

RICOH

RDC-i500 **IMAGE CAPTURING DEVICE**

Camera Operation Manual

To ensure correct use of your camera, read this manual carefully before use. Keep the manual handy for future use.



Introduction

Thank you for purchasing a Ricoh RDC-i500. This manual explains the correct handling procedures and precautions for your camera. To ensure the best performance, please read the manual thoroughly before using the camera. Keep the manual handy for quick future reference.

Ricoh Co., Ltd.

Test Shots

Check that your camera is recording the images correctly by taking a number of test shots.

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Exemption from Liability

Ricoh Co., Ltd. assumes no liability for failure to record or play back images caused by malfunction of the RDC-i500.

Warranty

This product is manufactured to local specifications and the warranty is valid within the country of purchase. Should the product fail or malfunction while you are abroad, the manufacturer assumes no responsibility for servicing the product locally or bearing the expenditure incurred therefor.

Radio Interference

Operating the RDC-i500 in the vicinity of other electronic equipment may adversely affect the performance of both devices. In particular, operating the camera close to a radio or television may lead to interference. If interference occurs, follow the procedures below.

- Move the camera as far away as possible from the TV, radio or other device
- Reorient the TV or radio antenna.
- Plug the devices into separate electrical outlets.

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How to Use the Operation Manuals

Five operation manuals are supplied with this camera.

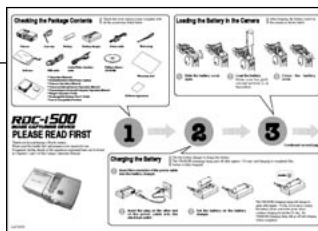
Use each operation manual as shown below to suit the purpose.

Open the package



Read This Before Proceeding!

These instructions explain the procedure for checking the contents of the package and loading the battery to enable you to use the camera straightaway.



Basic operation

Camera Operation Manual (this manual)

This manual explains in detail the preparations to take before using the camera together with the procedures for shooting and playback using the various functions.



Using the communication and Internet functions

Communication/Internet Operation Manual

This manual explains the procedures for transmitting images and using Internet functions.



Sending and receiving data using the camera and a PC

Connecting to a Personal Computer Operation Manual

This manual explains the procedures for connecting the camera to a PC, transmitting images from the camera to the PC and operating the camera from the PC.



Simple Operation Guide

This guide explains the basic setting procedures of recording, transmitting images and transferring them to a PC.



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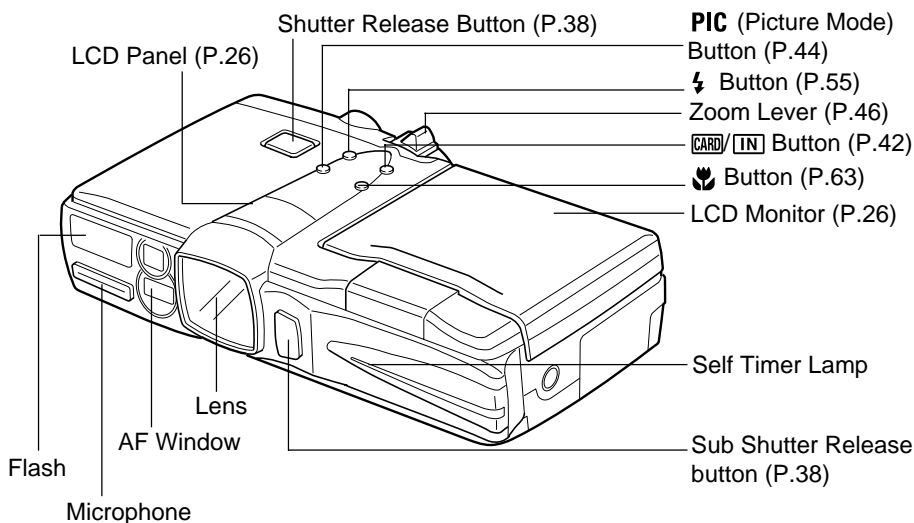


