

## Warranty and after-service

### Warranty

#### After-service

##### When the Reader/Writer does not operate properly

Check the Reader/Writer and your computer environment following the instructions in "Troubleshooting" in the column on the right.

##### Service during the warranty period

We will handle problems based on the warranty. For details, see "Warranty."

##### Service after the warranty period

If the problem is repairable, we will repair it upon request at the owner's expense. Contact the Reader/Writer call center.

##### Period of availability of parts

Even after production of this unit has ended, we will continue to offer parts indispensable for maintaining the function of the Contactless IC Card Reader/Writer for at least seven years. We can repair the Reader/Writer during this period.

## Specifications

Dimensions	Approx. 90×63×17 mm (width/height/depth)
Mass	Approx. 75 g (3 oz.)
Interface	USB 1.1 standard
Cable length	Approx. 80 cm
Operating temperature	5°C to 35°C (41°F to 95°F)
Operating humidity	10% to 90% (no condensation)
Storage temperature	-20°C to +60°C (-4°F to +140°F)
Storage humidity	10% to 90% (no condensation)
Power requirement	DC 5 V (supplied from the USB cable)
Power consumption	Max. 100 mA (during operation)

Design and specifications are subject to change without notice.

## Precautions

### Safety

- Do not use this unit in places subject to inordinate amounts of dampness, dust, steam, or soot. This may cause a fire or give an electric shock.
- Do not disassemble or modify the unit. This may cause a fire, give an electric shock, or cause an injury.
- Do not allow any liquid or solid object fall into the unit. This may cause a fire or give an electric shock. If it happens, unplug the unit from the computer immediately and contact your dealer or the Reader/Writer call center. If you leave the unit as it is, the computer connected to the unit may be damaged.
- Do not give an extreme shock to the unit, or squeeze it strongly. This may cause a malfunction.
- Do not pull the cable strongly, bend it, or crush it. The cable may be broken, and this may cause a malfunction.
- Do not use or leave the unit:
  - In places subject to extreme high temperatures, for example near a radiator, heating vent, or in direct sunlight.
  - In places subject to mechanical vibration or shock.
  - Near any equipment that generates a strong magnetic field.
  - In places where corrosive gas is present.

### Maintenance

- Clean the unit with a soft cloth or tissue paper. When the unit is very dirty, clean it with a soft cloth lightly moistened with a mild detergent solution and finish with a dry cloth.
- Do not use alcohol, thinner, or benzene to clean the unit. If you do so, the finish of the unit may be damaged or the coating may come off.
- When you use a chemical-impregnated cloth, use it according to the directions provided.
- Do not spray a volatile solvent such as insecticide toward the unit, or place rubber or vinyl products on the unit for a long time. If you do so, the finish of the unit may be damaged or the coating may come off.

## Troubleshooting

If a problem occurs, check the following.

- Did you install the required software on your computer properly?
- Is the connector on the cable of the Reader/Writer seated firmly in the USB port on your computer?
- Does your computer environment meet the requirements mentioned in "System Requirements?"

If you go through these checks and do not find any possible causes of problems, carry out the self-diagnosis. (For details, see "Setup" on the opposite page.)

#### Results of the self-diagnosis

##### If a result other than "Normal" appears.

→ Contact the Reader/Writer call center.

##### If result is "Normal," but the card is not recognized.

→ Confirm that your card is compatible with this Reader/Writer. Use a card that is compatible with the Reader/Writer.

If the recommendations above do not resolve the problem, refer to the FAQ section on our Web site (<http://www.sony.co.jp/Products/felica/pcrw/>).

Then, if the problem still persists, contact the Reader/Writer call center.

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.

If you have any questions about this product, you may call; Sony Customer Information Services Center  
1-800-222-7669 or <http://www.sony.com/>

#### Declaration of Conformity

Trade Name: SONY  
Model: RC-S310  
Responsible Party: Sony Electronics Inc.  
Address: 16450 W. Bernardo Dr,  
San Diego, CA 92127 U.S.A.  
Telephone Number: 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.

#### NOTICE TO USERS

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# Contactless IC Card Reader/Writer for USB

## Operating Instructions

Before operating the unit, please read these Operating Instructions thoroughly and retain them for future reference.

## RC-S310

<http://www.sony.co.jp/Products/felica/pcrw/>

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## Introduction

With this Reader/Writer, you can use cards that conform to the requirements of the Sony contactless IC card technology. If you do not know whether your card is compatible with the Reader/Writer, inquire from an information source shown on your card about the compatibility.

## System requirements

You can use this Reader/Writer only in the United States. To use it, you need an Internet connection environment meeting the requirements below.

