

**SONY®**

# ***DVD/CD Rewritable Drive***

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## **Operating Instructions**



Ultra Speed



DVD+R DL



DVD+ReWritable

High Speed



R/RW



R A M™

***DRX-S70U-W***

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# Table of Contents

Compliance Statements ..... 3

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## **Introduction**

Package Contents ..... 4  
Features ..... 4  
System Requirements ..... 5  
Part Names and Functions ..... 6

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## **Setup**

Placing the Drive ..... 8  
Connection through USB ..... 9  
    Before Connection ..... 9  
    Installation ..... 9  
    Disconnection ..... 10

---

## **Operation**

Using the Drive ..... 11  
    Supplied Software ..... 11  
    Using Generic Software with  
    the Drive ..... 12  
Compatible Discs ..... 13  
    Recommended Writable Discs ... 15  
Precautions on Writing/  
Playing Discs ..... 18  
Maximizing Performance ..... 20  
    Reaching the Highest Possible  
    Data Transfer Rate ..... 20  
    Updating the Firmware ..... 20

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## **Miscellaneous**

Precautions for Use .....21  
Support Overview .....22  
    User Support Web Site .....22  
    Update the Drive Firmware .....22  
Product and Support  
Information .....22

- **Power-Burn** is a trademark of Sony Corporation.
- c o n f o r m e d
- Pentium is a registered trademark of Intel Corporation.
- Microsoft, Windows, and Windows Vista are registered trademarks of Microsoft Corporation.
- Other system and product names used herein are registered trademarks or trademarks of their respective manufacturers, although the <sup>TM</sup> and ® marks are not used in the text.

- 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 DVD/CD rewritable drive. 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.

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# 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.

## ► Introduction

# Package Contents

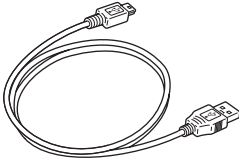
Please verify that the package contains the following when unpacking.

If any of these items appear to be missing and/or damaged, please contact your dealer.

- Drive



- USB cable



- Quick start guide
- Product Information
- AC power cord
- AC power adapter (HDAC-M1)
- Software disc
- Warranty card

### Note

Make sure that you back up the supplied software disc on another disc because the software disc is not distributed independently.

# Features

This product offers the following features.

- An external DVD/CD rewritable drive with Hi-Speed USB (USB 2.0) interface for computers.
- The drive can write to DVD+R Double Layer and DVD-R Dual Layer discs.
- The drive has a maximum 8× writing capability for high speed DVD+R and DVD-R discs.
- The drive can write to DVD-RAM discs.
- Features the **Power-Burn** CONFIRMED technology to prevent buffer underrun errors.

# System Requirements

The drive should be used with a system that meets the following requirements<sup>1)</sup>.

- PC/AT-compatible computer
- CPU: Pentium III 1.0 GHz or higher (Pentium 4, 2.0 GHz or higher recommended)
- 256 MB RAM or more (512 MB RAM for Windows Vista)
- 1 GB free hard disk space (10 GB for DVD creation)
- Operating system:  
Windows XP Home Edition SP3/  
Windows XP Professional SP3 (referred to as Windows XP SP3), or Windows Vista Home Basic SP1/Windows Vista Home Premium SP1/Windows Vista Business SP1/Windows Vista Ultimate SP1
- Hi-Speed USB (USB 2.0) port

<sup>1)</sup> 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.

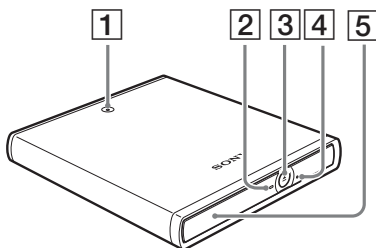
## Notes

- You must use discs that are compatible with the write speed you have selected.
- Writing speed may automatically be adjusted depending on the disc, specified disc speed, or disc conditions such as weight imbalance and eccentricity.
- When connected to a product that does not support Hi-Speed USB, there will be limitations on maximum transfer rate.

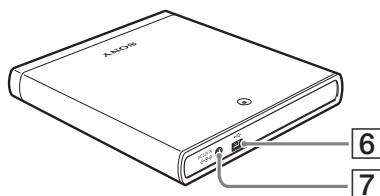
# Part Names and Functions

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## Front Panel



## Rear Panel



**1 Power indicator**

Indicates the power status.

**Lit:** Power on

**Off:** Power off

**2 Busy indicator**

Indicates the drive status.