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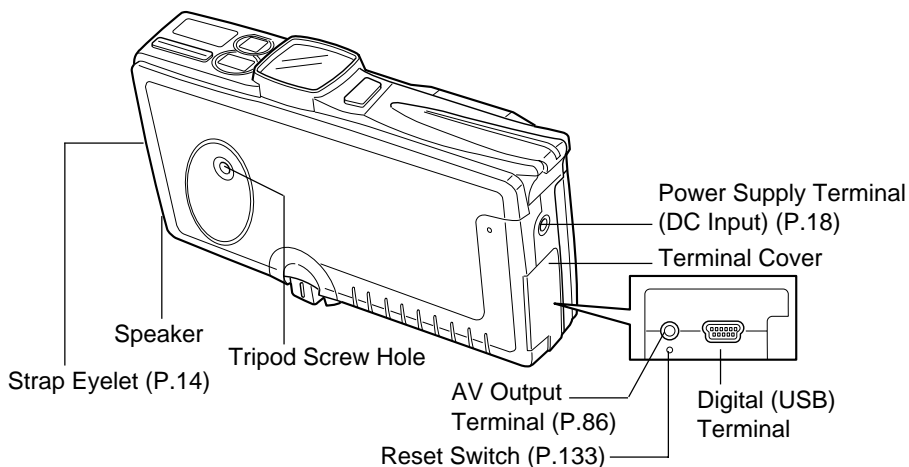
Parts & Names

■ Camera Body

Front

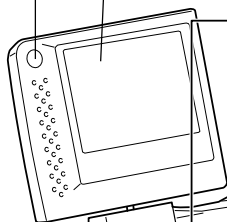


Back

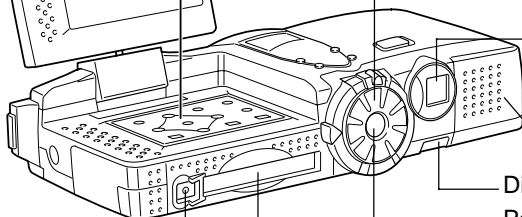


Operating Parts

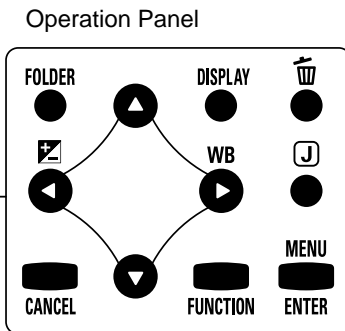
Remote Control Reception
LCD Monitor (P.26)



Mode Dial (P.25)



CF Card Slot (P.20)
EJECT Button



Viewfinder
• Flash Lamp
• Auto Focus Lamp
Battery Cover (P.16)
Diopter adjuster (P.36)
Power Switch (P.24)

■ Battery/Battery Charger

Battery Charger (BJ-1)



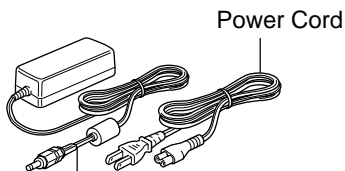
Power Cord

Rechargeable Battery (DB-20L)



■ AC Adapter (optional)

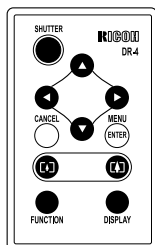
• AC-3 (100 V – 240 V)



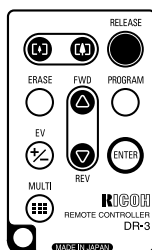
Connection Cable

■ Remote Control Unit (optional)

DR-4 (available in the near future*)



DR-3



* As of April, 2001

Safety Precautions

Warning Symbols

Various symbols are used throughout this operation manual and on the product to prevent physical harm to you or other people and damage to property. The symbols and their meanings are explained below.



Warning

This symbol indicates matters that may lead to death or serious injury if ignored or incorrectly handled.




Caution


This symbol indicates matters that may lead to injury or physical damage if ignored or incorrectly handled.


Sample Warnings



The  symbol alerts you to actions that must be performed.



The  symbol alerts you to prohibited actions.

The  symbol may be combined with other symbols to indicate that a specific action is prohibited.

● Examples



Do not touch



Do not disassemble

Observe the following precautions to ensure safe use of this equipment.



