How to Read the Operation Manuals

The following operation manuals are supplied with this camera. Refer to the appropriate manual for instructions relating to the required operation.

Open the package



Check the contents of the package. (p.2)

Basic operation



Digital Camera Operation Manual (this manual)

This manual explains how to operate the camera, from the preparations that are necessary before using the camera to instructions on how to use the various shooting functions and play back files.

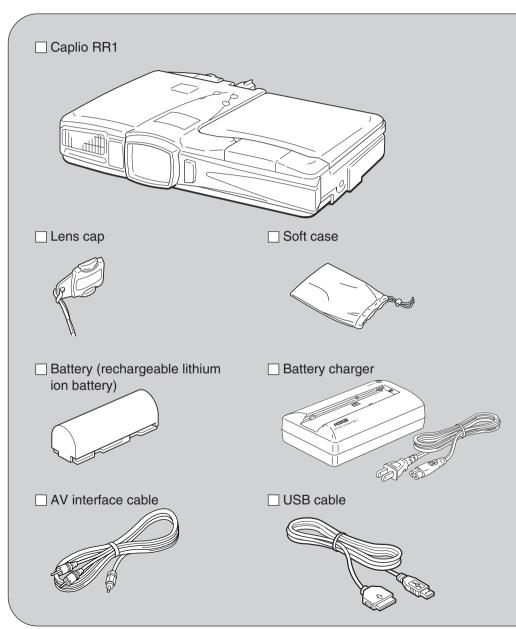
Transfer images to PC (Supplied by Software Operation Manual for Caplio RR1 CD-ROM)

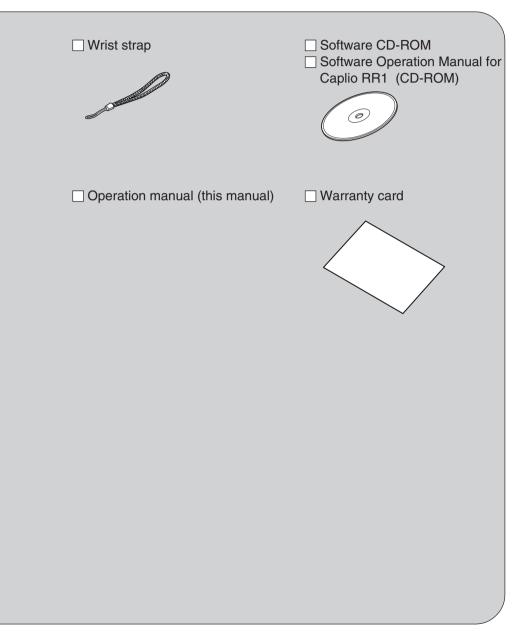
Caplio Utility Windows/Macintosh

This manual explains how to install the necessary software, how to connect the camera to the PC, and how to transfer files between the camera and the PC.

Checking the Package Contents

Check that your digital camera comes complete with the following items. Read the warranty card and keep it in a safe place.





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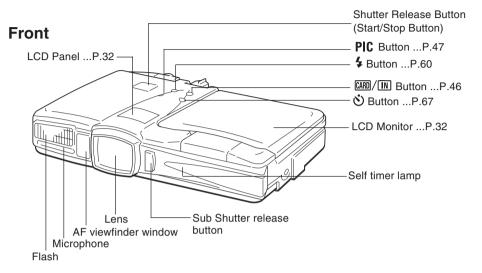
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■ Meaning of Symbols

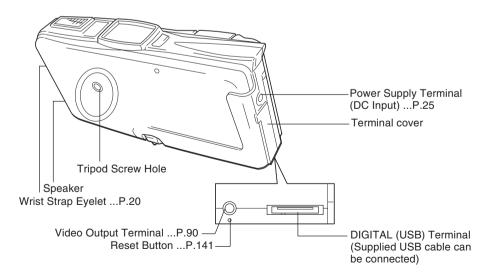
Important Note	This indicates points or restrictions relating to operation requiring your attention.
Note	This indicates a supplementary explanation of the operation concerned or points you should know.
Tips	This indicates information that it is useful to know when operating the camera.
See	This indicates the reference page for the function or operation concerned.

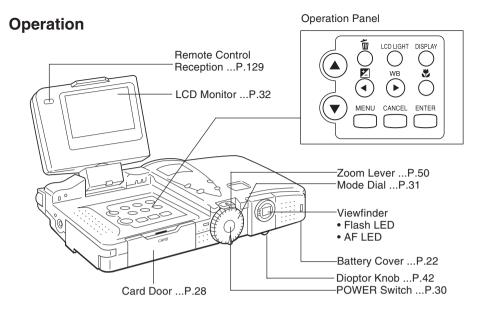
Parts & Names

■ Camera Body



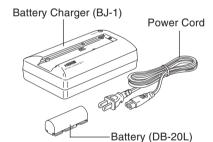
Back

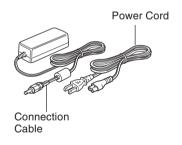




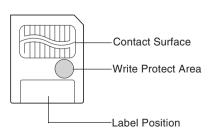
■ Battery/Battery Charger

AC Adapter (optional) AC-3 (100V – 240V)





■ SmartMedia Memory Card (optional)



■ Remote Control Unit (optional)

• DR-3



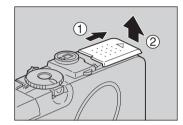
Basic Operation/Quick Reference

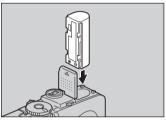
This section provides introductory information for operating the digital camera. Further details can be found in the reference pages mentioned below.

Preparations

Powering the Camera (p.21-25)

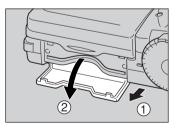
- 1 Load the battery into the camera.
 - * When using an AC adapter, connect it to the camera and then to the AC outlet. (p.25)

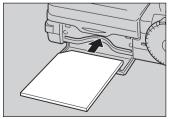




Inserting a SmartMedia Memory Card (p.26-29)

- 1 Make sure that the camera is turned off.2 Open the card door and insert a
- 2 Open the card door and insert a SmartMedia memory card.
 - * Before using a new SmartMedia memory card, you must first format (initialize) it with the camera. (p.120)





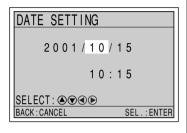
Setting the Date and Time (p.37-39)

- 1 Turn the power switch on and set the mode dial to [SET].
- **2** Press the **a** or **v** button to select [DATE SETTING].
- 3 Press the DISPLAY button to select the display method.
- **4** Press the ENTER button.
- **5** Press the **(a)** or **(c)** button to change the highlighted digit.
- 6 Press the ③ or ⑤ button to select the digit you wish to change.

Repeat steps **5** and **6** above to complete the settings.

- * Each time you press the ② or ⑤ button, the flashing digit changes, from year to month, day, hour and minute.
- 7 After you have set the date and time, press the ENTER button.

SET	\$ 2 / 3
POWER SAVE MODE	ON
SEQUENTIAL NO.	OFF
DATE SETTING	2001/ 1/ 1
VIDEO OUT MODE	NTSC
LANGUAGE	ENGLISH
SELECT: ♠ ♥	CHANGE: ③ ▶
	SEL . : ENTER

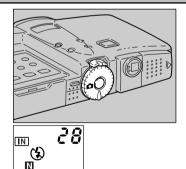


Shooting

Basic Shooting Procedure (Still Picture Mode) (p.45-54)

- 2 Press the MD/IN button to select the recording destination.
- **3** Press the PIC button to select an image quality mode.
- 4 Move the zoom lever to select the desired size of the subject.

- * Check the position of the subject by looking through the viewfinder or at the LCD monitor.
- **5** Press the shutter release button.





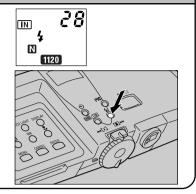
Changing the Flash Mode (p.60-61)

Set the mode dial to [a] or [].
Press the 4 button to select a flash mode.

You can choose Flash Off (), Auto (), Forced Flash (), or Slow Synchro mode (blinks).

The mark for the selected mode will be displayed on the LCD panel and on the LCD monitor.

3 Press the shutter release button.



Using the Self-Timer (p.67)

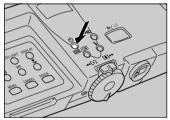
- 1 Set the mode dial to [1] or [2].
- **2** Press the \odot button.

The \circ mark will be displayed on the LCD panel and on the LCD monitor.

3 Press the shutter release button.

The self timer lamp lights and the self-timer starts. The shutter is released after a delay of approximately 10 seconds. The self timer lamp starts to flash about 2 seconds before the shutter is released and the beep sound is heard.

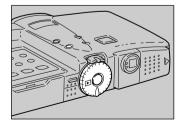




Playback

Playing Back Files (Still Image Files) (p.92-94)

- 1 Turn the power switch on and set the mode dial to [►].
- 2 Press the (ARD)/(III) button to select the playback source.
- **3** Press the **△** or **¬** button to select a file.
 - * The zoom playback and multi-image playback allow you to magnify an image or view several image files at once. (p.98-101)



Erasing

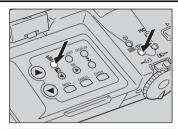
Erasing Files (p.114-117)

- Press the POWER switch to turn the camera on and set the mode dial to [].
- **2** Press the MD/IN button to select the erase source.
- **3** Press the m button.
- 4 Press the

 or

 or

 button to select the erase mode and press the ENTER button.
 - * Remember that files cannot be restored once they are erased. Before starting to erase a file, make sure that you want to erase it.



ERASE	
IN	
ERASE SINGLE IMAGE	
ERASE ALL IMAGES	
ERASE SELECTED IMAGES	
SELECT: ③ ♥	
BACK: CANCEL SEL.: E	NTER

If you selected [ERASE SINGLE IMAGE]

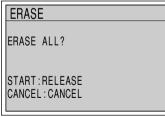
Fress the ♠ or ♥ button to select a file you want to erase and press the shutter release button.

Repeat step **5** to erase additional images one at a time.



If you selected [ERASE ALL IMAGES]

5 Press the shutter release button.



If you selected [ERASE SELECTED IMAGES]

5 Press the ⓐ or ◈ button and the ④ or ◈ button to select a file you want to erase and press the ENTER button.

Repeat step **5** to select additional files. To cancel the erase setting, press the ENTER button again.

6 Press the shutter release button.



Safety Precautions

Warning Symbols

Various symbols are used throughout this instruction 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.

⚠ Danger

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

⚠ 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 **①** symbol alerts you to actions that must be performed.



The \bigcirc symbol alerts you to prohibited actions.

The \bigcirc 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.



Do not attempt to disassemble, repair or modify the camera.
 The high voltage circuitry in the equipment may lead to electric shock.



 Do not attempt to disassemble, modify or directly solder the battery.

∆ Danger



Do not dispose of the battery in fire, subject it to heat, or use or leave it where it is exposed to high temperature, such as near fire or inside a car. Keep away from water and do not allow it to get wet.



 Do not pierce the battery with a needle, hit it with a hammer, tread on it, drop it or subject it to severe impact.



 Do not use the battery if the outer casing is damaged or it is suspiciously deformed.

.∱Warning



Turn off the power immediately in the event of irregularity, such as the equipment emitting smoke or a strange smell. Remove the batteries 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.



Turn off the power immediately if any metallic object, water, liquid or other foreign object gets into the equipment. Remove the batteries 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



- 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.
 - Do not put the battery in a microwave or high voltage equipment.
 - Remove the battery from the camera immediately and keep away from fire in the event of irregularity during use or recharging, such as leakage of the battery fluid, discoloration, or strange smell.



- Observe the following precautions to avoid the risk of fire, electric shock or bursting due to charging of the battery.
 - 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.

⚠Warning



• Keep the battery used in this equipment out of the reach of children to prevent accidental ingestion of harmful substances. Consumption of battery fluid is extremely 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 warnings 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 batteries 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 use the equipment in the bathroom or shower as this could result in fire or electric shock.



- Do not use the equipment near flammable gases, gasoline, benzine, 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 adapters for this equipment (AC-3) in household electrical outlets. Other adapters pose the risk of fire, electric shock or injury.



 To avoid the risk of fire, electric shock or injury, do not use the AC adapter with commercially available electronic transformers when traveling abroad. Observe the following precautions to ensure safe use of this unit.

∴Caution



Contact with fluid leaking from a 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 a battery starts to leak, remove it immediately from the equipment and wipe the battery chamber thoroughly before replacing it with a new battery.



Plug the power cords securely into the electrical outlets.
 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 Warnings for Accessories

 Safety warnings for the optional accessories, such as the AC adapter, are contained in the instruction manual provided with each product and should be read thoroughly before operating the equipment.

Chapter

GETTING STARTED

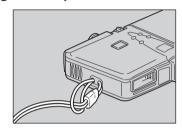
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Before Using the Camera

Attach the wrist strap and lens cap before using the camera.

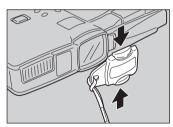
Attaching the Wrist Strap

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



Attaching the Lens Cap

Attach the lens cap by pressing the buttons in the direction of the arrow.



Remove the lens cap by gripping and pressing the buttons.



 Do not swing the camera around by its strap.



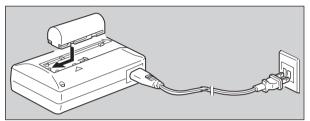
 Attach the lens cap to the wrist strap to prevent it from being lost.

Powering the Camera

This section explains how to load and charge the battery, and how to connect the AC adapter to power the camera from a household electrical outlet.

Charging the Battery

When using the camera for the first time or when the battery symbol () lights, charge the battery to its full capacity following the procedure described below.



- 1 Insert the connector of the power cord into the battery charger.
- 2 Insert the plug on the other end of the power cord into an electrical outlet.
- 3 Set the battery on the battery charger.
 Charging will start and continue as shown below.
 When charging is completed, disconnect the power plug from the electrical outlet.

CHARGE lamp	Contents
Lights red	Charging has started.
Lights green	The completion of charging (90% of full charge), after approximately 75 min. * The battery can be used at this point if you are in a hurry.
Lamp off	Full charge has been reached, approximately 35 min. after the lamp lights green.

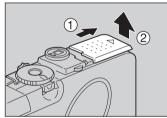
■ Precautions

- Do not use any batteries other than the Ricoh DB-20L.
- Use only a Ricoh BJ-1 battery charger to charge the battery.
- Do not use the BJ-1 battery charger to charge batteries other than the DB-20L battery.
- Charge the battery in a well ventilated area with an ambient temperature of 10°C – 40°C (50°F – 104°F).
- When the battery reaches the end of its service life, even if charged correctly, it will be effective for shorter and shorter periods. Replace with a new battery.
- After charging, the battery will feel hot, but this is normal.
- After charging, remove the power plug from the electrical outlet. Failure to do so may result in fire.

Loading the Battery

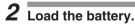
Load the battery (rechargeable lithium ion battery) before operating the camera.