**Lit:** The drive is Writing,  
Formatting, Reading data,  
Erasing, Load & Eject.

**Blinking:** The drive is Playing back an  
audio CD.

**Off:** The drive is in a state other  
than those outlined above.

**3 Eject button**

Press to open the disc tray.

**4 Emergency eject hole**

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

**5 Disc tray**

Insert discs here, label side up.

**Hint**

When you insert a disc, use your fingers to  
press around the center of the disc until it is  
firmly seated in the drive.

When you remove a disc, lift up on the edge  
of the disc with your thumb while supporting  
the center of the disc with your forefinger.

**6 USB Connector**

Used with a USB cable to connect the  
drive to a computer.

**7 DC IN Jack**

Connect the supplied AC power cord to  
the AC power adapter. Connect this  
assembly to the DC IN jack, and then  
connect the whole to the AC outlet.

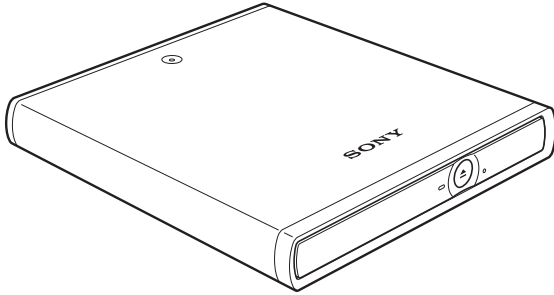
**Note**

Be sure to use the supplied AC power adapter.

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## Placing the Drive

Place the drive horizontally on a stable surface.



**Note**

This drive cannot be used in the vertical orientation.

# Connection through USB

## Note

This product including bundled software functions properly under Windows Vista, and Windows XP.  
It may not fulfill all functional and performance specification under other OS (operating system) environment.

## Before Connection

- Refer to the list of contents to verify that the package contents are complete.
- If your computer is not equipped with a USB connector, install a USB interface card.
- Have the manual for your computer handy.

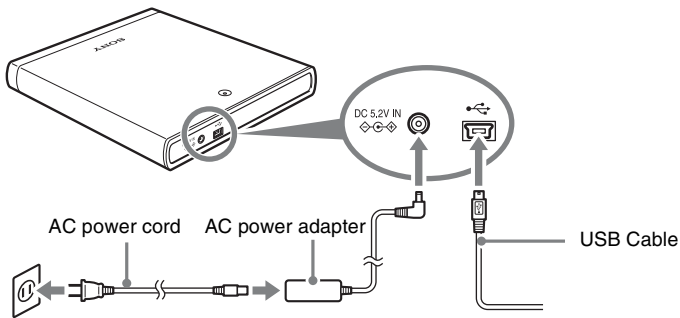
## Installation

These instructions apply to most commonly used computers.

**1** Start your computer.

**2** Connect the necessary cables.

- Connect the USB cable to the drive's USB connector.
- Connect the supplied AC power cord to the supplied AC power adapter. Then connect the AC power adapter to the drive's DC IN jack, and connect the power cord to the power outlet.



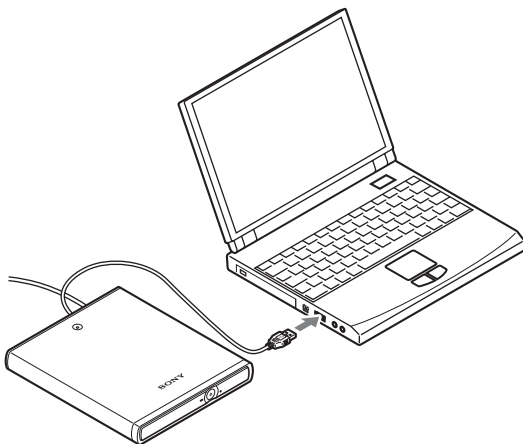
## Notes

- This drive does not have a power switch. The drive turns on when connected to a power supply with the AC power adapter.
- Using the wrong type of cable with this product can cause it to malfunction. Follow the instructions when connecting the product.

### 3 Connect the other end of the USB cable to your computer.

#### Note



Connect the drive to a USB connector on the computer.





### 4 Insert the supplied software disc into the DVD/CD rewritable drive and install the software.

## Disconnection

The disconnection procedure varies depending on your OS.

When your computer detects the drive successfully,  (or  depending on your OS) appears on the Windows task bar. When you want to disconnect the drive, you must first stop it using this icon.