Warning



- Turn off the power immediately in the event of irregularity, such as the equipment emitting smoke or a strange smell. Remove the battery as soon as possible, being careful to avoid electric shocks or burns. If you are drawing power from a household electrical outlet, be sure to unplug the power cord from the outlet to avoid fire or electrical hazards. Discontinue use of the equipment immediately if it is malfunctioning. Contact the nearest service center at your earliest convenience.

Warning



- Turn off the power immediately if any metallic object, water, liquid or other foreign object gets into the equipment. Remove the battery as soon as possible, being careful to avoid electric shocks or burns. If you are drawing power from a household electrical outlet, be sure to unplug the power cord from the outlet to avoid fire or electrical hazards. Discontinue use of the equipment immediately if it is malfunctioning. Contact the nearest service center at your earliest convenience.



- Avoid any contact with the liquid crystal inside the LCD monitor, should the monitor be damaged. Follow the emergency measures below in the following circumstances.
 - SKIN: If any of the liquid crystal gets on your skin, wipe it off and rinse the affected area thoroughly with water, then wash well with soap.
 - EYES: If it gets in your eyes, wash your eyes with clean water for at least 15 minutes and seek medical advice immediately .
 - INGESTION: If any of the liquid crystal is ingested, rinse the mouth out thoroughly with water. Have the victim drink a large amount of water and induce vomiting. Seek medical assistance immediately.



- Follow these precautions to prevent the battery from leaking, overheating, igniting or exploding.
 - Do not use a battery other than that specifically recommended for the equipment.
 - Do not carry or store the battery with metallic ballpoint pens, necklaces, coins, hairpins, etc.
 - Remove the battery from the camera or battery charger immediately in the event of irregularity, such as a strange smell or discoloration, during use or recharging.



- When using the communication card with the antenna on, pay attention to the direction of the antenna.

Warning



- Observe the following precautions to prevent fire, electric shock or explosion caused by the battery charger.
 - Do not use a power source voltage other than that indicated. Avoid putting several loads on one power outlet or using an extension cable.
 - Do not cut, damage, tie in a bundle or alter the power cord. Do not place heavy objects on the power cord, pull it or bend it excessively.
 - Do not plug or unplug the power cord with wet hands. When unplugging the power cord, be sure to hold the plug.
 - Do not wrap the battery in cloth, etc.



- Keep the battery used in this equipment out of the reach of children to prevent accidental ingestion. Consumption is harmful to human beings. If swallowed, seek immediate medical assistance.



- Keep the equipment out of the reach of children. Their inability to read and understand warning and safety precautions may lead to accidents.



- Do not touch the internal components of the equipment if they become exposed as a result of being dropped or damaged. The high-voltage circuitry in the equipment could lead to an electric shock. Remove the battery as soon as possible, being careful to avoid electric shocks or burns. Take the equipment to your nearest dealer or service center if it is damaged.



- Do not attempt to disassemble, repair or alter the equipment yourself. The high-voltage circuitry in the equipment poses a significant electrical hazard.



- Do not use the equipment in the kitchen or bathroom where it would be exposed to steam or humidity as this could result in fire or electric shock.



Warning



- Do not use the equipment near flammable gases, gasoline, benzene, thinner or similar substances to avoid the risk of explosion, fire or burns.
- Do not use the equipment in aircraft or other locations where usage is restricted or prohibited as this may lead to disasters or accidents.



- Wipe off any dust that accumulates on the electrical plug as this may lead to fire.
- Use only the specified AC adapter for this equipment (optional AC-3) in household electrical outlets. Other adapters pose the risk of fire, electric shock or failure.



- To avoid the risk of fire, electric shock or failure, do not use the AC adapter with commercially available electronic transformers when traveling abroad.

Observe the following precautions to ensure safe use of this equipment.

Caution



- Contact with fluid leaking from the battery can lead to burns. If part of your body comes in contact with a damaged battery, wash the area with water immediately. (Do not use soap.) If the battery starts to leak, remove it from the equipment and wipe the battery chamber thoroughly before replacing it with a new battery.



- Plug the power cord securely into the electrical outlet. Loose cords pose a fire hazard.



- Do not allow the camera to get wet. In addition, do not operate it with wet hands. Both pose the risk of electric shock.