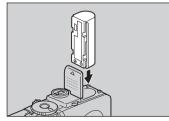
1 Check that the camera is turned off, and then open the battery cover by pressing and sliding it in the direction shown.



See

"Turning the Camera On and Off" (p.30).





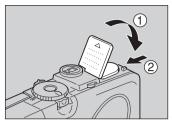


Before using the camera for the first time, be sure to charge the battery. (The battery leaves the factory in an uncharged state.) See "Charging the Battery". (p.21)



 Do not bring metallic objects, such as a needle, into contact with the battery contact surface 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 shows the approximate recording and playback times, as measured under the following test conditions:

[Test conditions]

During shooting: Shoot continuously in shooting mode with the power turned on

(shoot at intervals of 30 seconds, without turning the camera off in the middle, with the flash fired 50%, at a

temperature of 20°C (4°F))

During playback: Leave the camera continuously turned on in playback mode at a temperature of 20°C (4°F)

Battery Type	Approximate Recording Time	Approximate Playback Time
DB-20L lithium ion battery (fully charged)	50 minutes	50 minutes



Tips to Extend Recording and Playback Times

- The battery life indicated on the previous page tends to decrease depending on the ambient temperature.
 - In a 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 will accelerate expiration of the battery. Keep their usage to a minimum.
- Copying or erasing images repeatedly will also accelerate expiration of the battery.
- The battery life may be extended by shooting images using the viewfinder with the LCD monitor closed.

■ Handling Precautions

- Read the instruction manual supplied with the battery before using it.
- Use only the specified lithium ion battery. Check the type of battery in "Accessories" (p.143).
- Clean the contact area of the battery terminal and the battery with a dry cloth before loading.
- If the camera is used continuously for a long period, the battery may become hot. Allow to cool before unloading it.
- Except when charging the battery, store the charger and the battery separately.
- · Store the battery in the case provided.
- If the camera is not to be used for a long period, discharge the battery completely before removing it from the camera and store in a cool place. Recharge the battery fully before reusing the camera.

Note

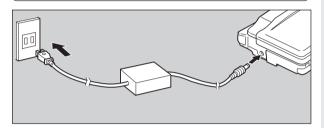
- When using the camera for an extended period near an electrical source, it is recommended to use an AC adapter (optional). See "Connecting an AC Adapter" (p.25).
- It is advisable to have a spare battery handy when powering the camera by the battery alone.
- The battery symbol () lights to show that the battery voltage is low.
 Recharge the battery. See "Charging the Battery" (p.21).

Connecting an AC Adapter

When using the camera for long periods of time to record or playback images or when connecting the camera to a personal computer, 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.
Connect the AC adapter cable to the power supply terminal (DC input) on the camera.



- "Turning the Camera On and Off" (p.30).
- Insert the power plug into the electrical outlet.



 If the battery is loaded in the camera while it is connected to the household power source, the camera is powered from the AC source and not by the battery. Unload the battery when using the camera for long periods of time.



- 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.
- Disconnect the AC adapter from the camera and electrical outlet if the camera will not be used for a long period of time.

SmartMedia Memory Cards

Note

- There are numerous types of SmartMedia memory cards.
 Before using a commercially available SmartMedia memory card, check with the manufacturer that it is compatible with your camera.
- By using an optional PC card adapter or floppy disk adapter, you can insert a SmartMedia memory card directly into the PC card slot or floppy disk drive of your PC.

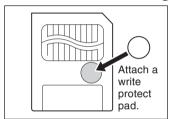
This section explains the types and usage of SmartMedia memory cards.

What is a SmartMedia Memory Card?

Files are recorded as data on the SmartMedia memory card in your camera. The following types of SmartMedia memory cards can be used:

- Capacity: 2 MB, 4 MB, 8 MB, 16 MB, 32 MB, 64 MB, 128MB
- Operating voltage: 3.3 V

■ Protecting Against Accidental Writing



Attaching a write protect pad to a SmartMedia memory card will prevent accidental erasure or overwriting of recorded files.

Remove the write protect pad from the SmartMedia memory card to record or erase data.



• If the write protect pad gets dirty, wipe it clean with a soft, dry cloth.

■ Handling Precautions

- SmartMedia Memory Cards
 - Do not insert or remove the SmartMedia memory card while the camera is turned on.
 - Do not bend, subject to strong force, shock, or drop the SmartMedia memory card.
 - Avoid using or storing SmartMedia memory cards in environments that are subject to static electricity or electrical interference.
 - Avoid using or storing SmartMedia 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 contact surface of the SmartMedia memory card clean and free from dust and foreign matter. Should the contact surface get dirty, wipe it clean with a soft, dry cloth.
- Keep the SmartMedia memory card slot free from dust and foreign matter.
- To avoid possible hazards, keep SmartMedia memory cards away from flames and do not dispose of them in fire.
- SmartMedia 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 SmartMedia memory 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 SmartMedia memory card. The data stored on the SmartMedia memory card may be lost or damaged.
- You are advised to copy important data from the SmartMedia memory card onto other media, such as floppy disks or hard disks.

Inserting a SmartMedia Memory Card

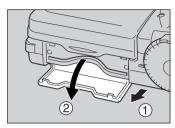
Check that the camera is turned off before inserting the SmartMedia memory card.



- Never insert or remove a SmartMedia memory card while the camera is turned on. The data stored on the SmartMedia memory card may be lost or damaged, or the camera may malfunction.
- When using a new SmartMedia memory card, or when using a SmartMedia memory card that has been used on other equipment, such as a personal computer, the SmartMedia memory card must first be formatted (initialized) with the camera. See "Formatting a Card/ Internal Memory" (p.120).
- Never remove the SmartMedia memory card while data is being recorded or erased. The data stored on the card may be lost or damaged.
- When the SmartMedia memory card has been removed, place it in the antistatic case supplied or other protective cover.

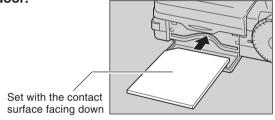
■ Inserting Card

1 Check that the camera is turned off, and then open the card door.



See

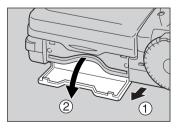
- "Turning the Camera On and Off" (p.30).
- 2 Insert the SmartMedia memory card into the card insert slot and close the card door.



Push the SmartMedia memory card fully into position, with the contact surface facing down.

■ Removing Card

1 Check that the camera is turned off, and then open the card door.



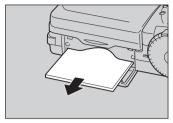


• "Turning the Camera On and Off" (p.30).

Note

- Insert the SmartMedia memory card in the correct direction. Do not insert it at an angle.
- The camera will not turn on when the card door is open.

Pull the SmartMedia memory card straight out of the slot.



3 Close the card door.

Turning the Camera On and Off

The camera is turned on and off by means of the power switch.

1 Press the power switch.

The camera will turn on.

To turn the camera off, press the power switch again.





Auto Power Off

The camera will turn off automatically (auto power off) to conserve the battery if it is left idle (no buttons operated) for a preset time. To resume use, turn the power on again.

The auto power off feature does not function when the camera is powered by an AC adapter. See "Auto Power Off Setting" (p.123).

How to Use the Mode Dial

The camera offers a number of recording and playback modes. Select the desired mode with the mode dial.

Mode dial	Mode name	Description	
۵	Still Picture mode	This mode is used for normal	
	mode	shooting.	
•	Sound mode	This mode is used for recording sound.	
	Text mode	This mode is used for recording text. Recording is in two colors, black and white, without any gradations.	
	Continuous Shooting mode	In this mode, the subject is shot continuously while the shutter release button is depressed.	
Ą	Motion Picture mode	This mode is used for recording motion pictures with sound.	
Þ	Playback mode	This mode is used for playing recorded image files.	
SET	Settings mode	This mode is used for entering or changing the camera settings.	

Turn the mode dial to select the desired mode.

The information displayed on the LCD monitor varies depending on the mode. For details, see the reference pages listed below.

- (Still Picture) (p.45)
- **(Sound)** (p.56)
- 🗐 (Text) (p.55)
- 🖳 (Continuous Shooting) (p.56)
- 🛱 (Motion Picture) (p.57)
- **(Playback)** (p.92)
- SET (Settings) (p.120)

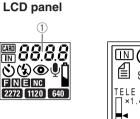
Explanation of Information Displays

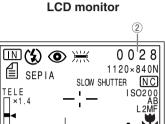
Note

- All items of information are shown for illustration purposes. During actual operation, only the relevant items are displayed.
- Items other than recording destination/playback source (CARD / [IN]) are not displayed for files recorded with another digital camera.
- If a message is displayed, see "Error Messages" (p.140).

The LCD monitor or the LCD panel displays symbols and figures showing the status of your camera, such as the battery level, the number of pictures that can be taken, and the mode settings.

Shooting Mode Display





(4)

(5)

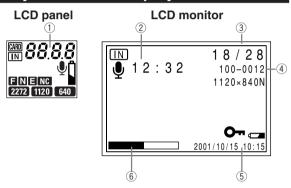
- 1):Remaining number of pictures / Remeining recording time
- 2:Remaining number of pictures / Remaining recording time
- ③:Zoom indication bar
- 4):Message
- 5:Date and time

	LCD panel	LCD monitor
Storage memory	CARD IN	CARD IN
Flash mode	(4) 4 4 (lit)	(\$) \$ \$ (lit) \$A
Red-eye reduction mode	•	•
Black/white contrast in Text mode	_	① -2 • ① -1 • 0 (no display) • ① +1 • ① +2
White balance		AUTO (no display) ☀ ⇔ ☆ Ж M
File type	•	Still picture (no display)
Monochrome mode		B & W • SEPIA
Sharpness mode		SHARP+1 • SHARP-1
Negative mode		NEG.
Digital zoom		× 1.4 •× 1.8 •× 3.6
Size/No. of pixels	2272 1120 640	2272 × 1704 • 1120 × 840 • 640 × 480
Image quality/ Compression rate	FNENC	F•N•E•NC
ISO sensitivity		AUTO (no display) • ISO200 • ISO400 • ISO800

	LCD panel	LCD monitor
Auto bracket	_	AB
Focus	_	AF (no display) • MF • 2.5m • ∞
Time exposure	_	L1 • L2 • L4 • L8
Macro mode	_	*
Self-timer mode	৩	৩
Battery symbol	1 *	← *
Exposure	_	EV -2.0 - EV+2.0
compensation		

* The battery symbol will be displayed when the battery level gets low.

Playback Mode Display



- 1:Playback file no. Playback
- 2:Sound recording time Motion picture recording time
- 3:Playback file no./Total no. of files
- 4):File name
- (5):Date and time
- 6:Indicator display

	LCD panel	LCD monitor
Storage memory	CARD IN	CARD IN
File type	•	Still picture (no display)
Size/No. of pixels	2272 1120 640	2272 × 1704 • 1120 × 840 • 640 × 480
Image quality/ Compression rate	FNENC	F•N•E•NC
Battery symbol	1 *	← *
Image protect mark	_	O
Sound recording	•	•

^{*} The battery symbol will be displayed when the battery level gets low.

Menus



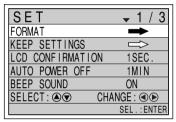
 For details of the settings that can be made on each menu, see "Functional Index" (p.154). This camera features various menus which can be used to enter or change the settings. Select and set the items using the buttons on the operation panel as shown below.

■ Menu Displays

SET Menu

Set the mode dial to [SET].

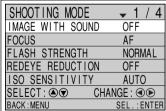
To exit the set menu, turn the mode dial to select another mode.



SHOOTING MODE Menu

Set the mode dial to shooting mode (♠ • ♠ • △ • △ • A) and press the MENU button.

To exit the record menu, press the MENU button again.

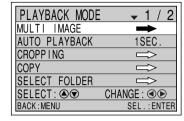


PLAYBACK MODE Menu

Set the mode dial to playback mode (▶) and press the MENU button.

To exit the playback MENU, press the Menu

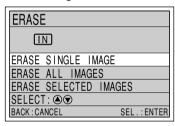
button again.



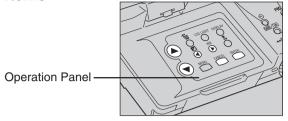
ERASE Menu

Set the mode dial to playback mode (\blacktriangleright) and press the $\tilde{\mathbf{w}}$ button.

To exit the erase menu and return to playback mode, press the $\mbox{1}{m}$ button again.



Selecting, Setting and Cancelling Items

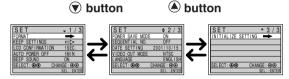


Note

 Items that are not fully illuminated cannot be selected.

Selecting the Item

Press the a or e button to select the item you want to set. If there is more than one screen, press the a button to display the previous screen and the e button to display the next screen.



button

button

If the item has an arrow (→), press the ENTER button to display the next screen.

ENTER button



CANCEL button

Selecting the Desired Setting

Press the
or button to select the desired setting and press the ENTER button.



Cancelling the Setting

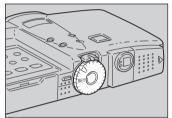
Press the CANCEL button. The setting will be cancelled and the screen will return to the previous display.

Setting the Date and Time

You can set the date and time on the camera. Use this function when using the camera for the first time or when you want to change the date and time.

Note

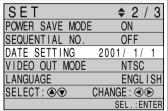
- · Use the yyyy/mm/dd format to set the date.
- Time is displayed in the 24-hour clock format. Midnight is expressed as 00:00 and noon as 12:00.
- Press the POWER switch to turn the camera on and set the mode dial to [SET].



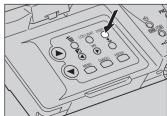
See

"Turning the Camera On and Off" (p.30).

Press the
or
button to select [DATE SETTING].



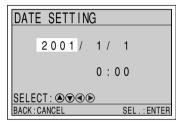
Press the DISPLAY button to select the date display method.



There are three ways of displaying the date: $2001/10/15 \rightarrow \text{Oct } 15\ 2001 \rightarrow 15\ \text{Oct } 2001$ Each time you press the DISPLAY button, the display method is switched in the sequence shown above. Press the DISPLAY button to select the desired date display method.

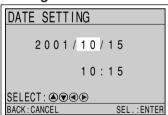
4 Press the ENTER button.
The date setting menu is displayed.

5 Press the **③** or **⑤** button to change the highlighted digit.



Press the button to increase the digit and the button to decrease the digit. Pressing the button continuously increases the speed.

6 Press the ② or ⑤ button to highlight the digit you wish to change.



Make the required changes by repeating steps **5** and **6**.



Each time the **ⓑ** button is pressed, the highlighted digit changes in the sequence: year → month → day → hour → minute.

7 After setting the minutes, press the ENTER button.

The clock will start and the display will return to the SET menu.



How to check the date and time

Press the DISPLAY button to display the set date and time on the LCD monitor. See "LCD Monitor Display" (p.46, p.97).



