

# ***Multi-Card Reader/Writer***

---

## **Operating Instructions**

Before operating the unit, please read this document thoroughly, and retain it for future reference.



**MEMORY STICK**<sup>™</sup>

## ***MRW62E-S2***

---

# Safety regulations

## **WARNING**

**Keep the unit away from children. If any part of the unit is swallowed, promptly see a doctor.**

**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.**

## **Notice for the customer in the countries applying EU Directives**

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.

## **NOTICE TO USERS**

Documentation ©2006 Sony Corporation. All rights reserved. This manual described herein, in whole or in part, may not be reproduced, translated to any machine-readable form without prior written approval from Sony Corporation.

IN NO EVENT SHALL SONY CORPORATION BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES, WHETHER BASED ON TORT, CONTRACT, OR OTHERWISE, ARISING OUT OF OR IN CONNECTION WITH THIS MANUAL, THE DEVICE DRIVERS OR OTHER INFORMATION CONTAINED HEREIN OR THE USE THEREOF.

Sony Corporation reserves the right to make any modification to this manual or the information contained herein at any time without notice.

SONY CORPORATION IS NOT RESPONSIBLE FOR ANY DAMAGE TO OR LOSS OF ANY PROGRAMS, DATA, OR OTHER INFORMATION STORED ON ANY MEDIA.

Copyright law prohibits unauthorized use of any recorded audio/video for any other purpose than personal enjoyment. Please be warned that the “Memory Stick” containing images and data protected by copyright shall be strictly used within copyright law.

## **Trademarks**

-  “Memory Stick,” “Memory Stick Duo,” “MagicGate Memory Stick,” “Memory Stick PRO,” “Memory Stick PRO Duo,” “Memory Stick Micro,” and “M2” are registered trademarks or trademarks of Sony.
- Microsoft<sup>®</sup>, Windows<sup>®</sup>, and the Windows logo are trademarks or registered trademarks of Microsoft Corporation in the United States of America and/or other countries.
- Macintosh<sup>®</sup> and Mac OS<sup>®</sup> are registered trademarks of Apple Inc. in the United States of America and/or other countries.
- Other system names, product names, and company names appearing in this manual are trademarks or registered trademarks of their respective holders, even though not indicated by the ® or <sup>TM</sup> marks.

**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.

# Table of contents

- Safety regulations ..... 2
- Overview ..... 4
- Package Contents ..... 4
- System Requirements ..... 4
- Supported Media ..... 5
- Parts and Functions ..... 6
- Connecting the Reader/Writer to a Computer ..... 7
- Using the Reader/Writer ..... 9
  - Inserting a Memory Card ..... 9
  - Reading and Writing Data on a Memory Card ..... 10
  - Removing a Memory Card ..... 11
  - Reading the Access Indicator ..... 12
- Disconnecting the Reader/Writer From the Computer ..... 13
- Installing the Drive Letter Recognition Software (Windows Only) ..... 14
- About Memory Stick ..... 15
- Usage Notes ..... 16
- Troubleshooting ..... 18
- Specifications ..... 19
- Technical Support ..... 19
- End User License Agreement ..... 20

**Before you use the reader/writer for the first time, you are encouraged to install the Drive Letter Recognition Software on your computer.**

Before connecting the reader/writer, see page 14 for details about the Drive Letter Recognition Software installation procedure. Also see the end user license agreement on page 20.

---

## Overview

The MRW62E-S2 (hereafter referred to as the “reader/writer”) has the following features:

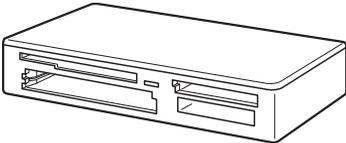
- Quick and simple data transfer – easily transfer images from camera to PC
- Compatible with “Memory Stick,” “Memory Stick PRO,” “Memory Stick Duo,” CompactFlash, Microdrive, xD-Picture Card, SmartMedia, MultiMediaCard, SD Memory Card
- Quick to Connect – Hot-pluggable USB-powered design

---

## Package Contents

When you unpack the box, make sure that it contains all the accessories listed below. If anything is missing or damaged, contact your retailer.

