials may be copyrighted. Unauthorized recording of such materials may be contrary to the copyright laws.

Main features

By connecting the unit to your Handycam®, you can easily record videos to a disc without using a computer (One Touch Disc Burn). The created disc can be played by connecting the unit to the Handycam® (One Touch Play). Also, you can play videos on a TV by connecting the Handycam® to the TV.

In addition, operating the unit from the Handycam®, you can enjoy some useful functions. The functions differ according to the Handycam®. For details, refer to the operating instructions of your Handycam®.

Compatible device

- This unit is designed exclusively for use with a Handycam®. Connect the unit to a Handycam® compatible with the DVDirect Express. For details on compatible Handycam® models, refer to the following address:
<http://www.sony.com/DVDirect/Compatibility>
- You cannot use this unit with an incompatible Handycam® or video camera other than Sony.
- You cannot use this unit for copying or playback of a disc by connecting to a computer; neither can it be used as an external disc drive.

Supported discs

The following writable new or unused 12 cm discs are compatible with this unit.

| Disc type | Logo | Writing speed |
|-----------|---|---------------|
| DVD+R |  | Up to 16x |
| DVD-R |  | Up to 16x |

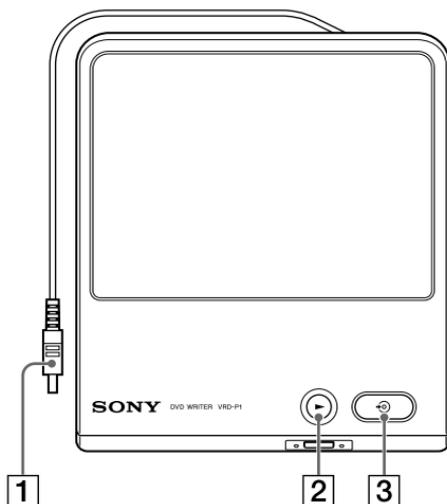
- Double/dual layer discs and 8cm discs are not supported.
- DVD+RW and DVD-RW discs are not supported.

Notes on using discs

- Only new or unused discs can be used for this unit.
- The quality of commercially made recordable discs can vary. Sub-standard discs may not record normally.
- Some recorded discs may not be playable due to recording quality or physical condition of the disc, or the characteristics of the playback device.
- You cannot play back discs recorded on other video devices, or commercially prerecorded discs.

Parts and controls

Top panel



1 USB cable (page 10, 11)

2 (play) button (page 11)

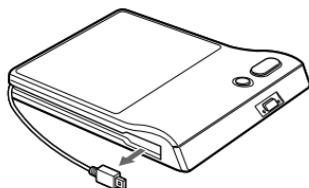
3 (DISC BURN) button (page 10)

About the USB cable

Pulling out the USB cable

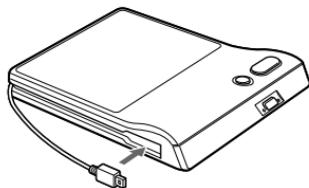
Pull out the connector of the USB cable from the side groove of the unit.

If you have any difficulty doing this, push the tip of the connector so that the connector protrudes from the unit, then pull out.

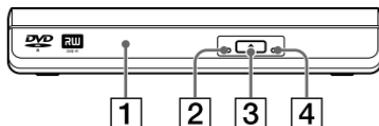


Storing the USB cable

Store the USB cable in the side groove of the unit.



Front side



1 Disc tray

2 ACCESS lamp

3 ▲ (eject) button

4 Emergency eject hole

If you cannot open the disc tray with the ▲ (eject) button, insert a pin or straightened paper clip into this hole to open the disc tray.

About the power supply

The power of the unit is supplied from the connected Handycam[®]. Make sure to connect the Handycam[®] to a power outlet using an AC adapter. You do not need to connect the unit to a power outlet.

Inserting a disc

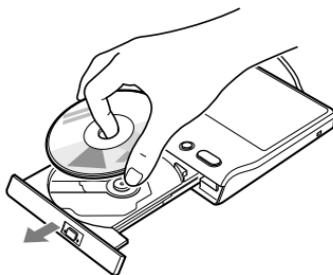
The unit can open its disc tray only when it is connected to a Handycam[®].

1 Press the ▲ (eject) button to open the disc tray.

The disc tray opens only halfway. Open it fully by hand.

2 Place the disc on the disc tray, recording side down.

The disc should click into place.



Do not touch the recording surface of the disc.

3 Push the disc tray to close.

Push the disc tray until it clicks.

Recording

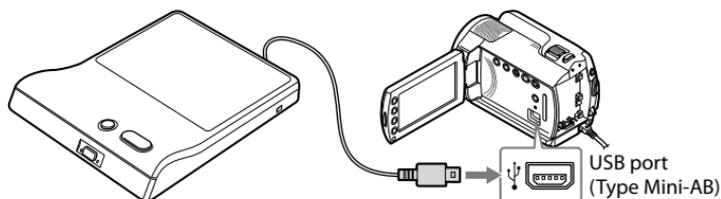
Connecting this unit to the Handycam[®], you can record videos to the disc by simply pressing the  (DISC BURN) button.