- Do not fire the flash at drivers of vehicles such as bicycles, cars and trains, as this may cause the driver to lose control and result in a traffic accident.

Safety Warning for Accessories

- Safety warnings for the optional accessories such as the remote control unit and AC adapter are contained in the operation manual provided with each product and should be read thoroughly before operating the equipment.

Chapter 1

Getting Started

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Before Using the Camera

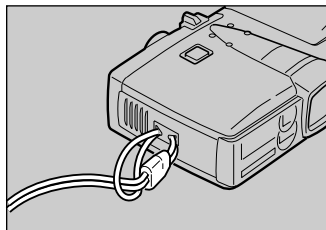
Before using the camera, attach the wrist strap, and lens cap.

Attaching the Wrist Strap

- 1 Pass the small loop of the strap through the strap eyelet and pass the other end through the loop as illustrated.



- Do not swing the camera around by its strap.



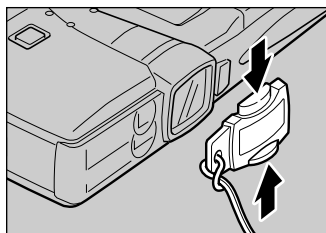
Attaching the Lens Cap

- 1 Push the lens cap on in the direction shown by the arrow.

To remove the lens cap, take hold and push off.



- Attach the lens cap to the strap to prevent it being lost.

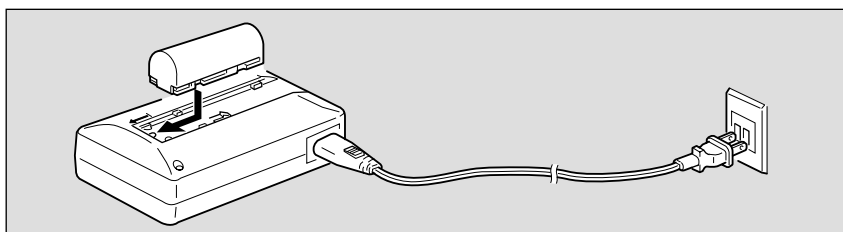


Powering the Camera

This section explains how to load and recharge the battery and how to power the camera from a household electrical outlet.

Charging the Battery

When using the battery for the first time or when the battery symbol is displayed, follow the procedure below and charge the battery to its full capacity.



- 1 Insert the connector of the power cord in the battery charger.
- 2 Insert the power plug at the other end of the power cord in the electrical outlet.
- 3 Set the battery in the battery charger.

Charging will start and the battery can be charged as shown in the table below. When charging is finished, remove the power plug from the electrical outlet.

CHARGE(Charging) Lamp	Explanation
Lights red	Charging starts
Lights green	75-minute charging has finished (battery is 90% charged) * If you are in a hurry, the battery can be used at this point.
Green light goes off	Battery is fully charged after charging for about 35 minutes after lamp lights green

■ Precautions Regarding Use

- Use only the specified battery (DB-20L).
- Use only the specified battery charger (BJ-1) to charge the battery.
- Do not use the battery charger to charge batteries other than the DB-20L battery.
- Charge the battery in a well ventilated place with an ambient temperature in the range of 10°C to 40°C (50°F to 104°F).
- When the battery approaches the end of its service life, its operating time becomes shorter even when properly charged. Replace with a new battery.
- The battery may feel warm after charging, but this is not a malfunction.
- After charging is finished, remove the power plug from the electrical outlet. Leaving the plug in the outlet may result in fire.

Loading the Battery

Load the rechargeable lithium ion battery (DB-20L) to operate the camera.



- When using the camera for the first time, be sure to charge the battery. (The battery is not charged when the camera leaves the factory.) → P.15 “Charging the Battery”

- 1 Check that the camera is turned off, and then open the battery cover by pressing the catch and sliding it in the direction shown.



- P.24 “Turning On/Off the Camera”

- 2 Load the battery.



- Do not bring metallic objects into contact with the battery contact surfaces or electrical connections. Electrostatic damage could result.

- 3 Close the battery cover.

Close the battery cover until it clicks into position.

● Shooting and Playback Guidelines

The table below gives the approximate recording and playback times that are available, as measured under the following test conditions.