- MRW62E-S2 Multi-Card Reader/Writer



- USB cable
- Read Me First

---

## System Requirements

The reader/writer requires the following minimum system configuration:

- OS
  - Windows® 7
  - Windows Vista®
  - Windows® XP Home or Professional
  - Windows® 2000 Professional (Service Pack 4 or later)
  - Windows® Me
  - Mac OS X 10.1.2 or later

This product works with the standard drivers in Windows.

# Supported Media

The reader/writer supports the following media:

## “Memory Stick” media

- “Memory Stick” (without MagicGate) \*1
- “MagicGate Memory Stick” \*1\*2
- “Memory Stick” (with MagicGate) \*1\*2\*3
- “Memory Stick Duo” (without MagicGate) \*1
- “MagicGate Memory Stick Duo” \*1\*2
- “Memory Stick Duo” (with MagicGate) \*1\*2\*3
- “Memory Stick PRO” \*2\*3
- “Memory Stick PRO Duo” \*2\*3
- “Memory Stick PRO-HG Duo” \*2\*3
- “Memory Stick Micro” (“M2”) \*2\*3\*4\*5

\*1 “MagicGate” is the general name of a copyright protection technology developed by Sony.

\*2 Recording or playback of MagicGate data that uses MagicGate technology is not supported.

\*3 4-bit parallel data transfer is supported. It, however, varies depending on each medium how long it takes to read/write data.

\*4 “M2” is an abbreviation of “Memory Stick Micro.” In this document, hereinafter, the abbreviation “M2,” is used.

\*5 With adaptor (not supplied) only.

## SD memory cards

- SD Memory Card \*6
- SDHC™ Memory Card \*6
- miniSD™ Card \*6\*7
- miniSDHC™ Card \*6\*7
- microSD™ Card \*6\*7
- microSDHC™ Card \*6\*7

\*6 Recording or playback of data that uses SD technology is not supported.

\*7 With adaptor (not supplied) only.

## Other memory cards

- MultiMediaCard \*8
- RS-MMC \*8
- CompactFlash®
- Microdrive® \*9
- SmartMedia™
- xD-Picture Card™

\*8 MMCplus and MMCmobile are supported.

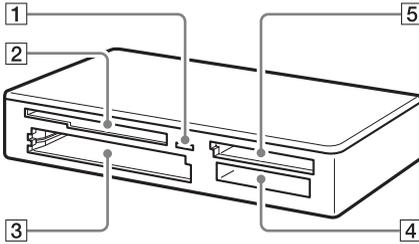
\*9 The Microdrive requires more power than other memory cards. When using a Microdrive, remove other memory cards; otherwise an error may occur due to a shortage of power.

## Notes

- Not all memory cards are guaranteed to work. Operation is not assured if non-supported memory cards are used.
- The capacity of a file to be recorded/played back is smaller than 4 GB per file according to the specifications of the file system incorporated in “Memory Stick.”
- Although operation check of this product has been performed with up to 8 GB “Memory Stick,” please note that the operation is not guaranteed for every type of “Memory Stick.”
- In this manual, all types of media listed in “Supported Media” are generically called memory cards.
- I/O cards that are not memory cards, such as GPS cards, are not supported.
- MultiMediaCards and SD Memory Cards use the same slot, so you cannot use them at the same time.
- The “Memory Stick” media all use the same slot, so you cannot use them at the same time.
- Only DOS format is supported. Memory cards in other formats are not supported.

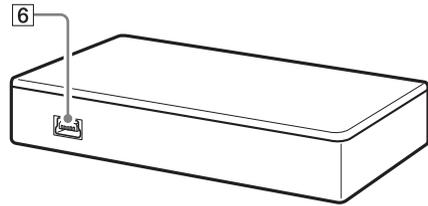
# Parts and Functions

## Front



- 1 Access Indicator**  
This indicator is always lit. The indicator blinks when the reader/writer accesses data on a memory card.
- 2 SmartMedia/xD-Picture Card Slot**  
Insert either a SmartMedia memory card or xD-Picture Card here.
- 3 CompactFlash/Microdrive Slot**  
Insert either a CompactFlash or Microdrive memory card here.  
Remove all other memory cards before using a Microdrive, because of its large power consumption.
- 4 “Memory Stick” Slot**  
Insert a “Memory Stick” media here.  
When inserting a “Memory Stick Micro” (“M2”), use an adaptor (not supplied).
- 5 MultiMediaCard/SD Memory Card Slot**  
Insert either a MultiMediaCard or an SD Memory Card here.  
When inserting a miniSD Card, miniSDHC Card, microSD Card or microSDHC Card, use an adaptor (not supplied).

