

MISCELLANEOUS Chapter

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Transferring Images to a PC

You can transfer recorded files to a personal computer by using an interface cable and software bundled with the camera.

■ Installing Camera Utility Software

Install the CD-ROM-based software (Camera utility Windows/Macintosh) (tentative name) bundled with the camera.

● PC Operating Platforms and Installation Instructions

○ Windows

- Operating system : Microsoft Windows 95/98/NT4.0
- PC : PC running Microsoft Windows 95/98
- CPU : Pentium or more
- Memory :
 - Windows95 : 16 MB or more (recommended 32 MB or more)
 - Windows98/NT4.0 : 32 MB or more (recommended 48 MB or more)
- Hard drive space : 6 MB or more
- Display resolution : 640 × 480 dots or more (recommended 800 × 60 dots or more)
- Display colors : 256 or more (recommended 32,000 or more)
- CD-ROM drive : CD-ROM drive supported by Microsoft Windows 95/98

- Note** • The Camera utility software does not run under Windows NT3.51.
• The Camera utility software does not run under Windows 3.1.

○ Installation

Run the setup.exe file in the Camera utility for Windows (tentative name) folder on CD-ROM (Ricoh Digital Camera Software Suite) and install the Camera utility software as instructed by onscreen guidance messages.

- Note** Likewise, install other software than the Camera utility for Windows (tentative name) in Ricoh Digital Camera Software Suite by running the setup.exe file in each folder.

○ Macintosh

- Macintosh PC : Note or desktop Macintosh II or more
- CPU : 68040 or faster, or PowerPC
- Internal memory : 24 MB or more
- Required memory : 2 MB of uncompressed application memory space (recommended 4 MB or more)
- Hard drive space : 6 MB or more
- Display resolution : 640 × 480 dots or more (recommended 800 × 60 dots or more)
- Display colors : 256 or more (recommended 32,000 or more)
- Keyboard mouse : Keyboard and mouse connectable to the Macintosh PC used
- CD-ROM drive : CD-ROM drive supported by the Macintosh PC used

○ Installation

Copy the Camera utility icon CD-ROM (Software CD Suite) to the Macintosh HDD.

- Note** Likewise, install other software than the Software CD Suite by copying each icon to the Macintosh HDD.

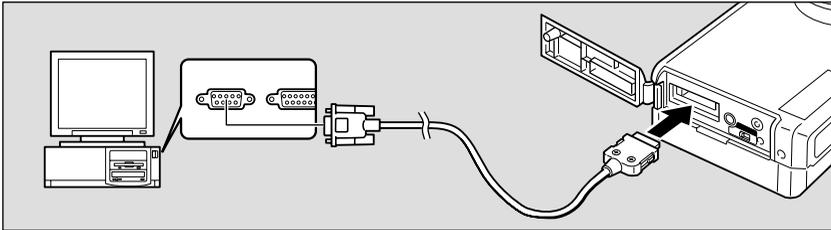
■ Connecting the Camera to a PC

Use the interface cable bundled with the RDC-5000 to connect it to a personal computer.

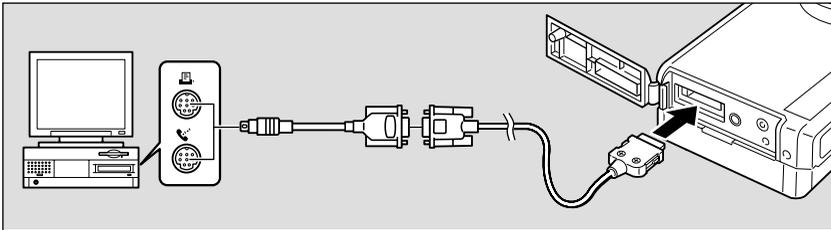
- 1 Turn off the PC.
- 2 Connect the camera and the PC to each other using the interface cable, but not before checking to see that the camera is turned off.

- Note**
- Avoid operating the camera from batteries to the extent possible; rather, run it via an AC adapter. If the power turns off while you are operating the camera, you would have to retry.
 - Do not connect or disconnect the AC adapter to or from the AC outlet while the camera is turned on.

Typical Windows connection

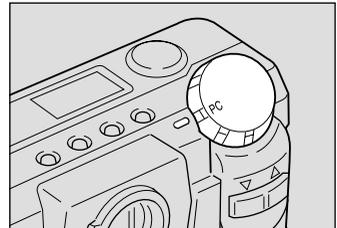


Typical Macintosh connection



The above diagrams illustrate typical connections to the Ricoh digital camera RDC-5000.

- 3 Turn on the camera and set the mode dial to [PC].



- 4 Turn on the PC and run the utility software.

Changing Camera Settings

This camera enables you to change camera settings to meet your applications.

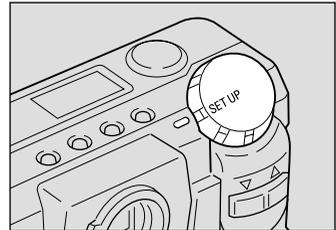
Beep Sound Setting

This camera beeps to alert you when it records a picture. You can disable the beep by following these steps.

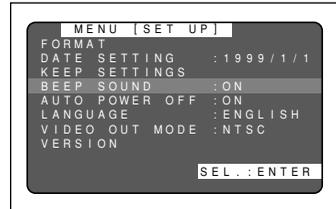
1 Set the mode dial to [SETUP].

The setup menu is displayed.

- Note** • To cancel the operation, set the mode dial to another mode.



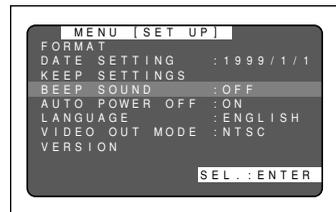
2 Press the **▲** or **▼** button to select [BEEP SOUND].



3 Press the **ENTER** button to select [OFF].

The beep is now disabled. When the setting is complete, set the mode dial to select another mode.