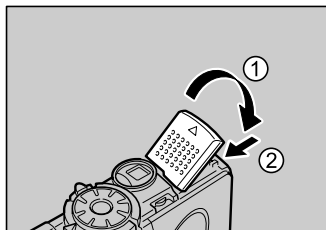
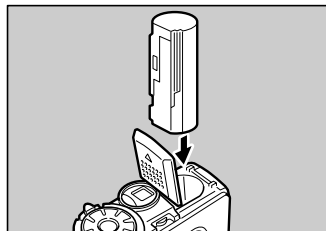
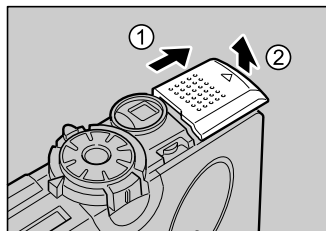
[Test conditions]

During shooting: Shoot continuously in a recording mode (shoot at intervals of 30 seconds, without turning the camera off in the middle, with the flash fired 50%, at an ambient temperature of 20°C (68°F).

During playback: Leave the camera continuously turned on in a playback mode at an ambient temperature of 20°C (68°F).

Battery Type	Approximate Recording Time	Approximate Playback Time
Lithium ion battery DB-20L	50 minutes	60 minutes

(fully charged)



Tips to Extend the Recording and Playback Times

- The battery lives indicated on the previous page may decrease depending on the ambient environment.
In an extremely cold environment, warming the battery by hand, for example, may allow you to take more pictures.
- Increased use of the flash or zoom feature or the LCD monitor may speed up the exhaustion of the battery. Reduce their usage to a minimum.
- Copying or erasing images repeatedly may also accelerate the exhaustion of the battery.
- Taking pictures with the LCD monitor display turned off will help to extend the life of the battery.

■ Handling Precautions

- Before using the battery, be sure to read the accompanying operation manual.
- Use the specified battery. → P.135 “Accessories”
- Wipe the terminals of the battery and the contacts of the camera with a dry cloth.
- Continued use of the battery for long periods may cause the battery to become hot. Wait until it cools before removing it.
- Store the battery charger and the battery separately except when charging.
- Store the battery in the case provided.
- When not using the camera for a long period of time, discharge the battery completely before removing it, and store it in a cool place. Before using the camera again, fully charge the battery.



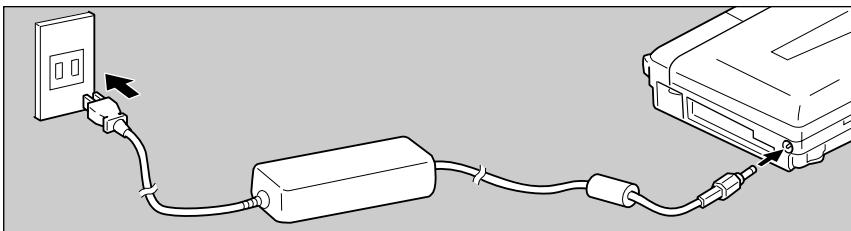
- If a power source is available nearby, you can economize on the battery by using an AC adapter (optional). → P.18 “Connecting an AC Adapter”
- You are advised to have a spare battery available when powering the camera from the battery alone.
- When the battery symbol appears on the LCD panel, it indicates that the battery voltage is low. Recharge the battery. → P.15 “Charging the Battery”

Connecting an AC Adapter

When using the camera for extended periods of time to shoot or playback images, or connecting with a PC, connect an AC adapter (optional) to the camera and power the camera from a household electrical source.

Using the AC Adapter

Before using the AC adapter, be sure to read the safety precautions in the accompanying manual.



- 1 Check that the camera is turned off, and connect the AC adapter connection cable to the power supply terminal (DC input) on the camera.

See • P.24 “Turning On/Off the Camera”

- 2 Insert the power plug into the electrical outlet.

Note • If the battery is loaded in the camera while it is connected to a household power source, the camera is powered from the AC source and not by the battery. If the AC adapter is to be used for a long time, remove the battery.



- Insert the power plug and connection cable securely. If the plug or cable works loose during recording, the data may be lost or damaged.
- If you connect or disconnect the AC adapter while operating the camera (recording, playback, or erasing), the camera will switch off to determine the power source. This may cause the data to be lost or damaged. To avoid this, connect or disconnect the AC adapter while the camera is turned off.
- When not using the camera for a long period of time, remove the AC adapter from the camera and power source.