## Rear

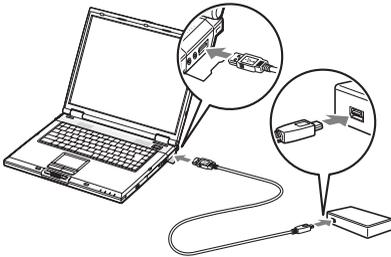


- 6 USB Port (mini B)**  
Connect to a computer using the supplied USB cable.

# Connecting the Reader/Writer to a Computer

Simply connect the reader/writer to a computer using the supplied USB cable.

- 1 Start the computer.**
- 2 Connect the smaller connector of the USB cable to the USB port on the rear of the reader/writer.**
- 3 Connect the larger connector of the USB cable to the USB port on the computer.**



The computer recognizes the reader/writer as a removable disk, and the reader/writer is ready for use.

## Notes

- Do not connect to a computer via a USB hub.
- Depending on the computer and the status of its operating system, the reader/writer may not operate or may become unstable. If this occurs, refer to the “Troubleshooting” section.
- After disconnecting the USB cable, wait at least 5 seconds before reconnecting it. (Otherwise, the reader/writer may not be recognized.)
- When two or more USB devices are connected to one computer, the reader/writer is not guaranteed to operate simultaneously with some types of USB device.
- You cannot access two or more memory cards simultaneously on a single computer by connecting additional memory card devices. Remove any memory cards from the reader/writer or turn off the other devices.

## ■ For Windows

- On some computers, a message may appear asking you to insert the operating system disc. When this happens, follow the computer’s instructions.
- On some computers, the “HI-SPEED USB Device Plugged into non-HI-SPEED USB Hub” message may appear, indicating that a hi-speed USB device has been connected to a USB port which does not support hi-speed USB. If your computer has multiple USB ports, try connecting to a different port. Otherwise, close the message and continue using the reader/writer with the current port.



- **Follow the steps below to turn off the write cache setting for removable disk drives. Leaving this setting on may cause the reader/writer to malfunction.**

– On Windows 7:

Open the following items in the following order: [Start] button- [Control Panel] - [System and Security] - [Device Manager] (Click on the Device Manager link located under the System heading) - [Disk drives] - [Sony Card\_R/W -MS USB Device]. On the [Policies] tab in the properties dialogbox that appears, make sure that [Quick removal (default)] is selected. In the same way, select [Quick removal (default)] on the policies] tab of the [Sony Card\_R/W -CF USB Device], [Sony Card\_R/W -SD USB Device], and [Sony Card\_R/W -SM/xD USB Device].

– On Windows Vista:

Open the following items in the following order: [Start] button - [Control Panel] - [System and Maintenance] - [Device Manager] button (When clicking on [Device Manager] button, the User Account Control window will appear, click on [Continue]) - [Disk drives] - [Sony Card\_R/W -MS USB Device]. On the [Policies] tab in the properties dialog box that appears, make sure that [Optimize for quick removal] is selected. In the same way, select [Optimize for quick removal] on the [Policies] tab of the [Sony Card\_R/W -CF USB Device], [Sony Card\_R/W -SD USB Device] and [Sony Card\_R/W -SM/xD USB Device].

–On Windows XP:

Open the following items in the following order: [Start] button – [Control Panel] – [Performance and Maintenance] – [System] – [Hardware] tab – [Device Manager] button – [Disk drives] – [Sony Card\_R/W -MS USB Device]. On the [Policies] tab in the properties dialog box that appears, make sure that [Optimize for quick removal] is selected.

In the same way, select [Optimize for quick removal] on the [Policies] tab of the [Sony Card\_R/W -CF USB Device], [Sony Card\_R/W -SD USB Device] and [Sony Card\_R/W -SM/xD USB Device].