- 1 Click  () on the task bar, and click the drive to be disconnected on the shortcut menu.
- 2 Operate following the message displayed, 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.

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# Using the Drive

Use the supplied software to read and write to CDs and DVDs. Refer to the documentation of each software for details about their operation.

## Supplied Software

The supplied software disc contains the following software.

### **Nero StartSmart Essentials**

Nero StartSmart serves as the command center to quickly start all the software of the Nero suite.

### **Nero Express Essentials**

Nero Express is a disc writing application that allows you to create CDs and DVDs through a simple step-by-step process.

### **Nero Vision Essentials SE\***

DVD-Video and video CD authoring software.

### **Nero ShowTime Essentials\***

DVD-Video and video CD playback software.

### **Nero CoverDesigner Essentials**

CD and DVD cover and label creation software.

### **Nero MediaHome Essentials**

This software allows you to share video and audio files among several computers on a network connection and to play back such files seamlessly from any of the connected computers.

### **Nero Toolkit**

The utilities of Nero Toolkit provide information about the system and more. Nero DiscSpeed tests the speed of the existing drives. Nero DriveSpeed adjusts the write speed to minimize drive noise. Nero InfoTool provides the main characteristics of drives, the discs they contain, and the installed software.

\* This software is a trial version with a 30-day usage restriction. You can lift this usage restriction by purchasing the additional DVD Video Multichannel Plug-in.

## Using Generic Software with the Drive

Using software other than the supplied software (such as generic software, shareware, or freeware) to write data to disc with this drive is not under warranty and Sony offers no customer service if problems arise from using such software.

Make sure that the supplied writing software and generic writing software do not coexist on your computer. Taking appropriate steps to avoid this situation, especially in the case of packet writing software<sup>1)</sup> or format utility<sup>2)</sup> will help prevent erratic operation of the software and/or computer.

If the generic software you are using does not detect the drive correctly, visit the Web site of the software manufacturer and update the software, as this may solve the problem.


<sup>1)</sup> Such as Roxio's Drag-to-Disc, BHA's B's CLIP, and Sonic's DLA.

<sup>2)</sup> Such as BHA's DVD-RAM Driver and Panasonic's DVD Form.


# Compatible Discs

The following discs are compatible with the drive.

## DVD











Disc types	Logo	Read	Write
DVD+R		✓	✓
DVD+R DL (Double layer)		✓	✓
DVD+RW		✓	✓
DVD+RW (High Speed)		✓	✓
DVD-R		✓	✓
DVD-R DL (Dual Layer)		✓	✓
DVD-RW <sup>1)</sup>		✓	✓
DVD-RAM <sup>2) 3)</sup>		✓	✓
DVD-ROM		✓	—
DVD-Video		✓	—

<sup>1)</sup> This drive is compatible with the DVD-RW disc displaying “” mark.

<sup>2)</sup> This drive can read DVD-RAM discs displaying the “” mark. However, the write operation is not supported.

<sup>3)</sup> Use a non-cartridge-type disc or a cartridge from which the disc can be ejected.

## CD

Disc types	Logo	Read	Write
CD-R		✓	✓
CD-RW		✓	✓
CD-RW (High Speed)		✓	✓
CD-RW (Ultra Speed)		✓	✓
CD-ROM		✓	—
CD-DA (audio only)		✓	—
CD Extra		✓	—
Video CD		✓	—
CD TEXT		✓	—
Photo CD		✓	—

Disc diameters		Read	Write
DVD	12 cm	✓	✓
	8 cm	✓	—
CD	12 cm	✓	✓
	8 cm	✓	✓

### Notes

- Only round discs should be used with this drive. Attempting to read odd-shaped discs (stars, hearts, card shape, etc.) may damage the drive.
- Operation is not guaranteed when writing to or playing back 99 minute discs.

## Recommended Writable Discs

We 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 this drive has been guaranteed at the user support Web site address (see page 22 for details).

### User support Web site

Insert the supplied software disc into the drive, and in the [Menu Selection] screen, click [User Support Web Page]. You can also directly type the user support Web site address (see page 22 for details) in the address box of your Web browser.

#### Note

You can safely use most disc formats that comply to the appropriate standards with this drive. However, bear in mind that some generic discs do not comply to quality or performance standards necessary for safe use with this drive. If you use such discs, the drive may automatically adjust the writing speed, writing errors may occur, and discs that have been written to may generate reading errors, etc.

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## Writable CDs and compatibility

The drive can write to CD-R and CD-RW discs, when used with writing software.