 The set date and time will be reset about 20 days after the battery has been removed, for example when changing the battery. In this case, reset the date and time.

How to Hold the Camera



- Keeping your finger away from the shutter release button and then pressing the shutter release button in one go may result in a blurred image.
- Do not move the camera until the beep sound is heard.

Unintentional movement of the camera during shooting will result in blurred images. To avoid such so-called "camera shake", hold the camera as described below. Be particularly careful to avoid camera shake with telephoto zoom shots.

- 1 Hold the camera steady with both hands with your elbows close to your body.
 - When viewing through the viewfinder
 With the camera pressed lightly to your face, aim it at your subject while looking through the viewfinder.







Vertical

 When viewing on the LCD monitor
 Hold the camera firmly in both hands, and aim it at your subject while looking at the LCD monitor.

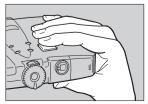


Horizontal

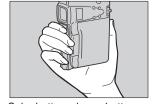


Vertical

Press the shutter release button lightly with your fingertip.



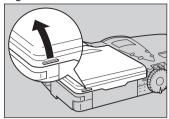
Main shutter release button



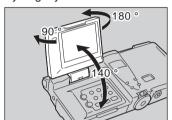
Sub shutter release button

■ LCD Monitor

To open the LCD monitor, press the knob and open the monitor as shown in the diagram.



You can turn the LCD monitor as shown in the diagram, allowing you to shoot at any angle you wish.



■ Usage Precautions

Be careful to keep the camera lens and flash from being covered by your fingers or hair, or by the wrist strap.



 Open the LCD monitor 90 degrees perpendicularly before rotating it in a horizontal direction.



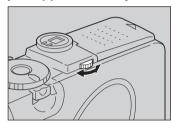
Adjusting the Camera

Adjust the brightness of the LCD monitor and the dioptor.

Diopter Adjustment

Adjust the diopter so that the subject is clearly visible through the viewfinder.

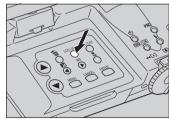
Adjust by rotating the diopter knob left or right until the subject appears clearly.



Adjusting the Brightness of the LCD Monitor

You can adjust the brightness of the LCD monitor when it is hard to see.

Press the LCD LIGHT button on the operation panel.



Each time you press the button, the brightness changes. The brightness can be adjusted in five stages.

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Basic Shooting

This section explains the general operation flow and basic shooting instructions.

Operation Flow

To record an image, follow the steps below.

Turn on the Camera



Press the power switch to turn the camera on. \rightarrow (p.30)

Select a Shooting Mode



Select the Recording Destination



Select internal memory ($\boxed{\mathbb{N}}$) or SmartMedia memory card ($\boxed{\mathbb{M}}$). \rightarrow (p.46)

Select an Image Quality Mode



Choose from nine image quality modes (2272/FNE • 1120/FNE • 640/FNE). \rightarrow (p.47)

Check the Position of the Subject



Check the position of the subject in the viewfinder or on the LCD monitor. \rightarrow (p.48)

Set the Size of the Subject



Use the zoom lever to select the size of the subject. \rightarrow (p.50)

Shoot

Press the shutter release button to record the image. (p.51)

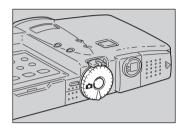
Selecting a Shooting Mode

The camera offers five shooting modes

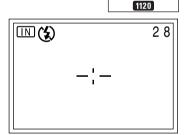
your photographic needs.

The explanation below is based on (Still Picture) mode.

Set the mode dial to [].



The recording setting will be displayed on the LCD panel and on the LCD monitor. IN



(1) M)

Changing the LCD Monitor Display

You can change the display on the LCD monitor by pressing the DISPLAY button. The display changes in the following sequence each time the DISPLAY button is pressed: Simple Display → Detailed Data Display → Grid Display \rightarrow No display.

See

"How to Use the Mode Dial" (p.31).



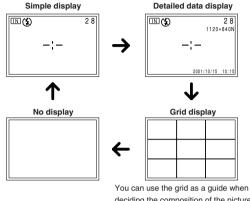
 LCD Monitor Display (Shooting mode) (p.46).



LCD Monitor Display (Shooting Mode)

Each time the DISPLAY button is pressed, the information displayed on the LCD monitor when recording an image, such as the shooting mode, image quality mode and recordable picture count, changes.

● In Still Picture Mode



deciding the composition of the picture.

* If you are using Sound mode or Motion Picture mode (, , ,) and the recordable time will appear on the initial display or detailed data display.

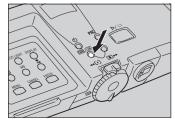
Selecting a Recording Destination

Select whether to record files in the internal memory or on the SmartMedia memory card mounted in the camera.

	Display	Description		
IN Records to the internal memory				
Records to the SmartMedia memory card		Records to the SmartMedia memory card		

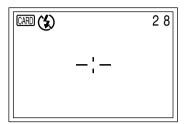
Press the MD/IN button and select the recording destination (MD • IN).

The recording destination changes each time the MRD/IN button is pressed.



The selected recording destination will be displayed.





Note

· If a SmartMedia memory card is mounted in the camera when it is turned on, the CARD mark will be displayed. To set the internal memory as the recording destination, enable the keep settings mode. See "Keep Settings" (p.121).

Selecting an Image Quality Mode

The camera offers the following image quality modes. Select the mode best suited to your photographic needs.

LCD Panel	LCD Monitor
2272/FNE	2272 × 1704F, 2272 × 1704N, 2272 × 1704E
1120 FNE	1120 × 840F, 1120 × 840N, 1120 × 840E
640 / FNE	640 × 480F, 640 × 480N, 640 × 480E

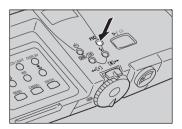
- The recordable picture count varies as you switch the image quality mode.
- The factory default setting is 1120 N.

Note

 To use the non-compressed mode (NC), set the mode on the shooting mode menu. See "Switching to Non-Compressed Mode" (p.84).

Press the PIC button and select an image quality mode.

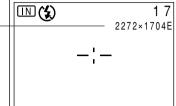
The image quality mode changes each time you press the PIC button.



The selected image quality mode will be displayed. The image quality mode setting will be saved even when the power is turned off.

(4) E 2272

Image quality mode
Displayed when the
DISPLAY button is
pressed to display the
detailed data. See "LCD
Monitor Display
(Shooting Mode)" (p.46)



Note

- Image sizes are 2272 × 1704 pixels, 1120 × 840 pixels and 640 × 480 pixels. With this product and in this manual, the number of pixels is shown as 2272, 1120 and 640.
- For the number of recordable images by image quality mode, see "Recording Capacities" (p.142).

Data Guide

Image Quality (Compression Size (No. of Pixels)	Fine	Normal	Economy
2272 2272 × 1704	Approx.	Approx.	Approx.
	1.5 MB/	726 KB/	363 KB/
	image	image	image
1120 1120 × 840	Approx.	Approx.	Approx.
1.20 / 0.10	470 KB/	235 KB/	118 KB/
	image	image	image
640 640 × 480	Approx.	Approx.	Approx.
0.0 0.0 × 100	152 KB/	72 KB/	40 KB/
	image	image	image

Checking the Position of the Subject

Check the position of your subject through the viewfinder or on the LCD monitor.

■ Viewing Through the Viewfinder

Aim the camera at the subject while looking through the viewfinder.

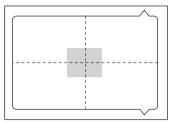
Shooting Scope

Frame the subject within the viewfinder.



Autofocus Field

Located in the center of the viewfinder and roughly corresponding to the area shown on the right, the autofocus field determines the focal distance.



■ Viewing on the LCD Monitor

Aim the camera at the subject while looking at the LCD monitor.

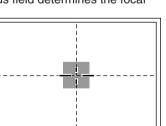
Shooting Scope

Frame the subject within the LCD monitor screen.



Autofocus Field

Located in the center of the LCD monitor screen and roughly corresponding to the area shown on the right, the autofocus field determines the focal distance.



Note

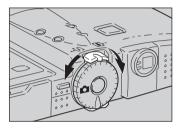
The shaded area and dotted lines are shown for illustration purposes only and do not actually appear in the viewfinder or on the LCD monitor.

Setting the Size of the Subject (Zoom)

By moving the zoom lever, you can vary the size of the subject without changing the distance between yourself and the subject (zoom range is equivalent to 35 - 105mm in 35mm camera format).

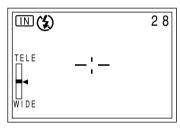
Move the zoom lever to [4] or [4].

Move to to increase the size of the subject (TELE), and move to to decrease the size of the subject (WIDE).



The zoom indication bar will be displayed on the LCD monitor.

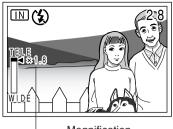
Adjust the subject to the desired size.



■ Digital Zoom Function

If you keep moving the zoom lever to when the camera is set on (Still Picture) mode and the Image quality mode is 40 and the lens is at the maximum telephoto position or the camera is in macro mode (is is displayed), the digital zoom function is triggered to magnify your shot 1.4 times, 1.8 times or 3.6 times.

To disable the digital zoom function, move the zoom lever to [4].



Magnification

(Note)

- The digital zoom function can be used when the Image quality mode is 640 . It cannot be used in the following situations:
- when the shooting mode is set on ♥ (Sound), (Text), □ (Continuous Shooting) or (Motion Picture) mode

 - when the image quality mode is set on non-compressed (NC)
- · When using the digital zoom function, decide the composition using the LCD monitor before shooting.

Shooting (Still Picture Mode)

Hold the camera correctly to keep it steady.

Aim the camera at your subject.



Note

· Use macro mode to shoot subjects closer than 24 cm (9.4 inches). See "Close-up Shooting (Macro Mode)" (p.68).

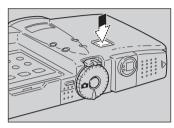
2 Use the zoom lever to set the size of the subject.



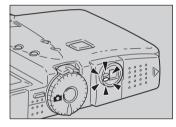
- "Checking the Position of the Subject" (p.48)
- "Setting the Size of the Subject (Zoom)" (p.50)

3 Press the shutter release button lightly with your fingertip.

The shutter release button works in a two-step action. When you press it lightly (halfway), the autofocus function is triggered to determine the focal distance. Keep the camera as steady as possible to prevent camera shake.

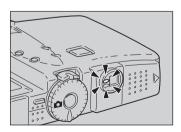


The AF LED (green) will light and the indicator - - on the LCD monitor will turn to green when the subject is in focus. The focus, exposure and white balance settings are set at this point.



Flash LED

The flash LED (red) lights when you press the shutter release button lightly in low light conditions.





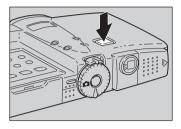
- · The subject will be out of focus when the AF LED flashes and the indicator - - on the LCD monitor turns red. Use the focus lock function. See "Focus Lock Shooting" (p.54).
- If the [SLOW SHUTTER] message is displayed, you are recommended to shoot with the flash or use S mode to avoid camera shake which tends to occur in this situation. See "Changing Flash Modes" (p.60) or "Increasing the Shutter Speed (S Mode)" (p.87).
- If the [!AE] message is displayed, the image is overexposed, but you can take the picture by pressing the shutter release button down fully.

(Note)

· The flash LED (red) blinks and the LCD monitor is cleared while the flash is charging. Pictures cannot be taken in this state.

4 Press the shutter release button down fully without removing your finger.

A beep will sound and the picture you have taken appears on the LCD monitor before it is recorded.



How to Cancel Recording

When you press down the shutter release button fully, the shot image will appear on the LCD monitor. To cancel recording, press the m button, and then press the shutter release button when the cancel confirmation message is displayed.



You can change the image confirmation time as desired. See "Changing LCD Confirmation Time" (p.122).

■ When Focusing is Difficult

You may experience difficulty focusing on the following subjects:

- · Objects with little or no contrast (such as the sky, white walls, and car hoods)
- Flat two-dimensional objects with only horizontal lines and no significant protrusions or indentations
- Fast-moving targets
- Low brightness objects (in dark places)
- Strongly backlit objects and objects struck by strong reflected light
- Flickering objects (such as fluorescent lights)

Note

- · Moving the camera before the beep sounds may result in a blurred image.
- You can incorporate sound into your recording. See "Still Picture/Text Shooting with Sound" (p.58).



- Do not open the battery cover or card door or detach the AC adapter (optional) during recording.
- · The AF LED and the flash LED will blink while the image is being recorded. Do not rotate the mode dial or turn off the power until recording has been completed.

It is not possible to use the CARD / IN button or use the MENU button to display the menu screen while an image is being recorded.

Note

- · The camera will turn off automatically (auto power off) to conserve the battery if it is left idle (no buttons operated) for a preset time. When you require more time to compose a shot, disable the auto power off feature. See "Auto Power Off Setting" (p.123).
- · When using the camera for an extended period of time, have a spare battery or AC adapter (optional) handy.

When shooting subjects like these, focus on another subject that is located at about the same distance and then aim at the target with that focus setting. See "Focus Lock Shooting" (p.54) "Setting the Focus" (p.70).



Focus Lock Shooting

Usually, the auto focus function focuses the camera on the subject that appears in the autofocus field on the LCD monitor or in the viewfinder. If the subject is located outside the autofocus field, it may appear blurred in the resulting shot. Use the focus lock to ensure accurate focusing on the subject.

Bring the subject on which you wish to focus into the autofocus field.



 Press the shutter release button halfway and hold the button pressed when the AF LED lights green and the indicator - - on the LCD monitor turns green.

Focusing, exposure and white balance will be locked.

Decide the composition of the shot by moving the camera with the shutter release button held, and then press the shutter release button down fully.



Special Shooting Functions

This section explains the various shooting functions. Depending on which shooting mode you choose, the functions which can be used will vary. Refer to the following table.

	oting Mode	Still	₽		Conti-	Motion
Shooting Function		Picture	Sound	Text	nuous	Picture
With Sound	p.58	0	×	0	×	×
Focus	p.70	0	×	0	0	0
Flash strength	p.61	0	×	0	×	×
Red-Eye Reduction		0	×	×	×	×
Mode	p.72		_ ^	^	_ ^	_ ^
ISO SENSITIVITY	p.73	0	×	0	0	×
Date Imprint	p.74	0	×	0	0	×
Split Screen	p.75	0	×	×	×	×
Sharpness Mode	p.79	0	×	×	0	×
Monochrome Mode	p.80	0	×	×	0	0
Negative	p.81	0	×	×	0	0
Interval	p.82	0	×	0	×	×
Auto Bracket	p.83	0	×	×	×	×
Non-Compressed	p.84	0	×	×	×	×
Photometry	p.86	0	×	×	0	×
S Mode	p.87	0	×	0	0	×
Time Exposure	p.88	0	×	×	×	×

Text Shooting

This function enables you to record text. The text will be recorded under optimum conditions in two values, black and white. (The data can be recorded in less than onethird of the usual volume.) To produce a sharp, clear image, you can set the black/white contrast in five stages (\bigcirc -2, \bigcirc -1, 0 (no display), \bigcirc +1, \bigcirc +2).