- Note** • An error beep is not suppressed even when [BEEP SOUND] is set to [OFF].



How To Cancel the Setting

Follow the above procedures and select [ON] in step 3. And the beep will be enabled.

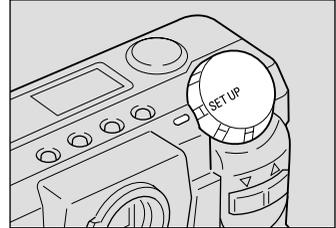
Auto Power Off Setting

The camera will turn off automatically (auto power-off) in the recording and play modes to conserve the battery if it is in idle (no buttons or switches manipulated) for more than 5 minutes. The auto power-off mode can be disabled by setting it to off in either the record or play mode.

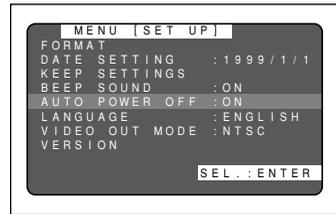
① Set the mode dial to [SETUP].

The setup menu is displayed.

- Note** • To cancel the operation, set the mode dial to another mode.



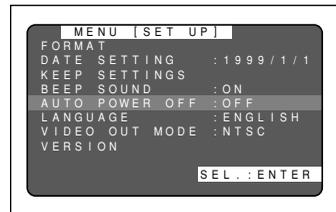
② Press the **POWER OFF** button to select [AUTO POWER OFF].



③ Press the **ENTER** button to change the setting to [OFF].

The auto power-off mode is disabled.

When the setting is completed, set the mode dial to another mode.



How To Enable the Auto Power Off Mode

Follow the above procedures, changing the setting to [ON] in step ③. The auto power-off will be effective again.

- Note** • Slide the power switch to reactivate the camera if it shuts off in auto power-off mode.
- When using an AC adapter, the auto power-off function is disabled even if you have set the auto power-off mode to on. (Except the interval shooting)

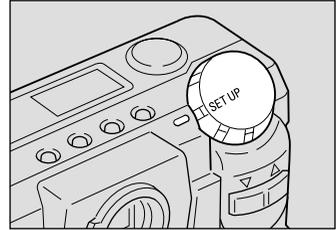
Changing OSD (On-Screen Display) Language

Displays information appearing on the LCD monitor in one of two alternative languages, Japanese and English.

① Set the mode dial to [SETUP].

The setup menu is displayed.

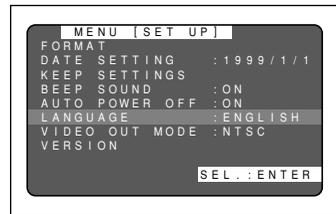
- Note** • To cancel the operation, set the mode dial to another mode.



② Press the or button to select [LANGUAGE] and press the ENTER button.

A language setup menu is displayed.

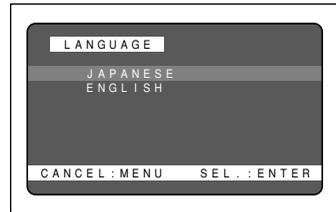
- Note** • To cancel the operation and return to the setup menu, press the MENU button.



③ Press the or button to select a language and press the ENTER button.

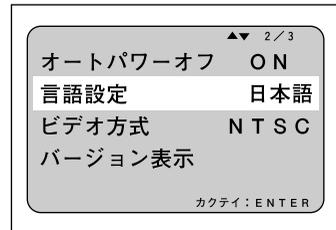
The display language setting is updated and the setup menu is displayed again.

When the setting is complete, set the mode dial to select another mode.



● Switching Back to English Display

When you have switched the LCD to Japanese display, choose [言語設定] from the SETUP menu and then choose [ENGLISH] from the resultant language setup menu to switch back English display.



How To Cancel the Setting

Follow the above procedures and select the other language in step ③ above. The display on the LCD monitor will then change accordingly.

- Note** • Enable the save mode to save the language setting. See “Keep Settings” (p.106).

Changing Video-Out Signal Method (NTSC/PAL)

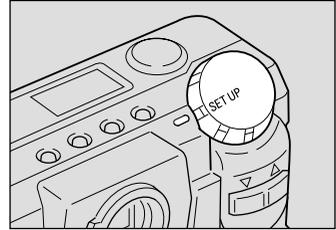
Switches the video system for connecting the camera to a TV set to play record images on TV.

See See "Using Your Digital Camera in Other Countries" (p.122).

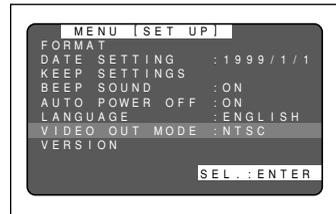
1 Set the mode dial to [SETUP].

The setup menu is displayed.

Note • To cancel the operation, set the mode dial to another mode.



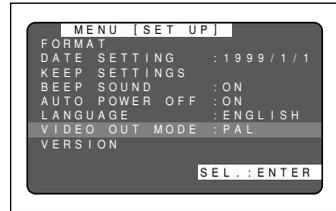
2 Press the **▲** or **▼** button to select [VIDEO OUT MODE].



3 Press the **ENTER** button and select between [NTSC] and [PAL].

The video system setting is updated.

When the setting is complete, set the mode dial to select another mode.



How To Cancel the Setting

Follow the above procedures and select the other video system in step 3 .

Note • When setting to PAL, this camera cannot be used as a monitor for the video printer, etc.
The LCD monitor would appear blank when the video cable is connected to video gear.

Keep Settings

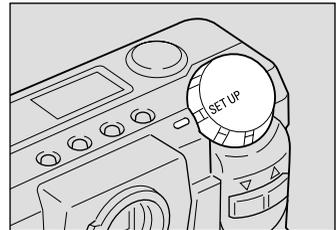
The keep settings mode is for preserving settings after the power is turned off. Each setting is saved and becomes effective when the camera is powered. The following settings can be saved.