1 Turn on the Handycam[®].

Make sure to connect the Handycam[®] to a power outlet using an AC adapter.

If you do not use an AC adapter for the Handycam[®], the unit does not work when it is connected to the Handycam[®].

2 Connect the unit to the USB port of the Handycam[®].



You cannot use a USB extension cable.

3 Insert a new or unused disc.

For details, see “Inserting a disc” (page 9).

4 Press the (DISC BURN) button.

The videos which were newly recorded by the Handycam[®] and were not copied yet are recorded to the disc.

If the video content exceeds a single disc, repeat steps 3 and 4.

You cannot add videos to a disc already recorded on by this unit.

Operating from a Handycam[®]

Operating from a Handycam[®], several convenient recording functions are available. For instance, you can select scenes to record. For details, refer to the operating instructions of your Handycam[®].

Checking your recording

When you record videos to a disc by this unit, make sure that the recording was successful by playing the disc before erasing the video from the Handycam[®].

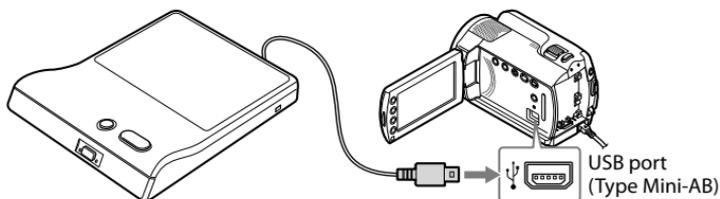
Playback

You can use this unit to play back created discs, viewing them either in the display of a connected Handycam® or on a TV. To view on a TV, you need to connect a Handycam® to the TV. For details about connecting to a TV, refer to the operating instructions of your Handycam®.

1 Turn on the Handycam®.

Make sure to connect the Handycam® to a power outlet using an AC adapter.
If you do not use an AC adapter for the Handycam®, the unit will not work when it is connected to the Handycam®.

2 Connect the unit to the USB port of the Handycam®.



You cannot use a USB extension cable.

3 Insert the disc recorded by this unit.

For details, see "Inserting a disc" (page 9).

4 Press the (play) button.

Playback starts from the beginning of the disc.

Operating from a Handycam®

You can also play videos by operating the Handycam® itself. For details, refer to the operating instructions of your Handycam®.

About playing the created disc on other devices

With a High Definition Handycam®, you can create High Definition discs (AVCHD format). For details on playing a disc on other devices, refer to page 13.

Video Lengths and Recording Time

Disc space (recordable time) available for recording videos

Available recording time of video on a disc depends on the Handycam® REC mode setting.

| High Definition (HD) | | Standard Definition (SD) | |
|----------------------|---------------------------|--------------------------|---------------------------|
| REC mode | Recordable time* | REC mode | Recordable time* |
| HD FH | approx. 30 minutes | STD HQ/HQ | approx. 1 hour |
| HD HQ | approx. 55 minutes | SP | approx. 1 hour 30 minutes |
| HD SP | approx. 1 hour 10 minutes | LP | approx. 3 hours |
| HD LP | approx. 1 hour 35 minutes | | |

* Single disc

Hints

- When down-converting to SD (Standard Definition) with an appropriate Handycam® model, you can record up to approx. 2 hours 40 minutes on a disc. (Picture quality may depend on the recording time.)
- Available REC modes vary between Handycam® models.

Time required for recording

When recording video, the length of time required for recording depends on the model of Handycam®, the REC mode setting used to shoot the video and the number of scenes the video contains. Typically, more time is required to record videos onto a disc if the video has been recorded at a higher image quality (bit rate) setting. Down-converting to SD (Standard Definition) video takes more than the actual video time.

| | |
|--|------------------------------------|
| Recording HD (High Definition) video or SD (Standard Definition) video as is | approx. 20 minutes ~ 1 hour |
| Down-converting to SD (Standard Definition) video | approx. 1 hour 5 minutes ~ 3 hours |

Notes

- You cannot record HD (High Definition) video taken in REC mode at a bit rate exceeding 18Mbps, such as in [HD FX] mode (for example, High Definition Handycam®) in AVCHD format.
- If the time of a scene exceeds the disc's capacity, recording will not be possible. In this case, divide the scene using the edit function of the Handycam®.

About HD (High Definition) disc compatibility

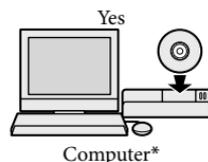
An HD (High Definition) disc cannot be played on an AVCHD incompatible DVD player or recorder.

Do not insert an HD (High Definition) disc in an AVCHD incompatible DVD player or recorder. The DVD player or recorder may fail to eject the disc and may erase its contents.

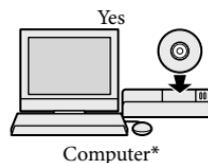
An HD (High Definition) disc can be played on an AVCHD compatible Blu-ray Disc player/recorder, Playstation 3® or other compatible device.