– On Windows 2000:

Open the following items in the following order: [Start] button – [Settings] – [Control Panel] – [System] – [Hardware] tab – [Device Manager] button – [Disk drives] – [Sony Card\_R/W -MS USB Device]. On the [Disk Properties] tab in the properties dialog box that appears, make sure the [Write Cache enabled] check box is not selected. In the same way, clear the [Write Cache enabled] check box on the [Disk Properties] tab of the [Sony Card\_R/W -CF USB Device], [Sony Card\_R/W -SD USB Device] and [Sony Card\_R/W -SM/xD USB Device].

– On Windows Me:

Open the following items in the following order: [Start] button – [Settings] – [Control Panel] – [System] – [Performance] tab – [File System] button. On the [Removable Disk] tab in the properties dialog box that appears, make sure the [Enable write-behind caching on all removable disk drives.] check box is not selected.

# Using the Reader/Writer

## Caution

Do not touch and remove a memory card from the reader/writer while the access indicator is blinking. The data stored on the memory card may be damaged.

## Inserting a Memory Card

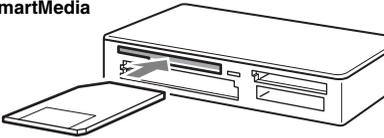
Insert a memory card into the corresponding slot on the reader/writer. When inserting a card, push it in as far as it can go.

## Notes

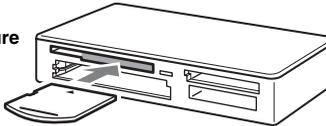
- Each card slot is designed so a card can only be inserted in the correct direction.
- Insert only one memory card into the corresponding slot. Do not insert multiple cards at the same time.
- When inserting a “Memory Stick Micro” (“M2”) or a miniSD Card, miniSDHC Card, microSD Card or microSDHC Card, use an appropriate adaptor (not supplied).
- Do not insert a card upside down.
- Forcibly inserting the card may damage the card or the slot.
- If a memory card is inserted incorrectly, you may not be able to remove it. In the unlikely event that a memory card becomes stuck in the reader/writer, consult your local Sony dealer.

Insert one of the following cards in this slot:

- SmartMedia



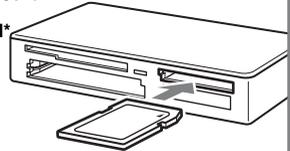
- xD-Picture Card\*



\* Push at the right side.

Insert one of the following cards in this slot:

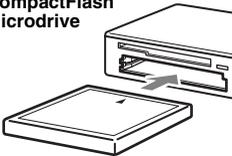
- MultiMediaCard
- RS-MMC
- SD Memory Card
- SDHC Memory Card
- miniSD Card\*
- miniSDHC Card\*
- microSD Card\*
- microSDHC Card\*



\* Use an appropriate adaptor (not supplied).

Insert one of the following cards in this slot:

- CompactFlash
- Microdrive



Insert one of the following cards in this slot:

- “Memory Stick” (without MagicGate)
- “MagicGate Memory Stick”
- “Memory Stick” (with MagicGate)
- “Memory Stick Duo” (without MagicGate)
- “MagicGate Memory Stick Duo”
- “Memory Stick Duo” (with MagicGate)
- “Memory Stick PRO”
- “Memory Stick PRO Duo”
- “Memory Stick PRO-HG Duo”
- “Memory Stick Micro” (“M2”)\*

\* Use an appropriate adaptor (not supplied).

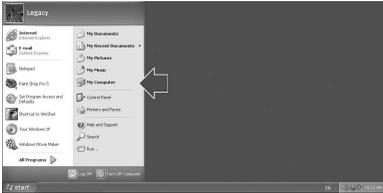
# Reading and Writing Data on a Memory Card

## ■ For Windows

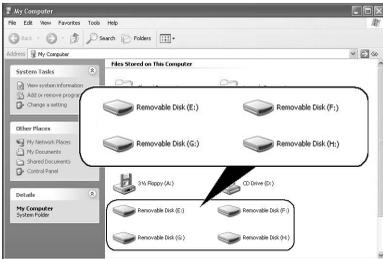
The following explanation is illustrated with screens from Windows XP.

The screens may differ for other versions of Windows.