- Flash (p.55)
- Recording mode (p.44, 52)
- Date Imprint (p.71)
- CARD/IN (p.42)
- Exposure Compensation (p.60)
- White Balance (p.62)
- Language (p.104)
- S Mode (p.77)

1 Set the mode dial to [SETUP].

The setup menu is displayed.

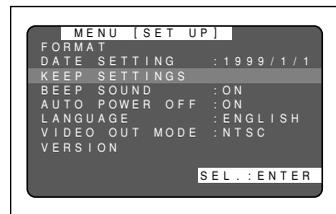
- Note** • To cancel the operation, set the mode dial to another mode.



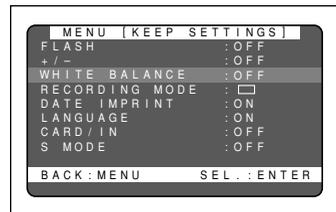
2 Press the **or** button to select [KEEP SETTINGS] and press the ENTER button.

The keep setting menu will be displayed.

- Note** • To cancel the operation and returns to the setup menu, press the MENU button.



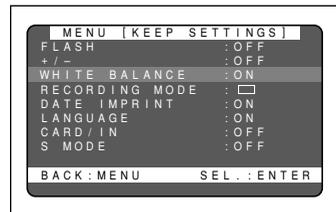
3 Press the **or** button to select a mode for setting the keep settings.



4 Press the ENTER button to change the setting to [ON].

With [REC Mode], press the enter button to select a mode to keep.

Keep Setting will be programmed. To program more items, repeat steps 3 and 4 as many times as needed.



The settings of the items for which Keep Setting is programmed will be retained even when the camera is turned off.

5 After confirming the setting, press the MENU button.

The setup menu will be displayed. Set the mode dial to another mode.

How To Cancel the Settings

Follow the above procedures, changing the setting to [OFF] in step 4. The settings will now revert to their defaults when the power is shut off.

Formatting Internal Memory

When internal memory becomes full, format it.



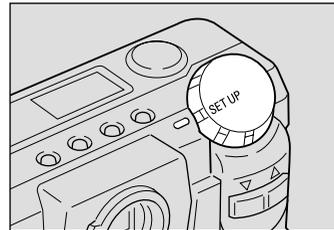
- Formatting internal memory will erase all the files recorded in it, whether they are protected or unprotected. Copy files to the SmartMedia memory card as needed before formatting internal memory. See “Copying Image Files” (p.89).

1 Set the mode dial to [SETUP].

The setup menu is displayed.



- To cancel the operation, set the mode dial to another mode.

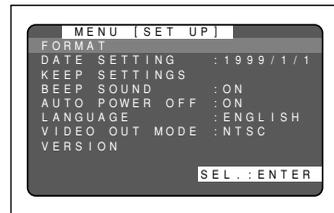


2 Press the or button to select [FORMAT] and press the ENTER button.

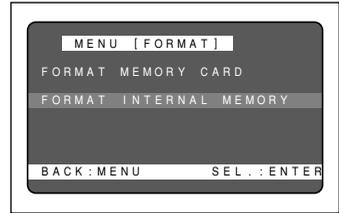
The format setup menu is displayed.



- To cancel the operation and return to the setup menu, press the MENU button.

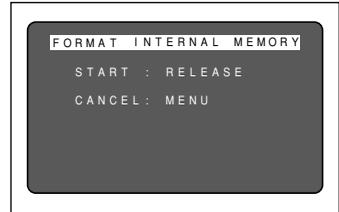


- ③ Press the **or** button to select **[FORMAT INTERNAL MEMORY]** and press the enter button.



- ④ Press the shutter release button.
The message "FORMATTING" is displayed and formatting of internal memory begins.

When the formatting is complete, the setup menu is displayed again. Set the mode dial to select another mode.



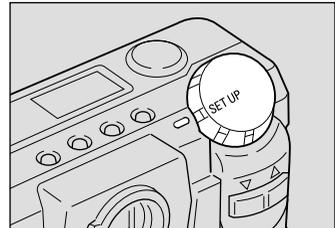
Displays the Current Version Information

You can view the current version information about your camera.

- ① Set the mode dial to **[SETUP]**.

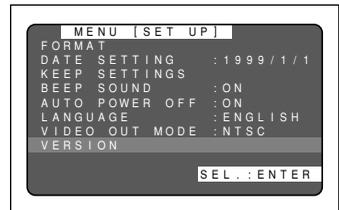
The setup menu is displayed.

- Note** • To cancel the operation, set the mode dial to another mode.



- ② Press the **or** button to select **[VERSION]** and press the ENTER button.

The version information is displayed.



- ③ After confirming the version information, press the MENU button.

When the setup menu is displayed again, set the mode dial to select another mode.

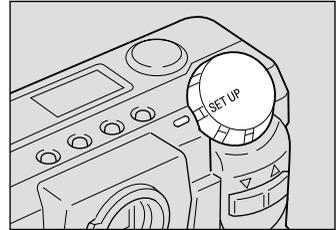
Changing LCD Confirmation

When you press the shutter release button to take a picture, the shot image appears on the LCD monitor, accompanied by a beep, before it is recorded. You can select the image confirmation time from among 0 second, 1 second, 2 seconds, and 3 seconds.

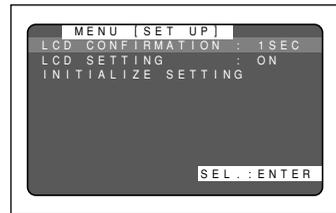
1 Set the mode dial to [SETUP].

The SETUP menu will open.

- Note** • To cancel the operation, turn the mode dial.



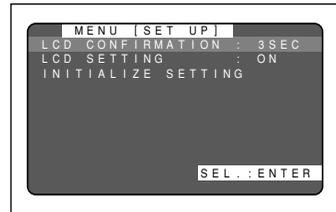
2 Press the or button to select [LCD CONFIRMATION].