- **7** Set the mode dial to [🗐].
- Press the or button to adjust the contrast of the black and white color. If you select a minus value, the black color will become lighter, and if you select a plus value, it will become darker.

Note

- You can only select 2272 and
 1120 image quality modes.
- To cancel recording, press the button while the shot image is displayed on the LCD monitor. See "Shooting (Still Picture Mode)" (p.51)
- Sound can be incorporated in the recording. See "Still Picture/Text Shooting with Sound" (p.58).

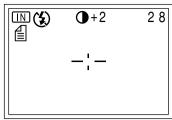


- The microphone is located on the front of the camera. Adjust the direction of the microphone to the best position for recording.
- Please keep the camera at least 30 cm (11.8 inches) away from mobile phone to prevent interference.



 When the recording/recordable time exceeds 100 minutes, the first digit of the seconds is not displayed on both the LCD monitor and the LCD panel.

3 Press the shutter release button.



The shot image appears on the LCD monitor before it is recorded.

Sound Recording

In this mode sound can be recorded. The recordable time is displayed according to the available capacity in the recording destination.

1 Set the mode dial to [**9**].

The recordable time is displayed on the LCD panel and on the LCD monitor.

2 Press the shutter release button.





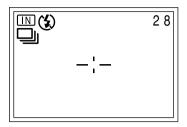
Recording will start. The \P mark blinks during recording and the recordable time is displayed. To stop recording, press the shutter release button again.

Continuous Shooting

This mode is for shooting a subject continuously while the shutter release button is depressed. This function is ideal for capturing special events.

Set the mode dial to [□].

Press the shutter release button.



Shooting continues while the shutter release button is pressed.

Continuous shooting stops when you release the shutter release button.

Maximum number of continuous pictures

The maximum number of pictures that can be taken continuously depends on the image quality mode.

Image Quality (Compression Rate) Size (No. of Pixels)	Fine	Normal	■ Economy
2272 2272 × 1704	Approx. 3	Approx. 7	Approx. 15
1120 1120 × 840	Approx. 11	Approx. 23	Approx. 45
640 640 × 480	Approx. 35	Approx. 67	Approx. 123

The table shows the maximum number of pictures that can be taken continuously at one time. The number of pictures that can be taken continuously varies depending on the available space on the SmartMedia memory card or internal memory.

Motion Picture Recording

This mode is for recording motion pictures. The recordable time is displayed according to the available capacity in the recording destination. Sound is incorporated in the recording.



- The microphone is located on the front of the camera. Adjust the direction of the microphone to the best position for recording.
- Please keep the camera at least 30 cm (11.8 inches) away from mobile phone to prevent interference.
- Install QuickTime 4.1.2 or later version to play motion picture files on the PC.



- · The flash does not fire in Continuous Shooting mode.
- · You cannot select noncompressed mode (NC) in continuous shooting mode.
- · In Continuous Shooting mode, the focus, exposure and white balance are locked in the status in effect when you press the shutter release button.
- · In Continuous Shooting mode. no image appears on the LCD monitor while pictures are being taken.
- · Continuous shooting stops when the total number of files recorded reaches RIMG9999. In this case, format the SmartMedia memory card or internal memory to resume continuous shooting.

Note

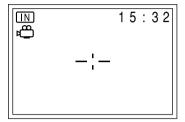
- Zoom does not work in Motion Picture mode
- The flash does not fire in Motion Picture mode.
- The focus, exposure compensation and white balance are locked in the state in effect when the shutter release button was pressed.

1 Set the mode dial to [👛].

The recordable time is displayed on the LCD panel and on the LCD monitor

Press the shutter release button.





Shooting starts. The recording time is displayed on the LCD panel during shooting.

Press the shutter release button again to stop recording.

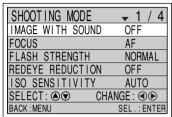
Still Picture/Text Shooting with Sound

This mode is for recording still pictures or text with 10 seconds of sound. This function is useful when you wish to add a comment or explain a situation.

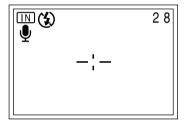


- The microphone is located on the front of the camera. Adjust the direction of the microphone to the best position for recording.
- Please keep the camera at least 30 cm (11.8 inches) away from mobile phone to prevent interference.
- 1 Set the mode dial to [♠] or [♠] and press the MENU button.

- Press the a or v button to select [IMAGE WITH SOUNDI.
- **3** Press the or button to select [ON] and press the ENTER button.



- Press the MENU button.
- Press the shutter release button.



About 10 seconds of sound can be recorded after the image has been displayed. The \P mark blinks during sound recording.

Note

- . The focus, exposure and white balance are locked in the state in effect when the shutter release button was pressed.
- · Sound recording starts after the image has been recorded. At this time, check that the Ψ symbol on the LCD monitor or LCD panel is
- Enable the keep settings mode to save the image with sound setting. See "Keep Settings" (p. 121).
- You can add a sound to a recorded file. See "Adding a Sound to a File being Played Back" (p. 94).

(Note)

 To cancel still picture/text shooting with sound, select [OFF].

Changing Flash Modes

The camera offers four flash modes. Select the flash mode best suited to your photographic needs.

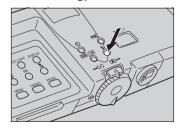
Display	Mode name	Description
(£)	Flash Off	The flash is disabled even in dark conditions. Use this mode for shooting where use of the flash is prohibited or where adequate room illumination is available.
4 A	Auto	The flash fires automatically when it detects low ambient light or backlighting.
4 lit	Forced Flash	When you take a picture against the light or under strong light, the subject's face may appear in the shade in the resultant shot. Use forced flash to reduce this effect. In this mode, the flash will fire regardless of the ambient light level.
blinking	Slow Synchro	Slows down the shutter release speed when the flash is activated so that the subject is illuminated and the background is captured too. If you use this mode when you want to take a clear picture of your subject and capture the background atmosphere, such as at a party, it reduces the effect of only the background being darkened when the flash fires.

^{*} The factory default setting is (2) (Flash Off) mode.

Effective Range of the Flash

When you shoot with the flash activated, the flash has an effective range of about 0.6-2.5~m (23.7 – 98.5 inches). The subject will appear dark in the picture if the light from the flash fails to reach it.

- 1 Set the mode dial to [1] or [1].
- Press the 4 button to select the flash mode (﴿ , 4^, 4 lit, 4 blinking).

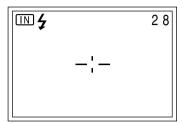


The flash mode switches each time you press the button.

The selected flash mode will be displayed. In Auto mode, the 4^A mark appears only on the LCD monitor and not on the LCD panel.

Press the shutter release button.





When the flash is activated, the flash LED (red) lights when you press the shutter release button liahtly.

The flash LED blinks while the flash is charging and the LCD monitor is cleared. You cannot shoot during this time.

Note

- The flash will not fire in the following situations:
 - Shooting) or (Motion Picture) mode
 - when the white balance mode is set on ★ (daylight), (overcast), A (tungsten light) or (fluorescent light)
 - when in macro mode ()
 - when using auto bracket
- Enable the keep settings mode to save the flash mode setting. See "Keep Settings" (p.121).
- · When shooting a subject with the flash activated, if the subject appears dark on the LCD monitor, switch to a wider angle. The subject may be difficult to focus on with the telephoto setting.
- · Shooting in the red-eye reduction mode will lessen the red-eye phenomenon in the resultant picture. See "Red-Eye Reduction Mode" (p.72).

■ Adjusting the Strength of the Flash

When shooting with the flash activated (4^A, 4 lit, 4 blinking), you can adjust the strength of the flash.

- the MENU button.
- Press the (a) or (a) button to select [FLASH] STRENGTH].

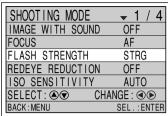


- When you shoot a subject located closer than about 0.6m (23.7 inches) with the flash activated, light from the flash may appear red in the resultant picture. The subject may also appear white due to overexposure. To avoid this, switch to Flash Off mode.
- The shutter speed slows automatically when you shoot in dark places. To prevent camera shake, hold the camera steady or mount it on a tripod. Take care to avoid camera shake particularly when using the telephoto setting ().



 Enable the keep settings mode to save the flash strength setting. See "Keep Settings" (p.121).

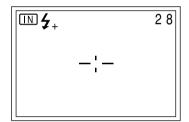
3 Press the ③ or ⑤ button to select the desired strength (NORMAL, STRG or SOFT) and press the ENTER button.



4 Press the MENU button.

If you select [STRG], + is displayed on the LCD monitor, and if you select [SOFT], – is displayed. There is no display when you select [NORMAL].

5 Press the shutter release button.



Setting the Exposure Compensation

As long as the subject is centered in the shooting range, you can take the picture normally as the camera will automatically adjust the exposure compensation for backlighting. If there is a significant difference in brightness between the background and subject, however, the subject tends to be underexposed (dark) or overexposed (white). Exposure compensation is useful in this situation. You can also use exposure compensation to produce intentionally under- or overexposed images.

Exposure Compensation Range

± 2.0 EV (in 0.25 EV steps)

Shooting Against the Light

The bright background will make the subject appear underexposed. Set the exposure compensation level to a positive (+) value to adjust the exposure.

Shooting a White Image

If you shoot an image that appears generally white, the shot will be underexposed as a whole, with people appearing dark and white objects appearing gray. Set the exposure compensation level to a positive (+) value to adjust the exposure.

Shooting a Black Image

If you shoot an image that appears generally black, the shot will be overexposed as a whole, with people appearing white and black objects appearing gray. Set the exposure compensation level to a negative (-) value to adjust the exposure. Follow the same procedure when shooting a person under a spotlight, for example.

Set the mode dial to one of the following: [• • • and press the ✓ button.



Press the or verbutton to change the exposure compensation value and press the ENTER button.



Continuously pressing the button changes the level continuously.



 If the subject is not centered in the shooting range when taking a picture against the light, the camera will not assume that the subject is in a backlit state. Exposure compensation is required in this situation.

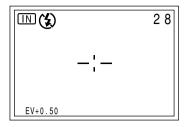
Note

- Enable the keep settings mode to save the exposure compensation level setting.
 See "Keep Settings" (p.121).
- You can take 3 frames in succession at exposure compensation levels of -0.5 EV, 0, and +0.5 EV based on the preset compensation level. See "Auto Bracket Shooting" (p.83).



 Enable the keep settings mode to save the white balance mode setting. See "Keep Settings" (p.121).

3 Press the shutter release button.



Changing the White Balance

The white balance mode adjusts the white balance so that you can capture your subject in its natural colors regardless of the light source. The AUTO mode will suffice in most situations.

The AUTO mode automatically adjusts the white balance based on the white areas, ensuring that white is reproduced as white regardless of the light source. Consequently, a subject that lacks in white tones as a whole or that is dominated by dark tones may not achieve an appropriate white balance. Change the white balance mode to shoot such subjects.

Display	Mode name	Description
AUTO	Auto	The camera automatically adjusts the white balance.
*	Daylight	This mode is used to shoot subjects outdoors where an appropriate white balance is difficult to achieve.
0	Overcast	This mode is used to shoot subjects outdoors under cloudy skies or in shade where the appropriate white balance is difficult to achieve.
$\dot{\sim}$	Tungsten Light	This mode is used to shoot subjects under tungsten light (light ball) where an appropriate white balance is difficult to achieve.
***	Fluorescent Light	This mode is used to shoot subjects under fluorescent light where an appropriate white balance is difficult to achieve.
М	Manual White Balance	You can set the optimum white balance or adjust the setting to the desired color.

^{*} The factory default setting is AUTO mode.

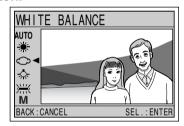
Subjects Difficult to Correct in Auto Mode

- Monochrome subjects
- · Subjects lit by multiple light sources

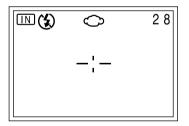
- Selecting Auto (AUTO), Daylight (*), Overcast (⋄), Tungsten Light (⋄) or Fluorescent Light (黑)
- Set the mode dial to one of the following: [• • • and press the WB button.



Press the
or
button to select the white balance (AUTO • * • ○ • * · ※) and press the ENTER button.



3 Press the shutter release button.





The color tones of a subject will vary depending on weather conditions or light source (tungsten light or fluorescent light).



- In AUTO mode, subjects lacking in white tones may not achieve an appropriate white balance. When shooting such subjects, add a white object to the composition.
- · The flash will not fire in the following white balance modes: 🐺 (daylight), 🗢 (overcast), 🏃 (tungsten light), and 💥 (fluorescent light).

Note

 You cannot use the flash to take a picture in manual white balance mode.

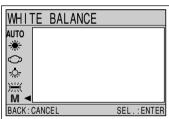
■ Selecting Manual White Balance (M)

Set the mode dial to one of the following:

[♠ • □ • ♠] and press the WB button.



Press the
or
button to select Manual
White Balance (M), aim the camera so that
a white subject fills the screen and press
the ENTER button.



The optimum white balance is set at this point.

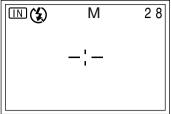
3 If you are satisfied with the white balance that has been set, press the ENTER button.



 To finely adjust the white balance or change the color

Press the A, P, Q or P button before pressing the ENTER button. Adjusting is available until "A R P Q B P" on the screen disappears.

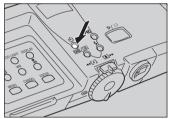
4 Press the shutter release button to take the picture.



Using the Self-Timer

The self-timer offers a convenient way to take group pictures with the photographer included. Mount the camera on a tripod or set it on a flat surface to shoot pictures with the self-timer.

the 🕲 button.



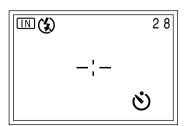
(Note)

· The self-timer setting is canceled when you press the button again, when you set the mode dial to another mode, or when you turn the camera off.

The self-timer is now set.

The 🖒 mark will be displayed on the LCD panel and on the LCD monitor.

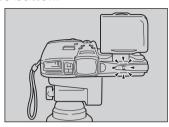




Note

- If the flash is charging, the self-timer will start when charging is completed.
- The focus is locked at the point when the shutter release button is pressed.

2 Decide the composition of the picture, position the camera securely, and press the shutter release button.



The self timer lamp lights and the self-timer starts. The shutter is released after a delay of approximately 10 seconds. The self timer lamp starts to flash about 2 seconds before the shutter is released and the beep sound is heard. The self-timer mode is automatically canceled when the shutter is released.

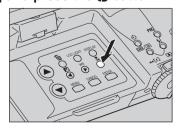


Remote Control

To operate the camera from a remote position or when the camera is fixed in one spot, use the optional remote control unit.