To play back (read) these CD-R and CD-RW discs on other CD-ROM drives, make settings on the writing software according to the purpose of the data.

### CD-R Discs

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

### CD-RW Discs

Data can be written to 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 CD-RW disc media cannot be played on a CD player unless it is designed to be CD-RW compatible.

### High Speed CD-RW Discs

The drive can write to High Speed CD-RW disc media. Data written on High Speed CD-RW discs can be read by standard CD-ROM drives.

#### Note

Drives that do not have the High Speed CD-RW logo cannot be used to write to High Speed CD-RW discs. When writing or adding to such discs with a drive other than this one, make sure that the drive has the High Speed CD-RW logo. Also, always set the writing speed to that specified for the particular High Speed CD-RW disc media being used.

### Ultra Speed CD-RW Discs

The drive can write to Ultra Speed CD-RW disc media. Data written on Ultra Speed CD-RW discs can be read by standard CD-ROM drives.

**Note**

Drives that do not have the Ultra Speed CD-RW logo cannot be used to write to Ultra Speed CD-RW discs. When writing or adding to such discs with a drive other than this one, make sure that the drive has the Ultra Speed CD-RW logo. Also, always set the writing speed to that specified for the particular Ultra Speed CD-RW disc media being used.

**Writing Speed**

When writing to CD-R and CD-RW discs, set the writing speed to that specified on the disc. Change the writing speed on the writing software.

**About playback/reading compatibility in CDs**

CD-R and CD-RW discs created with the drive 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 drive can be played on most CD players, however, there are some CD players and automobile CD players that do not guarantee playback of CD-R discs.

Also, CD-R music discs created with the drive can be played back on many standard CD players. However, depending on the type of your player, playback of CD-R and CD-RW discs may not be supported.

Further, 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.

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**Writable DVDs and compatibility**

The drive can write to DVD+R DL, DVD+R, DVD-R DL, and DVD-R discs, as well as to DVD+RW, DVD-RW and DVD-RAM discs, when used with writing software. The playback (read) compatibility of data written by this drive depends on the capabilities of the DVD-ROM drives or the DVD players and on the logical format selected when the disc is recorded (written).

**DVD+R DL/DVD+R/DVD-R DL/DVD-R Discs**

Data can be written to this type of disc only once. Once it has been written, it cannot be erased. Playback (read) compatibility of DVD+R and DVD-R discs depends on the capability of the DVD-ROM drive and the DVD player and on the logical format selected when it is recorded (written).

**DVD+RW and DVD-RW Discs**

Data can be repeatedly written to or erased from this type of disc. Typically, a new DVD+RW or DVD-RW disc can be rewritten about 1,000 times.

Playback (read) compatibility of DVD+RW and DVD-RW discs depends on the capability of the DVD-ROM drive and the DVD player and on the logical format selected when it is recorded (written).

**DVD-RAM Discs**

Data can be repeatedly written to or erased from this type of disc. Typically, a new DVD-RAM disc can be rewritten about 100,000 times. To play back (or read the data on) a DVD-RAM disc, a DVD-ROM drive or DVD player that supports DVD-RAM discs is required.

**About playback/reading compatibility in DVDs**

DVD+R DL/DVD+R/DVD-R DL/DVD-R discs, as well as DVD+RW and DVD-RW discs created and finalized with the drive can be played back on almost all DVD-ROM drives. However depending on the type of your drive, playback of DVD+R DL, DVD+RW, DVD-R DL, and DVD-RW discs may not be supported.

In addition, some drives do not support multi-session (DVD+R DL/DVD+R/DVD+RW) or multi-border (DVD-R DL/DVD-R/DVD-RW). In these cases, you can only play back the disc in single-session (DVD+R DL/DVD+R/DVD+RW) or single-border (DVD-R DL/DVD-R/DVD-RW).

Also, DVD-Video discs created with the drive can be played back on many standard DVD players. However depending on the type of your player, playback of DVD+RW and DVD-RW discs may not be supported.

Playback of DVD-RAM discs is only supported for DVD-RAM compatible DVD drives and DVD players.

Further, because of the differences in quality and characteristics between various DVD-ROM drive, DVD player, DVD+R DL disc, DVD+R disc, DVD+RW disc, DVD-R DL disc, DVD-R disc, DVD-RW disc and DVD-RAM disc manufacturers, playback may not be possible depending on the combination. (Playback compatibility is not under warranty.)