3 Press the enter button to select the image confirmation time.

The image confirmation time is selectable from among 0 second, 1 second, 2 seconds, and 3 seconds.

When the setting is complete, turn the mode dial to switch to another mode.



Restoring the Setting

Select [1 SEC] in step 3 above.

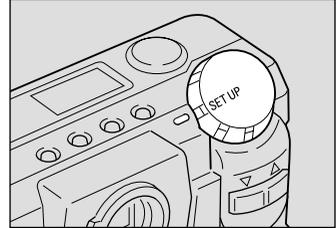
Changing the LCD Setting

The camera comes up with the LCD monitor enabled or disabled when it is powered on in a recording mode. You may set the camera to have the LCD monitor disabled when it is powered on, to save the batteries.

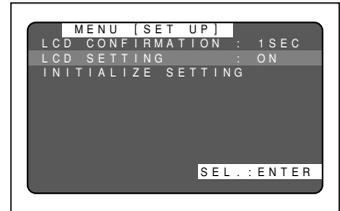
❶ Set the mode dial to [SETUP].

The SETUP menu will open.

- Note** • To cancel the operation, turn the mode dial.

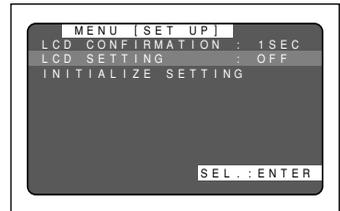


❷ Press the **[M]** or **[DISP]** button to select [LCD SETTING].



❸ Press the enter button to select [OFF].

The camera, when powered on in a recording mode, will now come up with the LCD monitor disabled. Press the DISPLAY button to switch the monitor display. See “LCD Monitor Display” (p.41).



When the setting is complete, turn the mode dial to switch to another mode.

Restoring the Setting

Select [ON] as an LCD initial display option in step ❸.

Initializing Settings

You can reset all settings, except for the date.



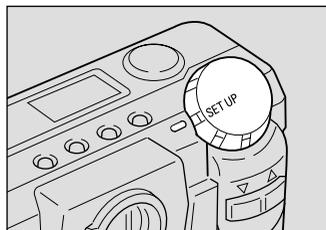
- Data set by Keep Settings will also be initialized to its factory defaults.

1 Set the mode dial to [SETUP].

The SETUP menu will open.



- To cancel the setting, turn the mode dial to choose another mode.

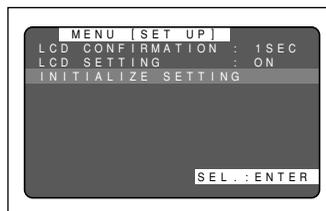


2 Press the **MENU** or **SETUP** button to choose [INITIALIZE SETTING] and press the **ENTER** button.

The initialize settings menu will open.



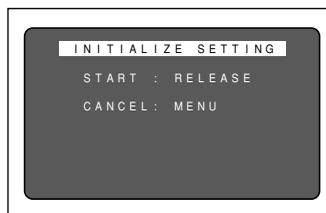
- To cancel the operation, press the MENU button to return to the SETUP menu.



3 Press the shutter release button.

The settings will be reset to their factory defaults. Recorded files are preserved intact even when the settings are initialized.

When the initialization is complete, the SETUP menu appears again. Turn the mode dial to choose another mode.



Using the Remote Control

The DR-3 remote control unit (optional) makes it possible to record and play back images from a remote location.



- The remote control receiver is located on the right side of the lens. Operate the remote control unit by pointing it at the remote control receiver.

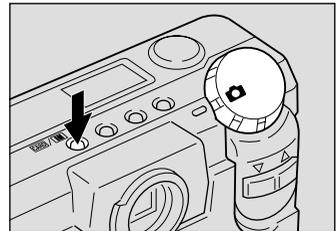


- For instructions on replacing the batteries and maintaining the remote control unit, refer to the accompanying manual.
- Some procedures differ when performed on the remote control unit and on the camera itself. Follow the instructions below to use the remote control unit.

Shooting

The remote control unit can be used to operate the camera. It is particularly convenient when the camera is set up at a remote location or is in a fixed position.

- 1 **Set the mode dial to [📷] and press the CARD/IN button to select a recording destination.**

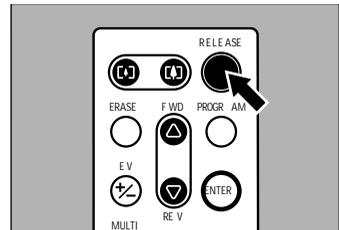


- 2 **Decide the composition of the picture and press the RELEASE button on the remote control unit.**

The self-timer LED will light and recording will start about 2 seconds later.



- Use the zoom buttons to vary the size of the subject. The [📈] button magnifies the subject (telephoto), while the [📉] button decreases the size of the subject (wide angle).



Setting Exposure Compensation

● Starting setting

Press the EV (+/-) button on the remote control unit.

● Setting the exposure compensation level

Set the exposure compensation level using the FWD () or REV () button and press the ENTER button on the remote control unit. And then press the RELEASE button to take a picture.

● Canceling the setting

Set the exposure compensation level to ± 0.0 .

Shooting in Manual Focus Mode

● Entering the mode

Press the ERASE button on the remote control unit.

● Focusing

Focus on the subject using the FWD () or REV () button. Press the RELEASE button to take a picture.

● Canceling the mode setting

Press the ERASE button again.

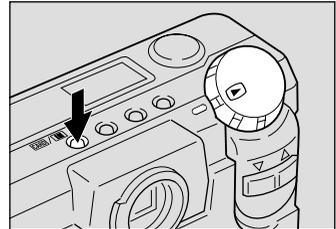
Playing

Use the remote control unit to playback recorded files.

- 1 Set the mode dial to [▶] and press the CARD/IN button to select a recording destination.