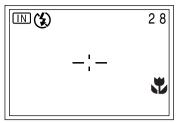
Close-up Shooting (Macro Mode)

Macro photography allows you to take a close-up picture of a subject. Macro mode is recommended for taking pictures at a distance of less than 24cm (9.5 inches) from the subject.

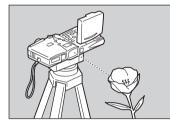


Note

 Macro shooting is canceled when you press the button again, when you set the mode dial to another mode, or when you turn the camera off. The mark will be displayed on the LCD monitor.



2 Bring the camera close to the subject and decide the composition of the picture. Press the shutter release button lightly to set the focus.



3 Press the shutter release button.



- · The focusing range is so small in macro mode that the focus can be lost if the camera is moved. Make sure the camera is firmly positioned by mounting it on a tripod, for example, to keep it steady when shooting.
- · As there is a wide margin between the field of view through the viewfinder and the shooting range, check the shooting range on the LCD monitor or with the camera connected to a TV.



Shutter release button

The optional remote control unit is convenient for when the camera is mounted on a tripod or similar device and the shutter release button is difficult to press.



· The flash will not fire in macro mode.



 Enable the keep settings mode to save the focus mode setting. See "Keep Settings" (p.121).

Setting the Focus

The camera has four focus settings.

Display	Mode name	Description
AF	Auto	The camera sets the focus automatically.
MF	Manual	You can set the focus manually.
2.5 m	2.5m	You can focus on a subject at a distance of about 2.5 m.
∞	Infinity	You can focus on a subject that is far away, such as a landscape.

■ Setting Auto Focus (AF), 2.5 m or Infinity (∞)

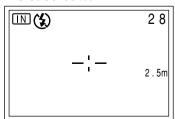
- Press the ♠ or ♥ button to select [FOCUS].
- **3** Press the **③** or **⑤** button to select [AF, 2.5m or ∞] and press the ENTER button.

SHOOTING MODE	▼ 1 / 4
IMAGE WITH SOUND	ON
FOCUS	2.5m
FLASH STRENGTH	NORMAL
REDEYE REDUCTION	OFF
ISO SENSITIVITY	AUTO
	NGE: ③ ▶
BACK:MENU	SEL.:ENTER

4 Press the MENU button.

"2.5 m" or "∞" will be displayed on the LCD monitor. If you select [AF], there is no display.

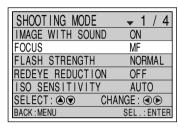
5 Press the shutter release button.



■ Setting Manual Focus (MF)

- Set the mode dial to one of the following:

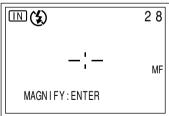
 [♠• □• □• ♠] and press the MENU
 button.
- Press the
 or
 to button select [FOCUS].
- **3** Press the **③** or **⑤** button to select [MF] and press the ENTER button.



4 Press the MENU button.

"MF" will be displayed on the LCD monitor.

5 Press the **(a)** or **(c)** button to focus on the subject and press the shutter release button.



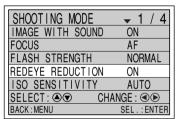
To change the size of the subject, press the zoom lever.

You can enlarge the center of the subject to facilitate focus adjustment by pressing the ENTER button.

Red-Eye Reduction Mode

If you shoot a subject in a dark place with the flash activated, the eyes of the subject may appear red in the resultant picture. In red-eye reduction mode, the flash will fire several times before the shutter releases to lessen the red-eye phenomenon.

- 1 Set the mode dial to [1 and press the MENU button.
- Press the
 or
 button to select [REDEYE REDUCTION].
- **3** Press the **④** or **▶** button to select [ON] and press the ENTER button.



- 4 Press the MENU button.
 - will be displayed on the LCD panel and on the LCD monitor.
- **5** Press the shutter release button.





When you press the shutter release button, the flash will fire several times in succession preliminarily before firing when the shutter releases.

Note

• To cancel the red-eye reduction mode, select [OFF].

Note

- You cannot use the redeye reduction mode when the flash mode is set on (Flash Off).
- Enable the keep settings mode to save the red-eye reduction mode setting. See "Keep settings" (p. 121).

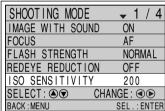


The shutter takes about 1 second to release after you press the shutter release button. Hold the camera steady meanwhile to shoot the picture.

Changing the ISO Setting

You can change the ISO sensitivity.

- Set the mode dial to one of the following: [• ● • • • and press the MENU button.
- Press the or button to select [ISO] SENSITIVITY].
- **3** Press the **④** or **▶** button to select the desired ISO setting (AUTO • 200 • 400 • 800) and press the ENTER button.



4 Press the MENU button.

The ISO setting will be displayed on the LCD monitor. There is no display when the setting is on AUTO.

5 Press the shutter release button.



(Note)

 Enable the keep settings mode to save the ISO setting. See "Keep Settings" (p.121).

Note

 This function is only available if the date has been set in the settings menu, so set the date first. The date is displayed in the style selected on the date setting menu. See "Setting the Date and Time" (p.37).

Note

• To cancel the date imprint mode, select [OFF].

Note

 Enable the keep settings mode to save the date imprint setting. See "Keep Settings" (p.121).

Date Imprinting

Use this mode to record images imprinted with the date.

- 1 Set the mode dial to one of the following: [♠• 🗐 🗐] and press the MENU button.
- Press the
 or
 button to select [DATE IMPRINT].
- **3** Press the **④** or **⑤** button to select [DATE] or [DT/TM] and press the ENTER button.

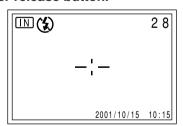
SHOOTING MODE	\$ 2 / 4
DATE IMPRINT	DT / TM
SPLIT-SCREEN	\Rightarrow
SHARPNESS	OFF
MONOCHOME MODE	OFF
NEGATIVE	OFF
SELECT: ④⊙	CHANGE: ③▶
BACK: MENU	SEL.:ENTER

If you select [DT/TM], the date and time are displayed (e.g. 2001/10/15 10:15), and if you select [DATE], the time is displayed (e.g. 2001/10/15).

4 Press the MENU button.

If the date imprint mode has been selected, the date will appear in brackets on the LCD monitor.

5 Press the shutter release button.



Split-Screen Mode

The screen is divided into two either vertically or horizontally, and the image is recorded in two shootings.

NEW: The image is recorded in two steps by

dividing the screen in two. You can record only one half if desired.

ADD: You can recall the recorded half and

add the other half. This image is saved

as a separate file.

Note

- · Use the LCD monitor when taking split images.
- · You cannot use the split-screen mode in the following cases:
 - when the shooting mode is set to

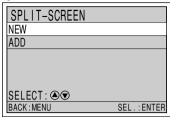
 (Sound),

 (Text),

 (Motion Picture) mode.
 - when the image quality mode is 2272 (2272 × 1704) or when in non-compressed (NC) mode
 - when shooting with sound
- You cannot set digital zoom mode, auto bracket mode or manual focus mode, or adjust the white balance or exposure compensation after setting split shooting mode.
- 1 Set the mode dial to [and press the MENU button.
- Press the ⓐ or **③** button to select [SPLIT-SCREEN] and press the ENTER button.

SHOOTING MODE	\$ 2 / 4
DATE IMPRINT	DATE
SPLIT-SCREEN	-
SHARPNESS	OFF
MONOCHOME MODE	OFF
NEGATIVE	OFF
SELECT: ▲♥	CHANGE: ● ▶
BACK: MENU	SEL . : ENTER

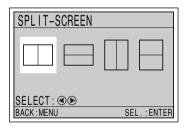
3 Press the **ⓐ** or **⑤** button to select the desired item and press the ENTER button.



Operation differs depending on the item selected. See "NEW" (p.76) See "ADD" (p.77)

NEW

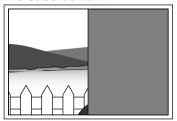
- 1 Select [NEW] from the Split Shooting menu and press the ENTER button.
- Press the or button to select the desired format and press the ENTER button.



To take the picture normally (horizontal shooting), choose from the two types on the right, and to hold the camera vertically to take the picture (vertical shooting), choose from the two types on the left.

3 Press the **③**, **⑤**, **④** or **⑥** button to select the shooting position.

4 Press the shutter release button.



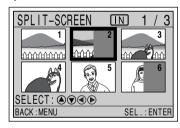
Take the second shooting in succession.

ADD

Select [ADD] from the split shooting menu and press the ENTER button.

The recorded images will be displayed as a multiimage display.

Press the 🏽 , 🐨 , 🕙 or 🕑 button to select the image to which you want to add a second shot and press the ENTER button.



The image inside the frame is the selected image.

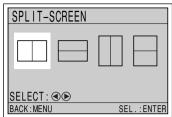


· If you press the CANCEL button after taking the first half of the image, the shot will be recorded and you can take the other half in add mode. See "ADD" (p.77)



- · Files that cannot be used for split shots are indicated in black on the multi-image display.
- You cannot add images that have been taken in text mode or non-compressed (NC) mode.

Press the **③** or **⑤** button to select the format and press the ENTER button.



The selected image will be displayed in half of the divided screen.

- Press the **⑤**, **⑤**, **⑥** or **⑥** button to select the shooting position.
- Press the shutter release button.

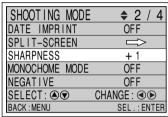




Sharpness Mode

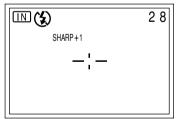
This mode enables you to adjust the sharpness of the contours of the subject in three stages (-1, 0 and +1).

- Set the mode dial to [1] or [1] and press the MENU button.
- Press the or button to select [SHARPNESS].
- **3** Press the **④** or **⑤** button to select [-1] or [+1] and press the ENTER button.



If you select [-1], the image will be recorded with soft contours. If you select [+1], the image will be recorded with sharp contours.

- 4 Press the MENU button.
- **5** Press the shutter release button.



Note

 Enable the keep settings mode to save the sharp mode setting. See "Keep Setting" (p.121)



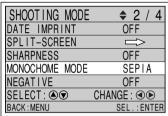
• To cancel the sharpness mode, select [OFF].

Monochrome Mode

Use this mode to shoot subjects in monochrome or sepia.

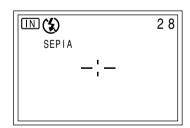
- Set the mode dial to one of the following:

 [♠ □ ♠] and press the MENU button.
- Press the (a) or (v) button to select [MONOCHROME MODE].
- **3** Press the **④** or **⑥** button to select [B&W] or [SEPIA] and press the ENTER button.



Select [B&W] to shoot in black and white images or [SEPIA] to shoot in sepia images.

- 4 Press the MENU button.
- **5** Press the shutter release button.



Note

 To cancel the monochrome mode, select [OFF].

Note

- The monochrome mode cannot be set when the negative mode is set on [ON].
- The white balance mode does not function when you choose monochrome mode.
- Enable the keep settings mode to save the monochrome mode setting.
 See "Keep Settings" (p.121).

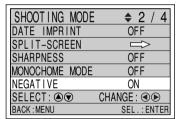
Negative Mode

By using a light box (available at a camera shop), you can photograph negatives from a developed 35mm film and convert the negative images into positive images.

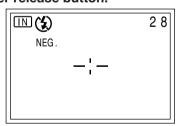
- Set the mode dial to one of the following: [• • • • • □] and press the MENU button.
- Press the or button to select [NEGATIVE].

Note

- · Enable the keep settings mode to save the negative mode setting. See "Keep Settings" (p.121)
- **3** Press the **④** or **▶** button to select [ON] and press the ENTER button.



- 4 Press the MENU button.
- Press the shutter release button.



If necessary, you can correct the image using M (manual white balance) or exposure compensation.



The surroundings may be reflected in the light from the light box and included in the shot. Cover the area around the negative with something black.



· To cancel the negative mode, select [OFF].



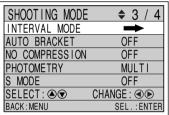
- If the camera is powered by the battery, the battery may run out during interval shooting. It is therefore recommended to use an AC adapter (optional) for interval shooting.
- Check the remaining number of pictures that can be stored on the SmartMedia memory card or internal memory before starting interval shooting.
- The auto power off function will be activated 24 hours after the start of interval shooting, even if the camera is powered by the AC adapter.

Interval Shooting

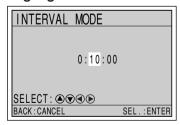
The camera can be set to take pictures automatically at preset intervals. The intervals can be set in steps of 30 seconds in the range of 30 seconds to 3 hours.

For example, if you set an interval of 1 hour, the shutter will be released every hour, taking pictures continuously until the internal memory or SmartMedia memory card runs out of available memory.

- 1 Set the mode dial to [□] or [□] and press the MENU button.
- Press the ♠ or ♥ button to select [INTERVAL MODE] and press the ENTER button.



- **3** Press the **④** or **⑤** button until the digit you want to set starts to flash.
- **4** Press the **ⓐ** or **⑤** button to change the value of the flashing digit.



Press the
button to increase the value, and press the
button to decrease the value. Pressing the button continuously increases the speed at which the digit changes.

Repeat steps 3 and 4 above to set the desired interval in steps of 30 seconds.

5 Press the ENTER button again after setting the digit for the seconds.

The interval timer is now enabled.

Press the shutter release button.



The camera will take the first shot and then proceed to shoot at the preset interval.

The "INTERVAL MODE" message flashes on the LCD monitor while interval shooting is in progress. Shooting will continue until the internal memory or SmartMedia memory card runs out of available memory.

Note

- · To cancel interval shooting, press the CANCEL button during shooting (while [INTERVAL MODE] is flashing).
- You can take normal shots by pressing the shutter release button while interval shooting is in progress. The preset interval will not be affected.
- The actual interval between shots may be longer than the preset time depending on the image quality and flash mode settings.

Auto Bracket Shooting

Auto bracket shooting allows you to take 3 frames in succession at exposure compensation values of -0.5 EV, 0 and +0.5 EV, based on the exposure compensation value set in "Setting the Exposure Compensation" (p.62).

To prevent camera shake, mount the camera on a tripod or set it on a flat surface when taking the pictures.

Set the mode dial to [and press the MENU button.



· The interval shooting mode is canceled when you press the CANCEL button, when you set the mode dial to another mode, or when you turn the camera off while the "INTERVAL MODE" message is lit on the LCD monitor.



 To cancel the auto bracket mode, select [OFF].

Press the ♠ or ♥ button to select [AUTO BRACKET].

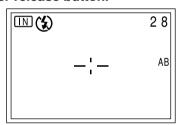
3 Press the **④** or **⑥** button to select [ON] and press the ENTER button.

SHOOTING MODE	\$ 3 / 4
INTERVAL MODE	-
AUTO BRACKET	ON
NO COMPRESSION	OFF
PHOTOMETRY	MULTI
S MODE	OFF
SELECT: ♠♥	CHANGE: ● ●
BACK:MENU	SEL.:ENTER

4 Press the MENU button.

"AB" will be displayed on the LCD monitor.