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# Precautions on Writing/Playing Discs

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## Write speed and compatible discs

- When writing data to disc at high speeds, you must use the appropriate type of disc.
- Configure the writing speed through your writing software. For details about the setting procedures, refer to your writing software documentation.
- When writing data to disc, the drive may adjust the writing speed to the quality of the disc in the drive. Depending on the transfer rate, there may also be limitations on writing speeds.

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## DVD region codes

The playback of DVD-Video (DVD discs) is protected and controlled by a region code setting. For the drive to play back DVD-Video, the region code on the DVD disc, the region code of the drive, and the region code of the DVD-Video software must all match.

With this drive, the region code can be set up to five times, including the initial assignment (RPC phase 2<sup>1)</sup> standard). After setting the region code five times, the setting becomes permanent and can no longer be changed. From this point on, you are only able to play back DVD-Video whose region code matches the one set the fifth time.

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 drive on it's properties dialog box accessible from the Device Manager.

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## Precautions when 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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## DVD copy protection technology

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

<sup>1)</sup> Region Playback Control (RPC) standard.

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## Copy controlled CDs

This product 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 drive. When using the drive 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 of your audio CD.



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## Attention Regarding DualDisc Software

A DualDisc is a two sided disc product 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 this product is not guaranteed.

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# Maximizing Performance

## Reaching the Highest Possible Data Transfer Rate

Make sure that you use High Speed discs for which this operation has been certified by Sony. For the latest information about these discs, visit the user support Web site. When using discs other than those mentioned above, the drive may limit writing speed to preserve a good reading quality.

## Updating the Firmware

We recommend using the drive with the latest firmware as some problems encountered when using the drive can be solved simply by updating the drive firmware. Firmware updates are available on the user support Web site. see page 22 for details.

### Hint

The firmware is the built-in software that makes the drive work.

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## Precautions for Use

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### Operation and storage conditions

Avoid using or storing the drive in a hot or humid location, or where it might be subject to severe vibration or direct sunlight.

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### On transportation

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

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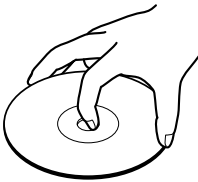
### Avoiding condensation problems

When you transfer this appliance from a cold place a hot place abruptly, you may get water drops on the surface and inside of the appliance. This is called condensation. If condensation occurs, turn off the power and leave the appliance until the condensation disappears; after the condensation disappears, you can use the appliance again. If you use the appliance during condensation, this may cause the appliance to malfunction.

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### 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, dirty or humid locations, in direct sunlight, or near heat-generating devices.
- To protect important data, always keep discs in their protective cases.
- Do not wipe writable discs to clean them before recording data. Instead, use a blower to remove any dust.
- Data may not record properly if a scratch or dust is present on the unrecorded area of writable discs. Use special care when handling.

# Support Overview

If you have problems with the drive, or are unsure of a procedure or some other details, please contact your Sony customer support center.

## 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 drive
- Information about the software supplied with the drive
- Latest firmware
- Frequently asked questions
- Troubleshooting guide
- Certified compatible computers
- Certified compatible discs
- Operating instructions
- Et cetera

## Accessing the user support Web site

Insert the supplied software disc into the drive, and in the [Menu Selection] screen, click [User Support Web Page]. You can also directly type the user support Web site address (see Product and Support Information for details) in the address box of your Web browser.

## Update the Drive Firmware

Some problems encountered when using the drive can be solved simply by updating the drive firmware. Firmware updates are available on the user support Web site. Access the site, make sure that there is an update for your firmware, and follow the instructions on the screen to proceed with download and installation.

## Product and Support Information

### Sony Global Sites Information (As of February, 2009)

#### 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.sony-optiarc.eu/>

#### Product purchased in Hong Kong:\*

<http://www.sony.com.hk/Electronics/cp>

#### Product purchased in China:\*

<http://www.sony.com.cn/products/ed/cp/ds/>

#### Product purchased in Singapore:\*

<http://www.sony-asia.com/microsite/cp/>

#### 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

#### About the Bundled Writing Software

Detailed information about the supplied writing software is available on the Web sites of the software manufacturers and software distributors. (Accessible from the links in each software application)

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## Technical Support

Please consult the above sources before calling with questions about using this product, or with technical questions about the drive or the supplied software. If using telephone or e-mail support, please have the following information available:

- Model number: DRX-S70U-W
- 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 the 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.**

<http://www.sony.net/>

Sony Corporation