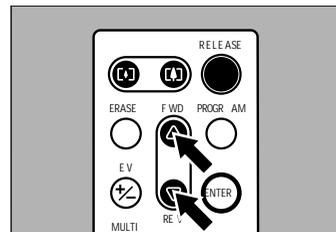
The most recently recorded file will be played back.

See "Playback Display" (p.80)



- 2 Choose a file by pressing the FWD () or REV () button on the remote control unit.

Note • The remote control unit buttons are operated in the same way as the buttons on the camera.



Magnifying an Image (Zoom Playback)

● Entering the mode

Press the PROGRAM button on the remote control unit.

● Moving the playback position

Press the FWD () or REV () button.

● Canceling the mode setting

Press the ENTER button to return to the normal playback display.

Displaying Multiple Images (Multi Image Playback)

● Entering the mode

Press the MULTI button on the remote control unit.

● Moving the selected file

Press the FWD () or REV () button.

● Canceling the mode setting

Press the ENTER button and the selected file will appear on the normal playback display screen.

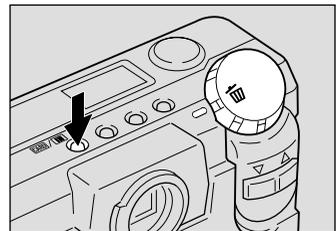
Erasing

You can use the remote control unit to erase a recorded file at a time.



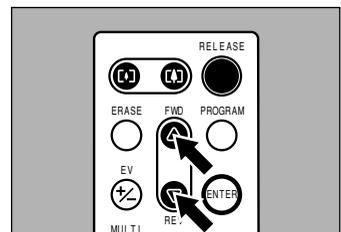
- Remember that files cannot be restored once they are erased. Before starting to erase files, make sure that you want to erase them.

- 1 Set the camera's mode dial to []. And press the CARD/IN button to select a source file to erase.



- 2 The erase menu will open. Use the FWD () or REV () button to select an erase mode.

Select [ERASE SINGLE IMAGE] from the erase menu to erase selected images one at a time.



Accessories

Item	Model	Remarks
AC Adapter	AC-3	For drawing power directly from a household electrical outlet. See "Using an AC Adapter" (p.29).
Remote Control Unit	DR-3	For remote operation of the camera's recording and playback functions.
SmartMedia Memory Cards		A postage stamp-sized storage media with a thickness of 0.76 millimeters.
4 M	FS-4	Capable of storing a maximum of (9) images recorded in 1800N mode.
8 M	FS-8	Capable of storing a maximum of (19) images recorded in 1800N mode.
16 M	FS-16	Capable of storing a maximum of (38) images recorded in 1800N mode.
32 M	FS-32	Capable of storing a maximum of (76) images recorded in 1800N mode.
PC Card Adapter	FS-B53	Used to insert the SmartMedia memory card directly into the PC card slot.
Floppy Disk Adapter	FS-B10	Used to insert the SmartMedia memory card directly into the PC floppy disk drive.

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- Macintosh is a registered trademark of Apple Computer, Inc., in the United States of America and other countries.
- All trademarked company and product names mentioned in this manual are the property of their respective owners.

Handling Precautions

- This camera is not waterproof. Keep away from water, rain, beverages, etc. Consult your nearest Ricoh service office if any liquid gets into the camera.
- Be careful not to drop the camera or subject it to impacts.
- Do not use the flash more than necessary in continuous shots to avoid overheating.
- Never look through the viewfinder directly at the sun or intense light. Your eyesight may be impaired.
- Do not fire the flash close to a baby or infant's eyes.
- Do not fire the flash by aiming the camera at a driver behind wheel. A traffic accident may result.
- Exercise caution to prevent sand or dust from getting into the camera in such environments as beaches or work sites.
- Do not leave the camera for any length of time in particularly hot or humid places, such as an automobile with the windows closed, beaches or bathrooms.
- Verify that the camera power is off before you attach the AC adapter.
- Direct sunlight and strong light striking the LCD monitor or the LCD panel will reflect white light, making it difficult to view.
- The LCD monitor or the LCD panel may contain some pixels that always or never illuminate and the brightness of some areas of the monitor may appear uneven. These are typical LCD performance characteristics and do not constitute malfunctions.
- Do not force any of the external moving parts, such as the card door, terminal cover or battery cover.
- Do not lift the camera by the hard cover, terminal cover or battery cover.
- Do not impede movement of the lens barrier while turning on the power.
- Be careful not to hit the lens unit or the LCD monitor while carrying the camera.
- Extreme temperature differentials may cause condensation to form inside the camera body and lens unit, reducing performance. To avoid this, place the camera in a plastic bag and let it slowly acclimatize to the new temperature before exposing it.

Potential Causes of Condensation

- Transporting the camera from a cold place to a warm place.
- Storing or using the camera in places subject to high humidity.
- Bringing the camera into a recently heated room or leaving it directly in the path of air conditioning.

Care and Storage

■ Care

- Fingerprints or dirt on the lens will reduce performance so take extra care not to get it dirty.
 - Do not wipe dust or smears off the lens with your fingers. Use a lens blower, readily available at most photographic suppliers, to blow dust off, or a very soft cloth to wipe it lightly.
 - Be particularly diligent in cleaning the lens after use at the beach or around chemicals.
 - If your camera should malfunction, take it to the nearest Ricoh service office. This product generates high voltages and disassembly is hazardous. Under no circumstances should you attempt to disassemble it yourself.
 - Never use solvents, benzene, insecticides or other volatile substances on the equipment as this may deform or dissolve it.
 - Be careful not to let objects rub against the LCD monitor or the LCD panel as it is readily susceptible to scratching.
 - To clean the LCD monitor or the LCD panel, wipe it gently with a soft cloth that has been moistened in diluted detergent and well-wrung. Wipe off any moisture with a soft, dry cloth.
- * Remove the batteries and AC adapter from the camera before commencing any of the above.