5 Press the shutter release button.



When you press the shutter release button, 3 frames are shot in succession at -0.5 EV, 0.0 and +0.5 EV, based on the preset exposure compensation value.



SOUND] is set to [ON].The flash does not fire in auto bracket mode.

· You cannot use the auto

bracket function when the image quality mode is set on

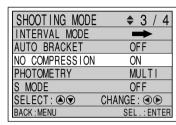
non-compressed (NC) or when [IMAGE WITH

(Note)

Switching to Non-compressed Mode

In normal image quality mode, the data is compressed at the time of recording. To record without compressing the data, set [NO COMPRESSION] to [ON] to switch the image quality mode.

- 1 Set the mode dial to [and press the MENU button.
- Press the or v button to select [NO COMPRESSION1.
- **3** Press the **④** or **▶** button to select [ON] and press the ENTER button.



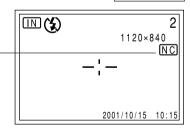
4 Press the MENU button.

NC will be displayed on the LCD panel and on the LCD monitor.

5 Press the shutter release button.



Non-compressed mode will be displayed when the DISPLAY button is pressed to show the detailed data. See "LCD Monitor Display (Shooting Mode)" (p.46).



Data Guide

Size (No. of Pixels)	NC
2272 2272 × 1704	Approx. 7.7 MB/image
1120 1120 × 840	Approx. 1.8 MB/image
640 640 × 480	Approx. 614 KB/image

Note

· Enable the keep settings mode to save the noncompressed mode setting. See "Keep Settings" (p.121)

(Note)

· To cancel the noncompressed mode, select [OFF].

Note

 Enable the keep settings mode to save the exposure metering system setting. See "Keep Settings" (p. 121).

Changing the Exposure Metering System (Photometry)

You can change the exposure metering system to record images.

Mode name	Description
MULTI	Multi-metering is performed by splitting the LCD monitor in several parts. This mode is also suitable for shooting the backlighted subject.
CTR WGHT	The middle of the LCD monitor is the focal point, and the light is measured uniformly over the whole screen.
SPOT	Exposure metering is performed on a part of the frame in the middle of the LCD monitor. This mode is used when the subject is exposed to strong light, such as a backlight.

- 1 Set the mode dial to [and press the MENU button.
- Press the (a) or (b) button to select [PHOTOMETRY].
- Press the ④ or ⑥ button to select the desired exposure metering system (MULTI
 CTR WGHT SPOT) and press the ENTER button.

SHOOTING MODE

INTERVAL MODE

AUTO BRACKET OFF

NO COMPRESSION OFF

PHOTOMETRY CTR WGHT

S MODE OFF

SELECT: © CHANGE: © BACK: MENU SEL: ENTER

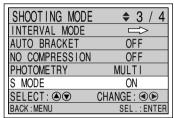
- 4 Press the MENU button.
- **5** Press the shutter release button.



Increasing the Shutter Speed (S Mode)

S mode reduces the risk of camera shake when taking pictures in dark surroundings without using the slow shutter function.

- Set the mode dial to one of the following: [• • • • □] and press the MENU button.
- Press the ♠ or ♠ button to select [S MODE].
- **3** Press the **③** or **⑤** button to select [ON] and press the ENTER button.



4 Press the MENU button.

"S" will be displayed on the LCD monitor.

5 Press the shutter release button.





Slow Shutter

The slow shutter function is activated when you take a picture in dark surroundings. The shutter speed is reduced to ensure that sufficient light is captured. [SLOW SHUTTER] is displayed on the LCD monitor when the shutter release button is pressed lightly.



· Images taken in S mode may appear dark.



 Enable the keep settings mode to save the S mode setting. See "Keep Settings" (p.121)



· To cancel the S mode, select [OFF].



 Mount the camera on a tripod, etc., when using the Time Exposure mode.



• To cancel the time exposure mode, select [OFF].

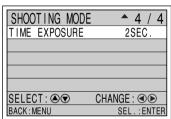


- The time exposure mode cannot be set in the auto bracket mode.
- Enable the keep settings mode to save the time exposure mode setting. See "Keep Settings" (p.121).

Setting the Time Exposure Mode

The time exposure mode is used when photographing bright subjects such as fireworks and cars in a dark place.

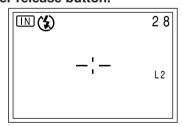
- 1 Set the mode dial to [and press the MENU button.
- Press the ♠ or ♥ button to select [TIME EXPOSURE].
- **3** Press the ③ or ⑤ button to select the exposure time (1 SEC., 2 SEC., 4 SEC., 8 SEC.) and press the ENTER button.



4 Press the MENU button.

Time exposure mode display will be displayed on the LCD monitor.

5 Press the shutter release button.



Chapter 3 PLAYBACK

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Before Starting to Playback Recorded Images

This section explains what kind of files can be played on the camera and how to play back recorded images using a TV.

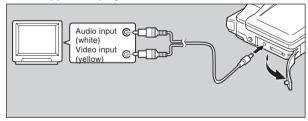
Files That Can Be Played Back on the Camera

The following kinds of files can be played on this camera:

- Files recorded on this camera.
- Still picture files recorded on the Ricoh RDC-300/ RDC-4000 or RDC-5000 series digital camera and sound files recorded on the Ricoh RDC-4000 series digital camera.
- Unplayable Files
 The [UNMATCHED FILE] message will be displayed if an unplayable file is encountered.

Connecting to a TV

Connect the camera to a TV set with the AV interface cable supplied to play recorded files on the TV screen.



- 1 Check that both the camera and the TV are turned off.
- Open the terminal cover on the camera and connect the AV interface cable to the AV out terminal.
- Connect the other end of the AV interface cable to the video input terminal and audio input terminal on the TV.



 Refer to the instruction manual for the equipment to which the camera is connected.

Note

- When you are away on overseas trips, you may view recorded images on a TV set with the other Video-out signal method (NTSC/PAL).
 See "Changing Video-Out Signal Method (NTSC/PAL)" (p.126).
- When you connect the camera to a TV, the screen displayed on the LCD monitor appears on the TV monitor.
- The range displayed may vary depending on the type of TV monitor.

Using the Camera for an Extended Period of Time

Supplying power to the camera from a household AC outlet using an optional AC adapter is recommended for shooting over an extended period of time. See "Connecting an AC Adapter" (p.25)

* Make sure that the camera is turned off before connecting the AC adapter.

Playing a File

This section provides instructions for playing back recorded files.

Playing a Still Picture/Text/ Continuous File

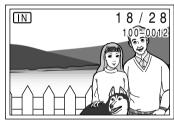
Follow the procedure below to play files recorded in (Still Picture), (Text) or (Continuous Shooting) mode, and still picture or text files with sound.

1 Set the mode dial to [▶] and press the MM/M button to select the playback source.

The most recently recorded file is played back on the LCD monitor.



- "Explanation of Information Displays" (p.32).
- Press the ⓐ or button to select a file to be played back.



Press the
button to display the next file, and press the button to display the previous file.

Keeping the button pressed increases the speed.

Still Picture and Text Files with Sound



Note

To play back a sound file, press the shutter release button.

Playback of a sound file ends automatically. To pause playback, press the shutter release button again or the button.

Playback Display

Pictures taken in the following image sizes will appear on the LCD monitor or TV monitor as shown below.



Note

- · Files may take a while to play after the camera is turned on or the mode dial is set, depending on the capacity of the SmartMedia
- Files that have been recorded in \square (Continuous Shooting) mode are recorded as single files and therefore can be played the same way as regular files.



Adding a Sound to a File being Played Back

You can add a sound to a file recorded in (Still Picture), (Text) or (Continuous Shooting) mode.

- Display the file to which you wish to add a sound.
- 2. Press the ENTER button.

The recordable time will be displayed on the LCD panel and on the LCD monitor. If a selected file has already been dubbed, a confirmation message will appear asking if you wish to superimpose a new sound.

Sound is recorded as long as permitted by the available recording destination memory.

3. Press the shutter release button.



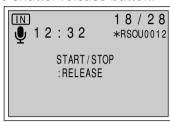


Recording starts. The \P symbol flashes during recording and the recording time is displayed on the LCD monitor. To stop recording, press the shutter release button again.

Playing Back a Sound File

Follow the procedure below to play files recorded in \P (Sound) mode.

- Set the mode dial to [] and press the IN button to select the playback source.
- Press the (a) or (v) button to select a sound file and press the shutter release button.



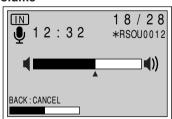
The sound will be played back, and the playback indicator and time elapsed will be displayed. Playback of a sound file ends automatically. To cancel playback, press the button.

To pause/resume Playback

If you press the shutter release button during playback, playback will be suspended. To resume playback, press the shutter release button again.

If you keep the zoom lever moved while playback is suspended, you can fast forward by moving to [4] or rewind by moving to [4].

Adjusting the Volume



If you press the
or button during playback, the volume adjustment indicator will be displayed. Press the
or button to adjust the volume.



The speaker is located on the front of the camera. Place the camera in the best position for playback.



- · When connected to a TV set, etc., use the connected device to adjust the audio volume.
- · When the recording/ recordable time exceeds 100 minutes, the first digit of the seconds is not displayed on both the LCD monitor and the LCD panel.

Playing Back a Motion Picture File

Follow the procedure below to play a file recorded in (Motion Picture) mode.

- Set the mode dial to [] and press the button to select the playback source.
- Press the ♠ or ♥ button to select a motion picture file and press the shutter release button.



The motion picture file will be played, and the playback indicator and time elapsed will be displayed.

Playback of a motion picture file ends automatically. To cancel playback, press the

button.

● To pause/resume Playback

If you press the shutter release button during playback, playback will be suspended. To resume playback, press the shutter release button again.

Note

Single frame forward/reverse, slow playback/ reverse slow playback

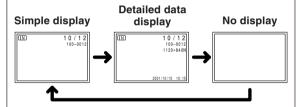
While playback is being suspended, move the zoom lever to to advance single image; move the zoom lever to [4] to return one frame. Also, keeping the zoom lever to starts slow playback and keeping the zoom lever to [4] starts reverse slow playback.



LCD Monitor Display (Playback Mode)

Each time you press the DISPLAY button, the information display switches between the date and time recorded, image quality mode, etc.

Still Picture/Text/Continuous File



 In the case of a sound file or motion picture file, the time elapsed and the indicators are displayed when the initial state or information display is displayed.

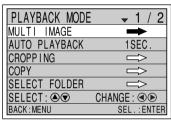
Special Playback Functions

This section explains the various playback functions.

Multi Image Playback

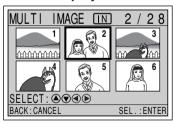
Multi-image playback lets you view six images at once on the LCD monitor for quick searching.

- 1 Set the mode dial to [] and press the MENU button.
- Press the ♠ or ♥ button to select [MULTI IMAGE] and press the ENTER button.



The LCD monitor will switch to the multi-image display.

3 Press the **③** or **⑤** button and the **④** or **⑥** button to select a file to be played back.



Six files at a time are displayed, with the position in which each file is displayed determined by the file number.

A
symbol above the multi-image display indicates a motion picture file and a
symbol indicates a still picture file with sound.

The file enclosed in a thick frame is the selected file.



 To display the previous set of six files, press the button when the selected file is on the top row, and to display the next set of six files, press the
 button when the selected file is on the bottom row.

4 Press the ENTER button.

The LCD monitor will return to the normal screen and the selected file will be displayed in the singleimage mode.



• Unplayable files are displayed in black. The following files can be displayed on the blue screen.

Sound	mark on blue screen
Text	mark on blue screen
Text + Sound	mark on blue screen

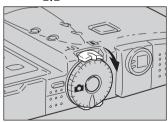
Zoom Playback

The image file being played is magnified both in height and width. Depending on the size of the image, images can be displayed in the following magnifications.

• 2272 : 1.4X, 1.8X, 3.6X

• 1120 : 1.8X • 640 : 2X

- **1** Set the mode dial to [▶].
- Press the or v button to select a file to be magnified.
- 3 Move the zoom lever to [4].

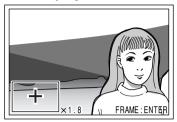


The file will be magnified and the window showing display position will be displayed.



- · Magnifiable files are still picture files, text files, and still picture/text files with sound that have been recorded on this camera.
- · Vertically recorded images can be displayed horizontally by setting zoom playback mode.

4 Press the **ⓐ** or **⑤** button and the **④** or **⑥** button to change the displayed area.



Press the ENTER button to remove the window.

Changing the Magnification
 The magnification changes each time you move
 the zoom lever to he when the image size is

To reduce the magnification, move the zoom lever to $\lceil \cdot \rceil$.

After confirming the file, move the zoom lever to [4].

The screen will return to the playback mode display.

Auto Playback

2272

This function automatically plays all the files stored in the internal memory or on the SmartMedia memory card.

- 1 Set the mode dial to [▶] and press the MENU button.
- Press the ♠ or ♥ button to select [AUTO PLAYBACK].
- Press the ④ or ▶ button to select the playback time (1 SEC., 3 SEC., 5 SEC., 10 SEC., 30 SEC., 60 SEC.) and press the ENTER button.

PLAYBACK MODE	→ 1 / 2
MULTI IMAGE	\Rightarrow
AUTO PLAYBACK	3SEC.
CROPPING	1
COPY	1
SELECT FOLDER	J
SELECT: ▲♥	CHANGE: ④ ▶
BACK:MENU	SEL . : ENTER

Note

- The time it takes to recall a file is not included in the playback time.
- Still picture/text files with sound, motion picture files and sound files are played for the time the sound or image was recorded, regardless of the preset playback time.

When you press the ENTER button, playback starts automatically for the specified time. Playback continues until canceled.

 How To Cancel Auto Playback
 Press any button, such as the shutter release button or zoom lever, during auto playback.

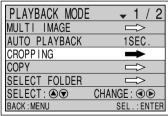
Cropping

This function enables you to cut out part of the displayed image and save it as a separate file.



- Cropped images are saved as separate files. Before cropping an image, check the available memory space in the recording destination, or the write protect setting of the SmartMedia card.
- Cropping cannot be performed in the following situations:
 - when the image has been recorded in ☐ (Text), ♥ (Sound) or

 (Motion Picture) mode.
 - when the image has been recorded in the following quality mode:2272 NC, 1120 NC, 640 F N E.
- 1 Set the mode dial to [].
- Press the
 or
 button to select the file to be cropped and press the MENU button.
- **3** Press the **⑤** or **⑤** button to select [CROPPING] and press the ENTER button.



4 Press the ♠ or ♥ button to select the cropped size and press the ENTER button.

CROPPING	- 1 / 2
	640×480
	1120×840
	640×480
	1120×840
051505	
SELECT: ♠♥ BACK: CANCEL	SEL . : ENTER
DAUN . CAINCEL	SELENTEN

The cropping frame will be displayed on the playback screen in blue.