- Computer hardware equipped with a USB port<sup>1)</sup>
- Operating system: Microsoft Windows 98  
Microsoft Windows 98 Second Edition  
Microsoft Windows Me  
Microsoft Windows 2000 Professional  
Microsoft Windows XP Home Edition  
Microsoft Windows XP Professional Edition

<sup>1)</sup> The USB port operation must be guaranteed by the manufacturer of the computer hardware.

#### Notes

- Even if your computer environment meets the requirements above, the Reader/Writer may not operate properly depending on the configuration of your software and hardware.
- Depending on type of computer, a malfunction may occur when the computer goes into the standby mode while the Reader/Writer is operating.
- If you unplug the Reader/Writer and plug it in again while the computer is in the standby mode, a malfunction may occur.

#### CAUTION

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

## Unpacking

Make sure your carton contains everything listed below.

- Reader/Writer unit
- Operating Instructions (this document)

## Setup

When you use the Reader/Writer for the first time, perform the procedures below.

### Notes

- Do not plug the Reader/Writer into the computer before you install the FeliCa Reader/Writer software.
- The FeliCa Reader/Writer software may be updated without prior notice. Check update information on our Web site (<http://www.sony.co.jp/Products/felica/pcrw/>) frequently.

## 1 Download and install the FeliCa Reader/Writer software.

- 1 Start up your computer.
- 2 If you use Windows 2000 or Windows XP, log on to Windows using an "Administrator" account.
- 3 Shut down all active programs. If virus protection software is active, the installation may not be completed properly.
- 4 Download the FeliCa Reader/Writer software from our Web site (<http://www.sony.co.jp/Products/felica/pcrw/>).
- 5 Click the downloaded file and install it according to the instructions shown on the display.
- 6 If an instruction requesting you to restart the computer appears, restart the computer.
- 7 Install other programs, if needed.

### <Tips>

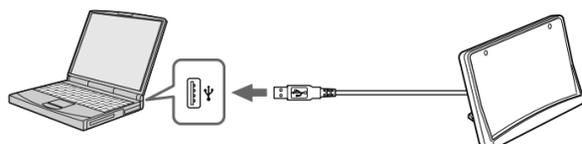
- If the installation does not complete successfully, remove the FeliCa Reader/Writer software using [Add/Remove Applications] (if you use Windows XP, [Add/Remove Programs]), restart the computer, and then perform the procedure from step 2 again.
- For details on the installation procedure, refer to our Web site (<http://www.sony.co.jp/Products/felica/pcrw/>).

## 2 Plug the Reader/Writer into the USB port on your computer.

Insert the connector on the cable of the Reader/Writer to the USB port on your computer.

### Note

If you connect a USB hub between the Reader/Writer and the computer, the Reader/Writer may not be recognized properly.

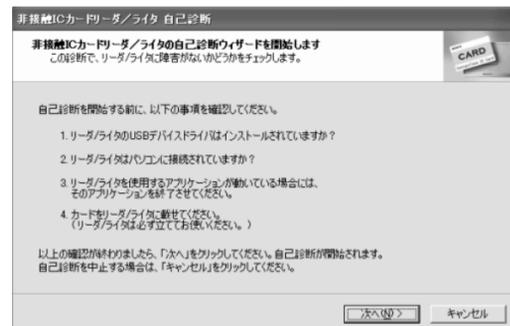


## 3 Confirm the reliability of the operation using the self-diagnosis function.

- 1 Put your card on the Reader/Writer (For details, see "Using the Reader/Writer").
- 2 Click the Windows Start button, point to [Programs] (if you use Windows XP, [All programs]), point to [Sony FeliCa Reader/Writer], and then click [Self-Diagnosis of Reader/Writer].



- 3 Carry out the self-diagnosis according to the instructions shown on the display.

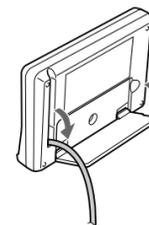


### <Tip>

The self-diagnosis program can be used even if you do not put a card on the Reader/Writer. However, in this case, the program checks only the operation of the Reader/Writer itself, but cannot check the communicating function with the card.

## Using the Reader/Writer

### 1 Stand the Reader/Writer upright using the tilt stand, and then release the cable from the groove.

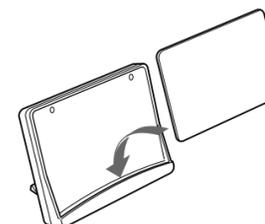


### Note

You can use the Reader/Writer laid down. However, in this case, make sure the surface on which you put the Reader/Writer is not made of metal. Otherwise, the Reader/Writer may not operate properly.

### 2 Put your card on the Reader/Writer.

Put the card on in landscape orientation.



### Notes

- Make sure to put only one card on the read/write surface. If you put more than one card on this surface at one time, the Reader/Writer does not operate properly.
- The timing for placing the card is defined by the service you use. Follow the instructions shown on the display.

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