■ Storage

To prevent possible failures, avoid storing the camera in places that are:

- Hot and damp, or subject to sharp temperature or humidity changes.
- Sandy or dusty.
- Subject to strong vibrations.
- In contact with chemicals, such as insecticides, or rubber or PVC products for extended periods of time.
- Near sources of strong electromagnetism (such as motors, transformers, and magnets).

Troubleshooting

Refer to the pointers listed below before submitting the equipment for repairs. If the problem persists after trying the suggestions, contact the nearest Ricoh service office listed at the back of this manual.

■ Power Source

Problem	Cause	Solution	Page
Power will not come on	Batteries dead, improperly installed or missing	Insert the batteries correctly or replace them.	27
	AC adapter not attached correctly	Attach correctly again.	29
	Card door open	Close the card door and retry starting.	32
Power cuts out	No buttons touched so auto power-off function was activated	Restart camera.	41
	Dead batteries	Replace with new batteries.	27
Battery quickly consumed	Camera operated in extremely high or low temperature location	–	–
	Camera operated in dark area requiring frequent use of the flash	–	–

■ Recording and Playback

Problem	Cause	Solution	Page
Shutter release button pressed but no image recorded	Batteries dead, improperly installed or missing	Replace or reposition batteries.	27
	No power, or mode dial is not set	Slide power on and set mode dial to [📷]	41
	Shutter release button only pressed halfway	Press shutter release button all the way.	48
	SmartMedia memory card not formatted (initialized)	Format SmartMedia memory card.	33
	No space on SmartMedia memory card	Erase unimportant files or replace SmartMedia memory card.	32, 94
	No space on internal memory	Erase unimportant files	94
	SmartMedia memory card not working (service life exceeded)	Replace SmartMedia memory card.	32
	Card door open	Ensure that card door is securely closed.	32
	Self-timer on	Press the self timer button to disengage the self timer recording mode.	67
	Flash is charging	Wait until flash LED ceases flashing.	49
SmartMedia memory card contact surface dirty	Clean contact surface with soft dry cloth.	31	
Cannot confirm a shot picture	The image confirmation time is too short.	Make the image confirmation time longer.	109
No image on the LCD monitor	The LCD monitor is turned OFF.	Press the DISPLAY button to turn ON the LCD monitor, or set [LCD Initialization] to [ON].	41, 110
	The video I/O switch is set on [IN].	Set video I/O switch is set on [OUT].	81
Autofocus is on but camera not focusing	Dirty lens	Clean lens with blower or soft dry cloth.	–
	Subject not in the center of the autofocus field	Use focus lock	68
	Subject difficult to focus	Use focus lock or switch to manual focus.	68, 70

Problem	Cause	Solution	Page
Flash won't fire, or won't charge	Camera not set to PIC mode	Use record menu to set record to PIC mode.	44
	Camera set to flash off mode	Cancel the flash off mode with flash button.	56
	White balance mode set to setting other than auto	Use record menu to set the white balance to auto.	62
	Batteries dead	Replace batteries.	27
Image dark even with flash	Subject farther than approx. 3.0 m (9.9 feet) with the zoom on telephoto or approx. 3.4 m (11.2 feet) with the zoom on wide angle	Come closer to subject.	55
Image is too bright	The camera is too close to the subject.	Retake picture without flash.	56
	Over-exposed	Use record menu to adjust exposure compensation.	60
	Brightness setting of LCD monitor not adjusted	Adjust brightness adjustment dial.	37
Image is too dark	Shot in low light area with camera set to flash off mode	Press the flash button disengage flash off mode.	56
	Under-exposed	Use record menu to adjust exposure compensation.	60
	Brightness setting of LCD monitor not adjusted	Adjust brightness adjustment dial.	37
Unnatural coloration of image	Shooting conditions difficult for white balance in auto mode	Place a white object near the subject, use the flash or select one of the manual white balance modes.	56, 62
Date and other recording data will not display	Screen display set to off	Press the ENTER button to switch screen display mode.	50
Can't playback or image won't appear	Camera not set to play mode	Set mode dial to [D].	83
	The playback source is different	Press the CARD/IN button to change the playback source	83
	SmartMedia memory card not installed or doesn't contain any files	Insert a SmartMedia memory card with recorded images.	32
	Use SmartMedia memory card not formatted by your camera	Use a SmartMedia memory card that has been formatted and recorded by your camera.	32
	SmartMedia memory card contains incorrectly recorded files	Insert a SmartMedia memory card containing pictures properly recorded by the camera.	32
	SmartMedia memory card contains files in a format not read by the camera.	Check the format type	82
	Card door open	Ensure that card door is securely closed.	32
	Video interface cable poorly connected	Check connection.	81
	Source of interference, such as electric motor, nearby	Relocate camera away from source.	–
	SmartMedia memory card contact surface dirty	Clean contact surface with soft dry cloth.	31
	The video I/O switch is set on [IN].	Set video I/O switch is set on [OUT].	81
Replay is not clear	Error in internal memory in the camera	Copy required files from internal memory to the SmartMedia memory card and format internal memory.	89, 107
	Error with SmartMedia memory card	Test camera with another SmartMedia memory card. If second card displays well, problem is with card not camera.	–

Problem	Cause	Solution	Page
Display shut off	Dead batteries	Replace batteries.	27
	Auto power-off activated	Slide power on again.	41
Remote control unit will not work	Obstruction between the remote control unit and camera sensor	Remove the obstruction. (Sensor is on the left side of the lens.)	–
	Dirty remote control transmitter or camera sensor	Clean with a soft dry cloth.	–
	Dead remote control batteries	Replace CR2032 lithium batteries.	–
LCD monitor brightness changes during autofocus operation	Area captured by autofocus field and the surrounding area have contrasting light levels or the entire subject is dark.	There is no malfunction.	–
Vertical lines appear on image	Phenomenon occurring with pictures of bright subjects, known as the smudge phenomenon	There is no malfunction. Never shoot the Sun, etc.	–