### 1 Open [My Computer].



### 2 Make sure the removable disk icons appear in [My Computer].



Drive letters for the removable disk icons are assigned in alphabetical order to the CompactFlash/Microdrive Slot, SmartMedia/xD-Picture Card Slot, MultiMediaCard/SD Memory Card Slot, and “Memory Stick” Slot.

For example, if the computer has an A:, C:, and D: drive before connecting the reader/writer, the drive letters will be assigned as follows when the reader/writer is connected:

Computer drive name	Corresponding memory card
Removable Disk (E:)	CompactFlash Microdrive
Removable Disk (F:)	SmartMedia xD-Picture Card
Removable Disk (G:)	MultiMediaCard SD Memory Card
Removable Disk (H:)	“Memory Stick” media

### 3 Insert a memory card into the corresponding slot.

When a volume label has been assigned to the memory card, the volume label will be displayed together with the removable disk icon.

### 4 Use the removable disk icon to read or write data on the memory card.

If the following message appears, the memory card has not been recognized correctly, even though the access indicator lights up. Remove the card and insert it again.



## Notes

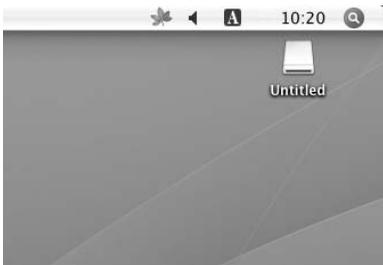
- Use the removable disk icon for the memory card you are using.
- It may take a while for the removable disk icons to appear.
- If the removable disk icons do not appear, follow the steps under “Disconnecting the Reader/Writer From the Computer” on page 13 to disconnect the reader/writer, and then wait at least 5 seconds before reconnecting it.  
If the [Safely Remove Hardware] icon mentioned in step 1 of “Disconnecting the Reader/Writer From the Computer” is not displayed, skip the rest of the procedure and immediately disconnect the reader/writer.
- Depending on your operating system and the type of memory card you are using, the reader/writer drives may be recognized as “Local Disks” instead of “Removable Disks,” but this will not affect their operation.

## ■ For Macintosh

### 1 Insert a memory card into the corresponding slot.

The removable disk icon appears on the desktop.

When a volume label is assigned to the memory card, the volume label will be displayed together with the removable disk icon.



### 2 Use the removable disk icon to read or write data on the memory card.

## Removing a Memory Card

### Note

Be sure to follow the steps described below. Sony accepts no responsibility for any damage or loss that results from removing a memory card without following the procedure described below.

## ■ For Windows

- 1 Make sure the access indicator is not blinking.
- 2 Open [My Computer].
- 3 Right-click the removable disk icon, and select [Eject].
- 4 Pull the memory card straight out.

## ■ For Macintosh

- 1 Close the files saved on the memory card, and exit any currently running applications.
- 2 Make sure the access indicator is not blinking.
- 3 Drag the removable disk icon to the [Trash].

Alternatively, select the removable disk icon, access the [File] menu on the menu bar, and select [Eject “Untitled”]\*.

\* Depending on the memory card, a different label than “Untitled” may be shown.

- 4 Pull the memory card straight out.

## Reading the Access Indicator

The access indicator changes according to the status of the reader/writer, as follows:

Reader/writer status	Access indicator
Connected to a computer	Lights up
Reading/writing data	Blinks*

\* Depending on your operating environment and the memory card you are using, the access indicator may blink so quickly it appears to be lit. Be careful not to misread the access indicator.

### Note

If data cannot be read from or written to the memory card while the access indicator is lit, make sure the card is fully inserted into the slot.

# Disconnecting the Reader/Writer From the Computer

## Notes

- Do not disconnect the reader/writer from the computer while the access indicator is blinking. Doing so may cause damage to the data stored on the memory card.
- Be sure to follow the steps described below. Sony accepts no responsibility for any damage or loss that results from disconnecting the reader/writer without following the procedure described below.

## ■ For Windows

The following explanation is illustrated with screens from Windows XP, and assumes that drive names E:, F:, G:, and H: are assigned to the four slots of the reader/writer. The screens may differ for other versions of Windows.