Type of created disc and compatible devices

HD (High Definition) disc (containing High Definition videos)



SD (Standard Definition) disc (containing Standard Definition videos)



* Install the AVCHD compatible application on your computer beforehand. Even in the case of a computer environment that satisfies system requirements, there may be noise in video playback, frames may be dropped, or sound may be lost intermittently. (This does not depend on the quality of the created disc.)

? Troubleshooting

If you experience any of the following difficulties while using the unit, use this troubleshooting guide to help remedy the problem before requesting repairs. Refer also to the operating instructions of your Handycam®. If the problem persists, contact your Sony dealer.

The Handycam® is connected, but the unit does not work.

- Make sure that your Handycam® is supported by this unit (page 7).
- Make sure that the Handycam® is connected to a power outlet by its AC adapter.
- Make sure that the Handycam® is configured correctly and the USB cable is connected properly to the Handycam®.
- Disconnect the USB cable from the Handycam®. Turn off the Handycam®, and then turn it on again. Then connect the USB cable to the Handycam® again.

Video cannot be recorded to the disc.

- Video recorded using the  (DISC BURN) button on the Handycam® cannot be recorded using the  (DISC BURN) button again. (The same disc cannot be created again using the  (DISC BURN) button.) To create copies of the same disc, select the [DISC BURN OPTION] setting on the Handycam®.
- Make sure that the disc is compatible with this unit (page 7).
- Make sure that the disc is new or unused. A disc that has already been recorded on or formatted by another device cannot be used.
- Make sure that the disc has no dust, dirt or fingerprints on the recording side.
- Make sure that the disc is placed on the disc tray with its recording side down.
- Vibration of the unit may cause a malfunction of the Handycam®. Do not place the Handycam® on the unit.

A disc cannot be played.

- You can play back only discs created by this unit. You cannot play back discs recorded on other video devices, or commercially pre-recorded discs.
- Make sure that the disc has no dust, dirt or fingerprints on the playback side.
- Make sure that the disc is placed on the disc tray with its playback side down.

The disc cannot be ejected.

The (eject) button does not work.

- Disconnect the USB cable from the Handycam®, turn off the power of the Handycam®, then turn it on again, reconnect the USB cable to the Handycam®, and then press the  (eject) button. If this does not work, open the disc tray using the emergency eject hole (page 9).
- The unit can open its disc tray only when it is connected to the Handycam®. Make sure that the unit is connected to the Handycam® properly.
- Make sure that the Handycam® is connected to a power outlet using an AC adapter.
- The disc cannot be ejected while recording or playing a disc.

Precautions

On use and care

Do not use or store the unit and accessories in the following locations:

- Anywhere extremely hot, cold or humid. Never leave exposed to temperatures above 60 °C, such as under direct sunlight, near heaters or in a car parked in the sun. They may malfunction or become deformed.
- Near strong magnetic fields or mechanical vibration. The unit may malfunction.
- Near strong radio waves or radiation. The unit may not be able to record properly.
- On a sandy beach or anywhere dusty. If sand or dust gets in the unit, malfunction or irreparable damage may result.

On handling the casing

- If the casing is soiled, clean it with a soft cloth lightly moistened with water, and then wipe the casing with a dry soft cloth.
- Avoid the following to avoid damage to the finish:
 - Chemicals such as thinner, benzene, alcohol, chemical cloths, repellent, insecticide and sunscreen
 - Handling the unit with the above substances on your hands
 - Leaving the casing in contact with rubber or vinyl objects for a long period of time

Transportation

Please repack the unit in its original carton when shipping.

If the unit is to be shipped, remove any disc beforehand.

Condensation

Do not expose the unit to sudden temperature changes. Do not use the unit immediately after moving it from a cold to warm location or raising the room temperature suddenly, as condensation may have formed within the unit. If the temperature changes suddenly while using the unit, turn off the power and stop use for at least one hour.

When moving the unit between temperature extremes, place it in an air-tight plastic bag. Allow at least one hour for the unit to adapt to the ambient temperature before use.

Handling discs

- Handle the discs only by the edges. Never touch the playback/recording surface.
- Do not affix labels on discs.
- 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.
- Clean the disc with a cleaning cloth. Wipe the disc from the center out.
- Data may not be recorded properly if there are scratches or dust on writable discs. Handle discs very carefully.

Specifications

Recording

Supported devices

Handycam® supported by the DVDirect Express

For details about Handycam® supported by the unit, see the following address:

<http://www.sony.com/DVDirect/Compatibility>

Recordable discs

DVD+R, DVD-R 12cm discs

Playback

Playable discs

Discs created with VRD-P1 (Other commercial or recorded discs are not supported.)

General

Consumption: 7 W (max.)

Operating temperature: 5 °C to 35 °C

Storage temperature: -20 °C to + 60 °C

Size: Approx. 143 × 162.5 × 25 mm (W×D×H)
including the projecting parts

Weight: Approx. 400 g

Design and specifications are subject to change without notice.

- “Handycam” and **HANDYCAM** are registered trademarks of Sony Corporation.
- “DVDirect” and DVDirect logo are trademarks of Sony Corporation.

Other system and product names used herein are registered trademarks or trademarks of their respective manufacturers, although the TM and [®] marks are not used in the text.

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