5 Press the ♠, ♠, ♠ or ♠ button to move the cropping frame to the desired position and press the ENTER button.

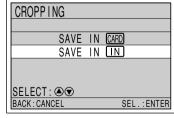


6 Press the shutter release button.



The cropped image will be displayed for the time set for LCD confirmation. See "Changing LCD Confirmation Time" (p.122).

7 Press the
or
button to select the recording destination and press the ENTER button.

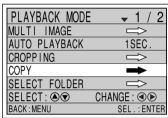


The cropped image will be recorded.

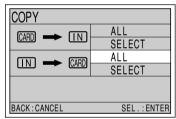
Copying Image Files

Files can be copied from the internal memory onto a SmartMedia memory card or vice versa.

- Set the mode dial to [] and press the MENU button.
- Press the or v button to select [COPY] and press the ENTER button.



3 Press the **a** or **v** button to select the copy mode and press the ENTER button.

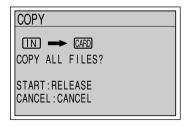


Operation varies depending on the copy mode. See:

- "Copying All Files" (p.103)
- "Copying Selected Files" (p.104)

Copying All Files

Press the shutter release button.





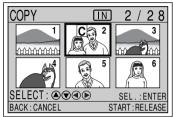
- When a protected file is copied, the copied file is unprotected.
- · Only files taken with this camera can be copied.
- · If there is not enough space available at the copy destination during copying, the [INSUFFICIENT MEMORY] message will be displayed. Press the shutter release button to copy as many files as permitted by the available memory. Press the CANCEL button to cancel the copy operation.



To cancel a selection, press the ENTER button again and the C mark will disappear. All the files will be copied and the display will return to the copy menu.

■ Copying Selected Files

1 Press the **③** or **⑤** button and the **④** or **⑥** button to select the file to be copied and press the ENTER button.



The selected file will be indicated by the \boxed{C} mark. To select more files, repeat step 1.

2 Press the shutter release button.

The selected files will be copied and the display will return to the copy menu.

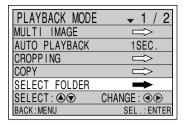
Playing a File Shot with a Non-Ricoh Camera

With certain exceptions, files recorded with a non-Ricoh camera can be played if the non-Ricoh camera conforms to the DCF* image file format.

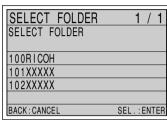
- * DCF is short for "Design rule for Camera File system" which is a set of specifications standardized by the Japan Electronics and Information Technology Industries Association (JEITA).
- Insert a SmartMedia memory card, set the mode dial to [▶] and press the MENU button.



- "Inserting a SmartMedia Memory Card" (p.27).
- Press the ⓐ or ♥ button to select [SELECT FOLDER] and press the ENTER button.



3 Press the **a** or **v** button to select a folder and press the ENTER button.



The image files in the folder will be displayed. Press the
or
button to select a file to play.

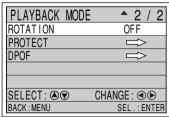


"Playing Back a File" (p.92).

Rotating a Displayed File

You can rotate a recorded file 90 degrees to the right, 90 degrees to the left, or 180 degrees on the display.

- Set the mode dial to [] and press the MENU button.
- Press the or button to select [ROTATION].

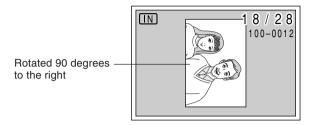


Note

- Only still picture files, text files, and still picture/text files with sound that have been recorded with this camera can be rotated.
- The preset angle will be saved when the camera is turned off, enabling you to play files at the preset angle next time you turn the camera on.



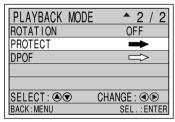
When you press the ENTER button, the file will be displayed at the specified angle.



Protecting a File

You can protect important files from being erased accidentally.

- 1 Set the mode dial to [▶] and press the MENU button.
- Press the ② or ③ button to select [PROTECT] and press the ENTER button.



3 Press the **③** or **⑤** button and the **④** or **⑥** button to select the file you wish to protect and press the ENTER button.



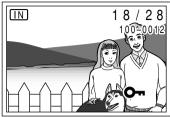


 Formatting the SmartMedia memory card or internal memory will erase protected as well as unprotected files.



 To cancel a selection, press the ENTER button again and the mark will disappear. The selected file will be indicated by the Om mark. Repeat step 3 to select other files.

4 Press the shutter release button.



The files will be protected.

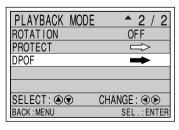
 How to Unprotect a File Choose a protected file on the protect menu (step 3) and press the ENTER button. The One mark will disappear.

Setting Printing Services (DPOF)

When submitting recorded files to a digital printing service, set the number of image prints and index prints that you require (DPOF*).

After setting, the recorded data can be printed by giving them to a store with digital camera print service.

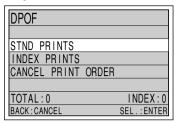
- * DPOF stands for Digital Print Order Format.
- Set the mode dial to [] and press the (ARD)/IN button to select (ARD), press the MENU button.
- Press the or verbutton to select [DPOF] and press the ENTER button.





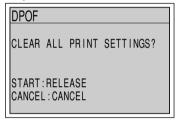
- · Only files in the RICOH folder can be set for digital printing services.
- Be sure to leave enough free memory space for one or two files on the SmartMedia memory card when setting the printing service.
- · Once a printing service is set, never program record, erase or any other settings. If any setting is programmed, reprogram it.

3 Press the **③** or **⑤** button to select the item you wish to set and press the ENTER button.



The procedure differs depending on the item you wish to set. See:

- "Specifying the Number of Prints" (p.108)
- "Specifying the Number of Index Prints" (p.110)
- "How to Cancel the DPOF Settings" (p.111)
- If DPOF has already been set



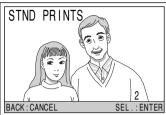
If DPOF has already been set, the screen on the above will be displayed. Press the shutter release button. New print settings are not possible unless the previous settings are first cleared.

■ Specifying the Number of Prints

- 1 Select [STND PRINTS] from the DPOF setting menu and press the ENTER button.
- Press the (a) or (b) button and the (d) or (e) button to select the file for which you wish to set the number of prints and press the ENTER button.

The selected file will be displayed as a single-image display.

3 Press the **△** or **▽** button to specify the number of prints and press the ENTER button.



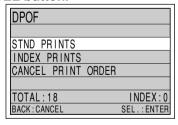
The number of prints will be set and the screen will return to the multi-image display. To continue setting the number of prints, repeat steps 2 and 3.



4 Press the CANCEL button.

The screen will return to the DPOF setting menu.

5 Press the CANCEL button.



The screen will return to the playback menu.



· To cancel the setting, set the number to zero.

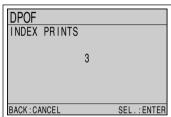


 Turning the mode dial while on the DPOF setting menu shown on the left will clear the setting. Be sure to press the CANCEL button to return to the playback menu.

Specifying the Number of Index Prints

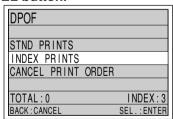
The index print feature allows all the files stored in the RICOH folder to be printed on a reduced scale. You can use the index print feature to list all the files recorded in the folder for visual confirmation or to specify the number of prints.

- 1 Select [INDEX PRINTS] from the DPOF setting menu and press the ENTER button.
- Press the
 or
 button to specify the number of index prints and press the ENTER button.



The display will return to the DPOF setting menu.

3 Press the CANCEL button.



The display will return to the playback menu.



• To cancel the setting, set the index number to zero.

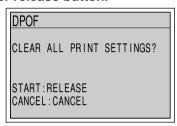


 Turning the mode dial while on the DPOF setting in step 3 will clear the setting. Be sure to press the CANCEL button to return to the playback menu.

■ How to Cancel the DPOF Settings

This function enables you to cancel the DPOF settings, such as the number of prints and number of indexes.

- Select [CANCEL PRINT ORDER] from the DPOF setting menu and press the ENTER button.
- **2** Press the shutter release button.



All the DPOF settings will be cleared and the display will return to the playback menu.

Chapter 4 ERASING

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Erasing Files



 Files cannot be restored once they are erased. Before starting to erase a file, make sure that you want to erase it. This section explains how to erase recorded files. There are three ways to erase files:

- 1) ERASE SINGLE IMAGE for erasing one selected file at a time.
- 2) ERASE ALL IMAGES for erasing all files at once.
- ERASE SELECTED IMAGES for erasing multiple selected files.

Note

- Files on a write-protected SmartMedia memory card cannot be erased unless the write protect pad is removed from the card. See "Protecting Against Accidental Writing" (p.26).
- Only files that have been taken with this camera can be erased.
- Protected files, which are identified by the On mark, cannot be erased until they are unprotected. See "Protecting a File" (p.106).
- Erasing time may vary depending on the capacity of the SmartMedia memory card and the type of file.

Erase Single Image

The selected file is erased.

1 Set the mode dial to [] and press the MID/IN button to select the erase source.



- **2** Press the button.
- **3** Press the **ⓐ** or **⑦** button to select [ERASE SINGLE IMAGE] and press the ENTER button.

ERASE

ERASE SINGLE IMAGE

ERASE ALL IMAGES

ERASE SELECTED IMAGES

SELECT: ©
BACK: CANCEL SEL: ENTER

Press the or button to select the file to be erased and press the shutter release button.



The selected file will be erased. To erase more files, repeat step 4.

Press the CANCEL button.The display will return to the erase menu.

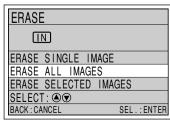
Erase All Images

All recorded files in the folder are erased.

Set the mode dial to [] and press the button to select the erase source.

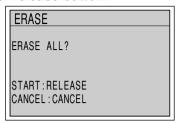


- **2** Press the fi button.
- **3** Press the **③** or **⑦** button to select [ERASE ALL IMAGES] and press the ENTER button.





 When a file is erased, the subsequent file numbers are reassigned. 4 Press the shutter release button.

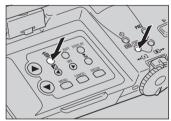


All the files will be erased and the display will return to the erase menu.

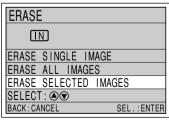
Erase Selected Images

Multiple selected files are erased.

1 Set the mode dial to [] and press the button to select the erase source.

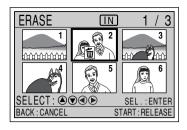


- **2** Press the button.
- **3** Press the **③** or **⑨** button to select [ERASE SELECTED IMAGES] and press the ENTER button.



Note

 To cancel selection, press the ENTER button again and the mark will disappear. Press the
or
button and the
or
button to select a file to be erased and press the ENTER button.



The selected file will be identified by the $\stackrel{\leftarrow}{\mathbf{m}}$ mark. To select more files, repeat step 4.

5 Press the shutter release button.

The selected files will be erased and the display will return to the erase menu.

Chapter 5

SETTINGS/MISCELLANEOUS

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Changing Camera Settings

Note

 A SmartMedia memory card with a write protect pad attached to it cannot be formatted. Remove the pad to format the SmartMedia memory card. See "Protecting Against Accidental Writing" (p. 26). This section explains how to format (initialize) a SmartMedia memory card or the internal memory, and how to change the various settings such as auto power off, beep sound and keep settings.

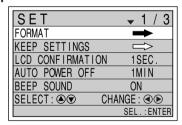
Formatting a Card/Internal Memory

Follow the procedure below to format a SmartMedia memory card or the internal memory.

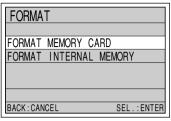
Before using a new SmartMedia memory card or a SmartMedia memory card that has been used on another device (such as a PC), you need to format it with the camera.

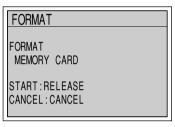


- Formatting a SmartMedia memory card or the internal memory will erase all the files recorded on the card or in the memory (including protected files). Copy any important files before formatting. See "Copying Image Files" (p.103).
- SmartMedia memory cards formatted on another device may be unusable.
- 1 Set the mode dial to [SET].
- Press the ♠ or ♥ button to select [FORMAT] and press the ENTER button.



3 Press the **♠** or **♥** button to select SmartMedia memory card or internal memory and press the ENTER button.





The "FORMATTING" message will be displayed. When formatting is completed, the display will return to the SET menu.

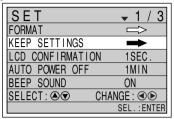
Keep Settings

The keep settings mode is for saving settings after the camera is turned off. The following settings can be saved.

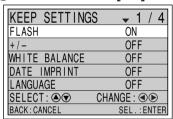
- Flash mode (p.60)
- Exposure compensation (p.62)
- White balance (p.64)
- Date imprint (p.74)
- Language (p.127)
- Recording destination (CARD/IN) (p.46)
- Focus mode (p.70)
- ISO sensitivity (p.73)
- Flash strength (p.61)
- Sharpness mode (p.79)

- Image with sound (p.58)
- Monochrome mode (p.80)
- Non-Compressed mode (p.84)
- Exposure metering system (Photometry) (p.86)
- S mode (p.87)
- Time Exposure mode (p.88)
- Negative mode(p.81)
- Red-Eve Reduction mode (p.72)

- 1 Set the mode dial to [SET].
- **2** Press the **(a)** or **(c)** button to select [KEEP SETTINGS] and press the ENTER button.



- **3** Press the ♠ or ♥ button to select the item to be saved.
- 4 Press the (a) or (b) button to select [ON].



Keep Setting will be activated. To set more items, repeat steps **3** and **4**.

Press the ENTER button.The display will return to the SET menu.

Changing LCD Confirmation Time

When you press the shutter release button to take a picture in (Still Picture) mode, the shot image appears on the LCD monitor. You can select the time for confirming the image after shooting to 0 sec., 1 sec., 2 sec., 3 sec., 4 sec. and 5 sec.

1 Set the mode dial to [SET].

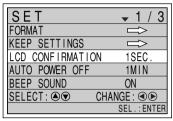


To cancel the setting, select [OFF].



- If you select 0 sec. for the image confirmation time, the shot image will not be displayed on the LCD monitor.
- The shot image will be displayed until recording is completed, regardless of the preset image confirmation time, when taking still picture/ text with sound, or when in non-compressed (NC) mode.

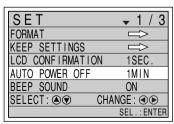
- Press the or button to select [LCD] CONFIRMATION].
- **3** Press the **④** or **▶** button to select the image confirmation time (0 SEC., 1 SEC., 2 SEC., 3 SEC., 4 SEC., 5 SEC.) and press the **ENTER button.**



Auto Power Off Setting

The camera will turn off automatically (auto power off) in recording and playback modes to conserve the battery if it is left idle (no buttons operated) for the preset time. You can select from 1 min., 3 min., 5 min., and OFF for the time until the auto power off function is activated.