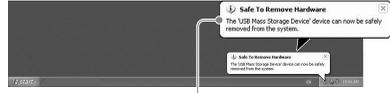
- 1 Click [Safely Remove Hardware] on the task tray, located at the lower right corner of the screen.**



- 2 Click [Safely remove USB Mass Storage Device - Drives (E:, F:, G:, H:)].**



- 3 Make sure the message "The 'USB Mass Storage Device' device can now be safely removed from the system." appears, and then disconnect the reader/writer.**



The 'USB Mass Storage Device' device can now be safely removed from the system.

## Note

The above steps are not required when removing a memory card from the reader/writer.

## ■ For Macintosh

- 1 Close the files saved on the memory card, and exit any currently running applications.**
- 2 Make sure the access indicator is not blinking.**
- 3 Drag the removable disk icon to the [Trash].**

Alternatively, select the removable disk icon, access the [File] menu on the menu bar, and select [Eject "Untitled"]\*.

\* Depending on the memory card, a different label than "Untitled" may be shown.

If no memory card is inserted into the reader/writer, skip this step.

- 4 Disconnect the reader/writer from the computer.**

# Installing the Drive Letter Recognition Software (Windows Only)

Before starting installation, read the “End User License Agreement.”

- 1 Download the installer file from the web site. The installer file can be downloaded from the following URL <http://support.sony-europe.com>**
- 2 Close all programs that are still running.**
- 3 Double click the installer file. (For windows Vista, User Account Control window will appear, click on [Allow].)**
- 4 When the following window appears, the installing is completed, and click [OK].**



## Notes on Icons

Once the Drive Letter Recognition Software is installed, the Removable Disk icons and their descriptions change.

For example, if the computer has an A:, C:, and D: drive before connecting the reader/writer, the drive letters will be assigned as follows when the reader/writer is connected:

Computer drive name	Corresponding memory card
 CF/Microdrive (E:)	CompactFlash Microdrive
 SmartMedia (F:)	SmartMedia xD-Picture Card
 MMC/SD (G:)	MultiMediaCard SD Memory Card
 Memory Stick (H:)	“Memory Stick” media

## Notes

- The use of this software is intended only for this reader/writer. Other reader/writers may not work with this software.
- Uninstall any similar software before installation to ensure that the software functions properly.

---

# About Memory Stick

---

## What is “Memory Stick”?

“Memory Stick” is a compact-size IC recording medium with a large capacity. It has been designed not only for exchanging/sharing digital data among “Memory Stick” compliant products, but also for serving as an insertable/removable external storage medium that can save data.

---

## Notes on “Memory Stick”

### On formatting (initialization)

- If you format media in which data has been already written, all the data will be erased. Please be cautious not to mistakenly erase any important data.
- Please make sure to format (initialize) a medium with the formatter of a “Memory Stick” compliant product. If it is initialized with Windows Explorer, a FORMAT ERROR occurs, and data on the medium can no longer be used by this product.

### About the size of “Memory Stick”

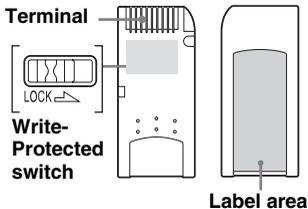
- This product has a slot that can take both standard size and Duo size. All the products with such a slot as this are equipped with a system which automatically measures the size of an inserted medium. That’s why both standard-size “Memory Stick” and smaller “Memory Stick Duo” can be used on this product without any Memory Stick Duo Adaptor.
- Do not insert multiple “Memory Sticks” at the same time. It might cause damage to the product.

- When you use “Memory Stick Duo” on this product, please make sure to insert it in the right direction.
- “Memory Stick Duo” should be kept away from small children to prevent them from accidentally swallowing it.
- When you use “Memory Stick Micro” on this product, please make sure to attach the medium into M2 adaptor. If you attempt to insert “Memory Stick Micro” without attaching to M2 adaptor, there is a possibility that it cannot be pulled out.