■ Miscellaneous

Problem	Cause	Solution	Page
SmartMedia memory card will not fit into slot	Wrong type of SmartMedia memory card	Use a SmartMedia memory card specified for the camera.	32
	SmartMedia memory card incorrectly oriented	Insert the SmartMedia memory card the correct way.	32
Camera will not operate even when buttons and switches are manipulated	Dead batteries	Replace batteries.	27
	Camera malfunction	Slide the power off and on once. Turn the mode dial to [📷] or [📷]. If the problem persists, (1) reset the camera by sliding the power switch after removing the main batteries, and (2) reinstall the batteries and try to operate the camera again.	–
Date and time are wrong	Date and time setting is incorrect	Reset the date and time.	35
Date and time were set but disappeared	Battery removed	The date setting is reset if the battery has been removed for about 3 minutes or longer. Set the date again.	35
Fill won't erase or SmartMedia memory card won't format	Camera not set to erase mode	Turn the mode dial to [🗑️].	94
	Write protect pad on SmartMedia memory card	Remove pad from SmartMedia memory card.	31
	File protected	Use the play menu to reset the file's protection setting.	87
	Power switch off or auto power-off activated.	Slide power on and retry.	102
Mode settings have changed	Batteries have been removed	Reset mode.	102
Auto power-off will not activate	Auto power-off setting is disabled	Enable setting.	103
	Camera powered by AC adapter (auto power-off is automatically disabled when powered by an AC adapter)	–	–
Beep will not sound	Beep disabled	Set beep sound to [ON] on the SETUP menu.	102
	No image on the TV screen		
	The video I/O switch is set on [IN].	Set video I/O switch is set on [OUT].	81
	The television system setting is incorrect.	Select the correct television system.	105
	The output video gear has an incorrect video I/O switch setting.	Check to see if the output video gear has a correct video I/O switch setting.	–

Using Your Digital Camera in Other Countries

Ricoh AC-3 AC adapter (optional)

- The AC-3 AC adapter adjusts automatically to voltages ranging from 100V to 240V AC and frequencies of 50Hz to 60Hz.
- Some countries use electrical outlets which have different shapes. Before leaving on a trip, obtain the necessary plug adapter from a travel agent or electric store.

Using a Local TV Receiver for Playing Pictures

- You can play pictures taken with this camera on a TV receiver (or monitor) furnished with a video input terminal. Use the video interface cable supplied.
- This camera supports two television systems: NTSC and PAL. Switch your camera's video system to meet the local video environment. See "Changing Video-Out Signal Method (NTSC/PAL)" (p.105).
- If you plan to take the camera with you on a trip abroad, identify the local television system beforehand.

About the Warranty and Servicing

1. The Ricoh RDC-5000 camera is backed by a one-year limited warranty. During the warranty period, which starts from the date of purchase, any defective parts will be repaired free of charge. In the event of a camera malfunction, contact the dealer from which you purchased the camera or contact the nearest Ricoh service office. Please note that you will be charged for the cost of shipping the camera from the Ricoh service office to your residence.
2. This warranty does not cover any damage resulting from:
 - ① Failure to follow the instructions in this instruction manual;
 - ② Repair, modification or overhaul not conducted by an authorized service center specified in this instruction manual;
 - ③ Fires or natural disaster;
 - ④ Improper storage, such as exposing the camera to high temperatures, humidity, or mothballs; storing it with leaking batteries; storing the camera in a dirty condition so that it becomes moldy; or otherwise insufficiently caring for the camera.
 - ⑤ Submergence; exposure to floods or spilled alcoholic or other beverages; allowing sand or mud to enter the camera; exposure to physical shocks; or dropping of the camera.
3. After a full year has passed from the purchase date, you will become responsible for all repair fees, including those incurred at an authorized service center.
4. You will be responsible for all repair fees, even within the warranty period, if the warranty card is not attached or if the distributor's name or the purchase date have been changed or are not indicated on the card.
5. Expenses for overhauls and thorough inspections as a result of a customer's special request will be charged to the customer, whether or not they are incurred during the warranty period.
6. This warranty only applies to the camera and not to the accessories, such as the hard case and wrist strap, nor does it apply to the consumables provided, such as batteries.
7. Any consequential damage arising from the failure of this camera, such as expenses for taking pictures or loss of expected profit, will not be reimbursed whether it occurs during the warranty period or not.
8. The above provisions refer to repairs offered free of charge, and do not limit your legal rights. The intention of the above provisions is also described in the warranty card provided with this camera.
9. Parts essential to the servicing of this camera - that is, components required to maintain the functions and quality of this camera - will be available for a period of seven years after the camera is discontinued. However, as some of those parts are kept for a longer period, do not hesitate to contact your distributor or the nearest Ricoh service representative even after the seven-year period.
10. Please note that, if the camera is seriously damaged from flooding, submergence, infiltration of sand or mud, violent shocks or dropping, the camera may not be repairable, and restoration to its original condition may be determined to be impossible.

 **Note**

- Before sending the camera in for repair, check the batteries and read this instruction manual again to ensure proper operation.
- Some repairs require a significant amount of time to be completed. Please allow sufficient time for repairs.
- When sending the camera to a service representative, please include a note which describes the defective part and the problem as precisely as possible.
- Remove all accessories not related to the problem before sending the camera to a service representative.
- Before taking any important pictures (such as at weddings, on trips abroad, etc.) test the camera to check its operation and ensure proper functioning. We recommended that you keep this manual and spare batteries on hand.