Storage Memory

Files shot with this camera can be recorded on the following two types of memory:

Storage Memory	Capacity
CF card	16 MB, 32 MB, 48 MB, 64 MB, 96 MB, 128 MB, 192 MB (3.3 V)
Internal memory	Max. 7 MB (available area for recording images)

- Note**
- There are various kinds of CF cards in the market. Use a recommended memory card. → See the separate list of Compatible Products.
 - The card represented in this operation manual indicates both the CF card and the Microdrive.

Microdrive

Using this camera, you can record images on the Microdrive. Be sure to read the instruction manual provided and the following cautions before use.

- Be sure to turn the power off before inserting or removing the Microdrive.
- Insert the Microdrive in the same way as the CF card. → P.20 “Inserting a Memory Card”
- The indication **CF** will be displayed when the Microdrive has been inserted in the card slot.
- Use of the Microdrive causes noise in the following situation when the drive is accessed:

When you record in Voice Memo mode, Motion Picture mode or in Still Picture or Text mode with voice memo

■ Handling Precautions

- Never remove the card while data is being recorded or erased.
- Do not bend, subject to strong force or shock, or drop the card.
- Avoid using or storing memory cards in environments that are subject to static electricity or electrical interference.
- Avoid using or storing memory cards in environments that are subject to high temperature and humidity, where dust accumulates, or in atmospheres where corrosive substances are present.
- Keep the card slot free from dust or foreign matter.
- To avoid possible hazards, keep memory cards away from flames and do not dispose of them in fire.
- Memory cards have a limited service life. Cards that have been used over an extended period of time may fail to record additional files.

■ Data

- Data recorded on a card may be lost by improper handling by the customer or a third party, by being subjected to static electricity or electrical interference, or during camera malfunction or repair. Ricoh Co., Ltd. assumes no liability for damages incurred by such loss of recorded data.
- Do not remove the battery from the camera, turn off the camera, or connect the AC adapter while data is being recorded on the card. The data stored on the memory card could be lost or damaged.
- You are advised to copy valuable data from the memory card onto other memory, such as floppy disks or hard disks.

Inserting a Memory Card

Check that the camera is turned off before inserting the card.



- Be sure to turn the power off before inserting or removing the card, otherwise the data on the card may be lost or damaged and the camera may malfunction.
- Before using a new card or a card that has been used on another device (such as a PC), you need to format (initialize) it with the camera. → P.35 “Formatting the Storage Memory”
- Do not remove the card while data is being recorded or erased. The data stored on the card could be lost or damaged.

■ Inserting Card

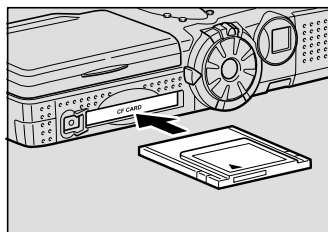
① Check that the camera is turned off.



• P.24 “Turning On/Off the Camera”

② Insert the card into the card slot.

Push the card into the card slot fully into position, with the label surface facing up.

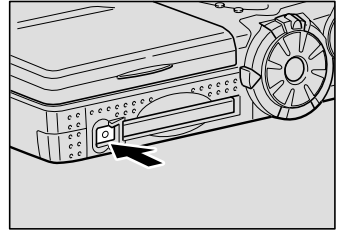


- The card will pop out of the card slot when you press the EJECT button once and press it again.

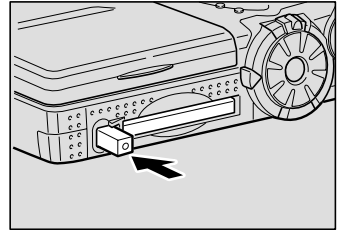
■ Removing Card

- ① Check that the camera is turned off, and extract the EJECT button by pressing it once.

See • P.24 “Turning On/Off the Camera”



- ② Press the EJECT button again, keeping it straight.



- ③ Remove the card by pulling it horizontally out of the slot.

Note • Press the EJECT button to return it to its original position.