# Usage Notes

## “Memory Stick” Media

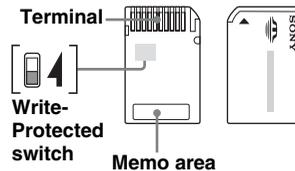
### Notes on using “Memory Stick” media



- Do not remove “Memory Stick” while data is being read or written.
- Data may be damaged if:
  - You remove “Memory Stick” or disconnect the USB cable while data is being read or written.
  - You use “Memory Stick” in a place where it is susceptible to static electricity or electric noise.
- You can keep backup copies of important data on a “Memory Stick.”
- Avoid touching the metal terminals on the “Memory Stick” to prevent damage from static discharge.
- Do not subject the “Memory Stick” to excessive stress or shock.
- Do not disassemble or modify “Memory Stick.”
- Keep “Memory Stick” and other media away from water, excessive heat and humidity, and from corrosive elements.
- Do not use or keep “Memory Stick” under an unfavorable condition as below:
  - Extremely hot place (such as in a parked car with windows closed in summer, a spot under direct sunlight, or near an electrical appliance that radiates heat).
  - Humid place.
  - Place near corrosive substances.

- If you set Write-Protected switch “LOCK,” data cannot be recorded, edited, or erased.
- Do not stick anything other than the supplied labels on the label area of “Memory Stick.”
- Stick a label precisely within the label area. Make sure that the label does not go beyond the area.
- Carry and keep “Memory Stick” in the supplied case.

### Notes on using “Memory Stick Duo/ Memory Stick PRO Duo”



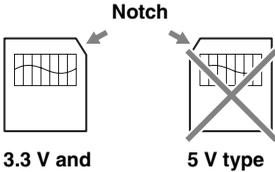
- When you use “Memory Stick Duo/ Memory Stick PRO Duo” without Write-Protected switch, be careful not to edit or erase important data by mistake.
- When you use “Memory Stick Duo/ Memory Stick PRO Duo” with Write-Protected switch, data cannot be recorded, edited, or erased by “LOCK” the switch.
- Use an object with a sharp tip to move the Write-Protected switch.
- Do not press on the memo area strongly when writing.
- Carry and keep “Memory Stick” in the supplied case.

---

## SmartMedia Cards

### Supported SmartMedia cards

The reader/writer supports 3.3-volt and 3-volt SmartMedia cards, but not the older 5-volt type.



3.3 V and  
3 V type

5 V type

#### Note

Do not insert a 5-volt SmartMedia card into the reader/writer forcibly.

### SmartMedia card handling

If the gold contact area of a SmartMedia card is dirty, a read error may occur. Keep the contact area clean. Otherwise do not touch the gold contact area. Do not twist or warp the card.

Protect the card from static electricity.

### SmartMedia card with ID

The reader/writer does not support the ID information on SmartMedia cards, but allows any SmartMedia card with an ID to be used as regular media.

---

## Other Points to Note

### Media formatting

Do not format (initialize) memory cards with a computer. If you format a memory card with a computer, devices such as digital cameras may not be able to use it due to differences in format type (FAT size, cluster size, hard disk type, or super floppy disk type). If you use a digital camera, format memory cards with your camera, instead.

### Restrictions on DOS mode

In Windows, the reader/writer does not operate in DOS mode.

To use the reader/writer, start up Windows.

## Standby

The reader/writer supports standby functions based on the PC2000 standard, which may not cover the standby function of all computers. Disable the standby function of your computer if it causes any problems. While the computer is in standby, do not insert or remove any media.

## Antivirus software

If you have memory-resident antivirus software on your computer, the computer may hang or become unusually slow. In this case, set your antivirus software so it does not scan the media in the reader/writer.

## Do not attempt to dismantle, repair, or alter the reader/writer yourself

Do not, under any circumstances, attempt to dismantle, repair, or alter the reader/writer yourself. You may not only permanently damage the reader/writer and/or your computer, but may also cause fire or personal injury through electrical shock.

## Operating and storage environments

- Do not place the reader/writer close to heat sources or in direct sunlight; in dusty, dirty, or humid locations; under precipitation such as rain; or leave it in a vehicle with the windows closed.
- If the reader/writer interferes with the reception of radio or television signals, move the reader/writer away from the radio or television.
- When using the reader/writer, do not wrap it in cloth, sheets, or covers as this may cause a malfunction or fire.

# Troubleshooting

Before consulting your Sony representative, verify the following.

If the problem still persists, consult your local Sony dealer.