Specifications

■ General

- **Video Signal Protocol** : PAL/NTSC
- **Power Source and Voltage** : Batteries: 6 volts
AC: 5 volts
- **Dimensions (W × H × D)** : 131.1 × 68.8 × 45.2 mm (5.17" × 2.71" × 1.78")
(excluding grips)
- **Weight** : Approximately 315 g (11 oz.) (excluding batteries)
- **Operating Range - Temperature** : 0° to 40° C (32° to 104 F)
- **Operating Range - Relative Humidity** : 85% or less
- **Storage** : -20° to 60°C (-4° to 140°F)

■ Camera

- **CCD** : 2,300,000 million square pixels (effective: 2,190,000 million)
- **Lens** : Zoom lens F=2.8 - 3.2
 - Focal length : f=8 - 18 mm (equivalent to 38-86 mm on 35mm camera format)
 - Minimum shooting range : Approximately 4 cm (1.6") (macro)
- **Viewfinder**
 - Type : Real image
 - Magnification : Telescope 0.34X, standard 0.56X, wide angle 0.77X
 - Parallax correction : No
 - Diopter : -1 dpt
- **Monitor**
 - Display Size : 1.8"
 - Drive System : TFT Active Matrix System
 - Picture Elements : Approximately 110,000 pixels
- **White Balance** : Auto/Preset (Daylight, Cloudy (Overcast), Fluorescent Light, Tungsten Light)
- **Exposure Compensation**
 - Light Metering System : Centerweighted
 - Exposure Value Memory System : Auto backlighting detection
Manual compensation, ±2.0 EV (in 0.5 EV increments)
 - Metering : TTL-CCD method
 - Flash Automatic Exposure : Yes (daylight synchro)
 - Shutter Speed : 1-1/500
 - Minimum diaphragm setting : F 13.5 – F 14.4
 - ISO Sensitivity : Approximately equivalent to 100
- **Distance Adjustment**
 - Autofocus Method : TTL-CCD AF
 - Autofocus Range : 4 cm (1.6") to infinity

● Built-in Flash

- Type : Auto
- Range : About 0.4 to 3.0 m (telescope)
About 0.4 to 3.4 m (wide angle)
- Modes : Off/On (Forced flash/Slow synchro)/Auto/Red-eye reduction

■ Image Data Recording and Playback

● Image Resolution : 1792 × 1200, 896 × 600 pixels

● File Format : JPEG (Exif2.1)

● Camera : File System standard: Design rule for Camera File System (DCF)

● Compression Format : JPEG baseline method

● Approximate File Sizes

- 1792 × 1200 : F mode: approx. 795 KB, N mode: approx. 401 KB, E mode: approx. 204 KB,
- 896 × 600 : F mode: approx. 270 KB, N mode: approx. 139 KB, E mode: approx. 73 KB
- 640 × 480 : F mode: approx. 157 KB, N mode: approx. 82 KB, E mode: approx. 45 KB

■ Input/Output Terminal

- Power input : 5 V (AC adapter)
- Video output : 1.0 V_{p-p} (75 W)
- RS-232 C/AUX : For connecting to a PC

■ Body

● Tripod Screw Hole

- Power Supply : Tapped (1/4-20 UNC)
: Length: less than 5.7 mm (0.22")

■ Main Batteries

- Type : AA alkaline batteries
: AA Ni-MH batteries
: AA Ni-Cd batteries
- Voltage : 6 volts (1.5 volts × 4 batteries)

● Date backup battery

- Battery type : Super-capacitor
- Duration : About 3 minutes

● Auto Power-Off : Activated after more than 5 minutes

■ Internal Memory

- Capacity : 8 MB

■ Compatible Memory Cards for Recording and Playback

- Type of Memory : SmartMedia memory card
- Capacity : 2, 4, 8, 16, 32 MB
- Operating Voltage : 3.3 volts

Recording Capacities

The table below gives approximate recording picture counts available by SmartMedia memory card capacity and by PIC mode.

Type	PIC Mode	Recording Mode	Approximate Recording Picture counts
2MB	1800 × 1200	F	2
		N	4
		E	9
	900 × 600	F	7
		N	14
		E	26
	640 × 480	F	12
		N	23
		E	41
4MB	1800 × 1200	F	4
		N	9
		E	19
	900 × 600	F	14
		N	27
		E	49
	640 × 480	F	24
		N	45
		E	82
8MB	1800 × 1200	F	9
		N	19
		E	38
	900 × 600	F	29
		N	55
		E	99
	640 × 480	F	49
		N	90
		E	165

Type	PIC Mode	Recording Mode	Approximate Recording Picture counts
16MB	1800 × 1200	F	19
		N	38
		E	76
	900 × 600	F	58
		N	110
		E	199
	640 × 480	F	99
		N	166
		E	332
32MB	1800 × 1200	F	39
		N	76
		E	153
	900 × 600	F	117
		N	221
		E	399
	640 × 480	F	199
		N	332
		E	665



- The picture size of 640 × 480 is available with the digital zoom function enabled.
- Internal memory is similar to an 8 MB SmartMedia memory card.



Declaration of Conformity

“The Product complies with the requirements of the EMC Directive 89/336/EEC.”

INFORMATION TO THE USER

USA FCC Part15 Class B

The 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, user, 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. In 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 to outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help. (FCC 15.105B)

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. (FCC 15.21)
Properly shielded and grounded cables and connectors must be used for connection to a host computer in order to comply with FCC emission limits. (FCC 15.27)
An AC adapter with a ferrite core must be used for RF interference suppression.

COMPLIANCE INFORMATION STATEMENT

Product Name: Ricoh Digital Camera

Model Number: RDC-5000

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.

RICOH CORPORATION

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Note to Users in Canada

Note: This Class B digital apparatus complies with Canadian ICES-003

Remarque Concernant les Utilisateurs au Canada

Avertissement: Cet appareil numérique de la classe B est conforme a la norme NMB-003 du Canada

IMPORTANT SAFETY INSTRUCTIONS-SAVE THESE INSTRUCTIONS DANGER-TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, CAREFULLY FOLLOW THESE INSTRUCTIONS.

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