<b>Problem</b>	<b>Solution</b>
The computer does not detect the reader/writer.	→ Your computer and the reader/writer may not be properly connected. Disconnect the reader/writer from the computer and reconnect it.
The removable disk icon does not appear.	→ Your computer and the reader/writer may not be properly connected. See “Connecting the Reader/Writer to a Computer” and make sure the connection is correct. → A USB device other than the reader/writer is connected to the USB port on the computer.
The memory card cannot be accessed with Windows Explorer or My Computer.	→ No memory card is inserted. Insert a memory card into the proper slot.
The computer does not recognize the memory card.	→ The memory card is not fully inserted. Insert the card completely. → The memory card is not inserted straight. Remove the card and insert it again.
The read/write speed is slow.	→ The speed may vary depending on the environment or the memory card being used. This is not a malfunction.
With Windows 2000 or Windows Me, the drive icon of the unit does not appear in the “My Computer” window.	→ Make sure that the “USB Mass Storage Device” is not displayed as  in the “Device Manager.” If it is, delete it, disconnect the USB cable from your computer, and then reconnect it.

---

# Specifications

## USB transfer rate

Full-speed (12 Mbps)

High-speed (480 Mbps)

This high-speed transfer rate is a theoretical value for the USB standard.

Actual performance is dependent on the device.

## Power requirements

4.75 V to 5.25 V DC

## Current consumption

Max. 500 mA \*

## Access indicator

Always lit

Blinks on access

## Operating environment

Temperature: 5 °C to 40 °C

(41 °F to 104 °F)

Humidity: 30% to 80% RH

## Storage environment

Temperature: -30 °C to + 60 °C

(-22 °F to +140 °F)

Humidity: No condensation

## Dimensions (W × H × D)

Approx. 86 × 15.7 × 50 mm

(3 3/8 × 5/8 × 2 inches)

(excluding protrusions)

## Mass

Approx. 55 g (1.9oz.)

\* Except when using Microdrive

---

# Technical Support

- For customers in Europe

Refer to “Sony at your service” of the EUROPEAN GUARANTEE

INFORMATION DOCUMENT or check on-line under

□ <http://www.sony-europe.com/>

---

# End User License Agreement

## IMPORTANT NOTICE

The following “END USER LICENSE AGREEMENT” applies to the Drive Letter Recognition Software provided by Sony. Please read the following “END USER LICENSE AGREEMENT” before installing. By installing the Drive Letter Recognition Software, you agree to the “END USER LICENSE AGREEMENT.”

## END USER LICENSE AGREEMENT

This is a legal agreement between you (hereafter referred to as the User) and Sony Corporation (hereafter referred to as Sony) pertaining to the right to use the software (hereafter referred to as the PROGRAM). Using the PROGRAM indicates your acceptance of these terms and conclusion of the Agreement between the User and Sony.

1. Copyright and all other rights relating to the PROGRAM and documents accompanying the PROGRAM are owned by Sony or the original rightful person or organization (hereafter referred to as the original rightful person) granting Sony the right to use the PROGRAM. The User is granted no rights other than those specified in this agreement.
2. Sony grants the User the non-exclusive, indivisible and nontransferable right to use the PROGRAM for the purpose of using the Sony product Multi-Card Reader/Writer for which the PROGRAM designates.
3. The User may not transfer the Right of Use described above to any third party nor allow for any third party to use the PROGRAM unless the User obtains the advance written permission of Sony.

4. The User may not export or transport the PROGRAM or documents accompanying the PROGRAM from the country where the User installed the PROGRAM to any other country.
5. The User may not (i) update, add to, or modify nor (ii) deassemble or de-compile the PROGRAM either in whole or in part.
6. **THE PROGRAM IS PROVIDED “AS IS” WITHOUT EXPRESS OR IMPLIED WARRANTIES, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE OR NON-DEFECTIVENESS.**
7. If any dispute relating to infringement of copyright, patent, or other intangible property rights arises between the User and a third party as a consequence of use of the PROGRAM, the User shall settle the dispute at the User’s own expense, and shall make no claim against Sony or the original rightful person.
8. Sony may terminate your license upon notice for failure to comply with any of these Terms. Any such termination shall not affect any payments, any compensation for damage. Upon termination, you must immediately destroy the Software together with all copies in any form.
9. This Agreement has several non-English language versions for the reference purpose only. In the event of any discrepancy between the English language version and any other language version, the English language version shall prevail.