- Set the mode dial to [SET].
- Press the left or left button to select [AUTO POWER OFF].
- **3** Press the or button to select the preset time (1 MIN, 3 MIN, 5 MIN, OFF) and press the ENTER button.



If you select OFF, the auto power off function will be disabled.

(Note)

- · Turn the power on again to reactivate the camera if it shuts off in auto power off
- When using an AC adapter (option), the auto power off function is disabled even if you have set a time (except for interval shooting).



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

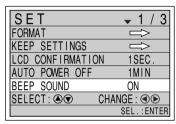


 This mode is used to save 10% power consumption compared with the normal mode.

Beep Sound Setting

The camera beeps to alert you when it records a picture. You can enable or disable the beep by changing the setting.

- 1 Set the mode dial to [SET].
- Press the ♠ or ♥ button to select [BEEP SOUND].
- **3** Press the **④** or **▶** button to select [ON] or [OFF] and press the ENTER button.

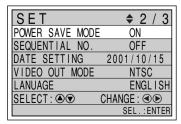


If you select [OFF], the beep sound will be disabled.

Power Save Mode Setting

This mode is used to conserve power consumed by the LCD monitor and extend the battery life.

- 1 Set the mode dial to [SET].
- Press the ♠ and ♠ buttons to select [POWER SAVE MODE].
- **3** Press the **④** or **⑤** button to select [ON] or [OFF] and press the ENTER button.



Changing the File Numbering System

By enabling or disabling sequential numbering, you can determine the method for assigning consecutive numbers to files. In both cases, there is never any duplication of file names on the same memory card.

When sequential numbering is ON

File names are assigned in sequence from R0010001 to R9999999.

The camera always remembers the last number assigned so that even when a new (blank) memory card is inserted, the camera continues assigning numbers in sequence from where it left off. In other words, the numbers are not reset.

However if the new memory card contains a file number higher than the last one remembered by the camera, file naming will continue from after this higher number. For example, if the highest number the camera remembers is R0020500, and the new memory card contains a file R0020600, file naming will resume from R0020601.

* To reset sequential numbering so that it will assign file names from R0010001 again, initialize the settings (p. 127) and insert a blank memory card.

When sequential numbering is OFF

File names are assigned in sequence from RIMG0001 to RIMG9999, however anytime a new (blank) memory card is inserted, the numbering resets back to RIMG0001.

However if the new memory card already contains files, file naming will begin from after the highest number on the card. For example, if the new memory card contains a file RIMG0800, file naming will begin from RIMG0801.

* When the file names reach RIMG9999, [FILE NUMBER OVER] is displayed and no more images can be recorded. See "Error Messages" (p.140).

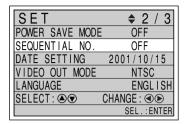
1 Set the mode dial to [SET].

Press the
or
button to select [SEQUENTIAL NO.].

Note

- Numbering starts from RIMG0001 when the internal memory is selected as the recording destination.
- Using the consecutive numbering system (when [SEQUENTIAL NO.] is [ON]) is useful when submitting images to digital printing services or keeping files on a PC as there is no risk of the same number being assigned twice.

3 Press the **④** or **▶** button to select [ON] or [OFF] and press the ENTER button.



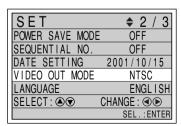
If you select [OFF], files will be assigned numbers starting from RIMG0001.

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

- "Connecting to a TV" (p.90) for instructions on how to connect the camera to a TV.
- "Using Your Digital Camera in Other Countries" (p.144) for information about the television systems.
- 1 Set the mode dial to [SET].
- Press the or button to select [VIDEO OUT MODE].
- **3** Press the **④** or **▶** button to select [NTSC] or [PAL] and press the ENTER button.



The video setting will be changed.

Changing Display Language

The information on the LCD monitor can be displayed in English, French, German and Japanese.

- Set the mode dial to [SFT].
- Press the or button to select [LANGUAGE].
- **3** Press the **④** or **▶** button to select the display language and press the ENTER button.

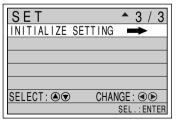
SET	\$ 2 / 3
POWER SAVE MODE	OFF
SEQUENTIAL NO.	OFF
DATE SETTING	2001/10/15
VIDEO OUT MODE	NTSC
LANGUAGE	ENGL I SH
SELECT: ♠♥	CHANGE: ● ▶
	SEL.:ENTER

The language setting will be changed.

Initializing Settings

You can reset all settings except the date.

- Set the mode dial to [SET].
- Press the
 or
 button to select [INITIALIZE SETTING] and press the **ENTER button.**





Enable the keep settings mode to save the display language setting. See "Keep Settings" (p.121).



Mode settings that have been saved will also be initialized.



 Recorded files are preserved intact even when the settings are initialized.

3 Press the shutter release button.

INITIALIZE SETTING

INITIALIZE ALL SETTINGS?

START: RELEASE CANCEL: CANCEL

The settings will be reset to their factory default settings and the display will return to the SET menu.

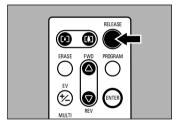
Using the Remote Control

This section explains how to operate the camera using the optional DR-3 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.

- 2 Decide the composition of the picture and press the RELEASE button.



Use the zoom button to vary the size of the subject. Press the [4] zoom button to magnify the subject and press the [4] zoom button to decrease the size of the subject.

- In (Still Picture) mode
 The self-timer LED will light and recording will start about 2 seconds later.
- (Text) mode
 Recording starts as soon as the RELEASE button is pressed.
- In (Continuous Shooting) mode Shots will be taken continuously while the RELEASE button is pressed. Shooting will stop when the RELEASE button is released and the shots will be recorded.



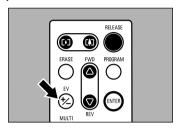
 The remote control receiver is located at the upper left of the LCD monitor. Operate the remote control unit by pointing it at the LCD monitor.



 For instructions on replacing the batteries and maintaining the remote control unit, refer to the accompanying manual. ● In ● (Sound)/ ➡ (Motion Picture) mode
Recording of the sound and image will start
when the RELEASE button is pressed.
Recording will stop when the RELEASE button is
pressed again and the shots will be recorded.

■ Setting Exposure Compensation

1 Press the EV (+/-) button.

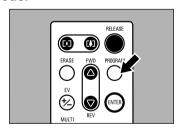


2 Set the exposure compensation level using the FWD (△) or REV (▽) button and press the ENTER button.

Press the RELEASE button to take the picture.

■ Setting the Focus

1 Press the PROGRAM button to select the desired focus mode.



The focus setting changes in the following sequence each time the button is pressed: AF (Auto) \rightarrow MF (Manual) \rightarrow 2.5m \rightarrow ∞ (Infinity). Press the RELEASE button to take the picture.

How to Cancel the Focus Mode Setting
 Press the PROGRAM button and change the focus mode.

Note

 When using MF (Manual) mode, adjust the focus using the FWD (△) and REV (▽) buttons, then press the RELEASE button to take the picture.

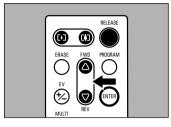
Playing

Use the remote control unit to play back recorded files.

Set the mode dial on the camera to [] and press the MD/M button to select the playback source.

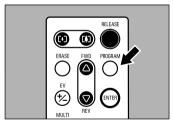
The most recently recorded file will be played.

2 Press the FWD (\triangle) or REV (∇) button to select a file.



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

- Magnifying an Image (Zoom Playback)
- Press the PROGRAM button.

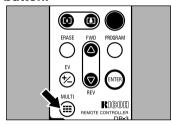


The image will be displayed in zoom playback.

Press the [♣] or [♣] button and the FWD (△) or REV (▽) button to shift the playback position.

Depending on the image size, you can change the magnification by pressing the ENTER button. See "Zoom Playback" (p.99).

- How to Cancel Zoom Playback Mode Press the PROGRAM button.
- Displaying Multiple Images (Multi Image Playback)
- 1 Press the MULTI button.



The images will be displayed in Multi playback.

- Press the [♣] or [♣] button and the FWD (△) or REV (▽) button to select a file to be played back.
- **3** Press the ENTER button.

The selected image will be displayed in singleimage mode and multi-image playback mode will be canceled.

Erasing

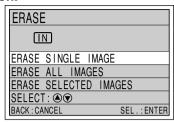
You can use the remote control unit to erase a recorded file.

- 1 Set the mode dial on the camera to [] and press the [] button to select the erase source.
- **2** Press the ERASE button.

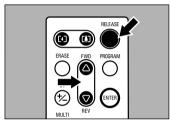
The erase menu will be displayed.



 Files cannot be restored once they are erased. Before starting to erase a file, make sure that you want to erase it. **3** Use the FWD (\triangle) or REV (∇) button to select [ERASE SINGLE IMAGE] and press the ENTER button.



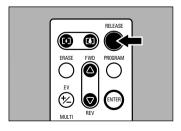
4 Use the FWD (\triangle) or REV (∇) button to select the file to be erased and press the RELEASE button.



The selected file will be erased.

■ Erasing All Files

- Select [ERASE ALL IMAGES] on the erase mode screen (step 3).
- **2** Press the RELEASE button.



All the files will be erased.



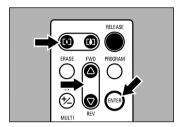
To cancel operation, press the CANCEL button on the camera.



 To cancel operation, press the CANCEL button on the camera.

■ Erasing Selected Images

- 1 Select [ERASE SELECTED IMAGES] on the erase mode screen (step 3).
- 2 Use the ♣ or ♣ button and the FWD (△) or REV (▽) button to select the file to be erased and press the ENTER button.



Repeat step 2 to select more images.

3 Press the RELEASE button.



• To cancel selection, press the ENTER button again.



 To cancel operation, press the CANCEL button on the camera.

APPENDIX

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Troubleshooting

Refer to the items listed below before submitting the equipment for repairs. If the problem persists, contact your nearest Ricoh service center.

■ Power Source

Symptom	Cause	Remedy	Page
Power will not come on	Battery expired, improperly inserted or not loaded	Insert the battery correctly or charge the battery	P.21 P.22
	AC adapter (optional) not connected correctly	Connect correctly	P.25
	Card door open	Close the card door and turn power on again	P.30
Power cuts out	No buttons touched so auto power off function was activated	Turn power on again	P.30
	Battery is exhausted	Charge battery or use AC adapter (optional)	P.21
Battery will not charge	End of battery life	Replace with new battery	P.22
Battery quickly consumed	Camera operated in extremely high or low temperature location	-	P.23
	Camera operated in dark area requiring frequent use of flash	_	_

■ Recording

Symptom	Cause	Remedy	Page
Shutter release button pressed	Battery is exhausted, improperly inserted or not loaded	Insert battery correctly or recharge battery or use AC adapter (optional)	P.21 P.22
but no image recorded	Power is not turned on or mode dial is not set	Turn power on and set mode dial to shooting mode	P.30
	Shutter release button only pressed halfway	Press shutter release button all the way	P.51
	SmartMedia memory card not formatted	Format SmartMedia memory card	P.120
	Insufficient memory on SmartMedia memory card	Erase unwanted files or insert new SmartMedia memory card	P.27 P.114
	Insufficient memory space in internal memory	Erase unwanted files	P.114
	End of service life of SmartMedia memory card	Insert new SmartMedia memory card	P.27
	Card door open	Ensure that card door is securely closed.	P.27
	Self-timer on	Press 🖒 button to disable the self-timer	P.67
	Flash is charging	Wait until flash LED ceases flashing	-
	A write protect pad is attached on a SmartMedia memory card	Remove the write protect pad from the SmartMedia memory card	P.26
	SmartMedia memory card contact surface dirty	Clean contact surface with soft dry cloth	P.26
Cannot confirm a shot picture	Image confirmation time is too short	Set a longer image confirmation time	P.122

Symptom	Cause	Remedy	Page	
No image on the LCD monitor	Power is off, or LCD monitor is dark	Turn power on, or adjust brightness of the LCD monitor with LCD LIGHT button	P.42 P.30	
Autofocus is on	Dirty lens or AF viewfinder	Clean lens or viewfinder with soft dry cloth	-	
but camera not focusing	Subject not in center of autofocus field	Use focus lock	P.54	
	Subject difficult to focus	Use focus lock or switch to manual focus	P.54 P.70	
Flash will not fire or will not charge	Shooting mode is set to (Sound), (Continuous Shooting) or (Motion Picture)	Set mode dial to (Still Picture) or (Text) mode		
-	Flash is set to (flash off) mode	Press 4 button to cancel flash off mode	P.60	
	Mode dial is set to macro mode	Press 📸 button to cancel macro mode	P.68	
	White balance set to mode other than auto	Set white balance to auto	P.64	
	Battery is exhausted	Charge battery or use AC adapter (optional)	P.21	
Image dark even with flash	Subject farther than approx. 2.5m	Come closer to subject	P.60	
Image is too	Camera is too close to subject	Set flash to flash off mode with 4 button	P.60	
bright	Overexposed	Press Dutton to change exposure compensation level or cancel the time exposure mode		
Brightness setting needs adjusting		Press LCD LIGHT button to adjust brightness of LCD monitor		
Image is too Shot in low light area with camera set to (3) (flash off) mode		Press 4 button to cancel flash off mode	P.60	
	Under-exposed	Press 🔀 button to change exposure compensation level or set the time exposure mode	P.62	
	Brightness setting needs adjusting	Press LCD LIGHT button to adjust brightness of LCD monitor	P.42	
Unnatural coloration of image	Shooting conditions difficult to achieve white balance in auto mode	Place a white object near the subject, use the flash or select a white balance mode other than auto	P.60 P.64	
Date and other recording data will not display	Screen display set to off	Press DISPLAY button to switch screen display mode	P.46 P.97	
LCD monitor brightness changes during AF operation	Brightness of autofocus field and surrounding area are different, or picture shot in a dark place	There is no malfunction	-	
Vertical lines appear on image	Phenomenon occurring with pictures of bright subject, known as smudge phenomenon	There is no malfunction	-	

■ Playback and Erasing

Symptom	Cause	Remedy			
Cannot play or image will not	Camera not set to ► (Play) mode	Set mode dial to ▶ (Play)	P.92		
appear	Wrong playback source	Press CARD/IN button to change playback source	P.92		
	SmartMedia memory card not inserted or does not contain any files	Insert SmartMedia memory card with recorded images	P.27		
	Attempted to play SmartMedia memory card not formatted with this camera	Use SmartMedia memory card that has been formatted and recorded on this camera	P.27		
	SmartMedia memory card contains incorrectly recorded files	Insert SmartMedia memory card containing pictures properly recorded with this camera	P.27		
	SmartMedia memory card contains files in format not read by this camera	Check format type			
	Card door open	Ensure that card door is securely closed	P.27		
	Video interface cable not correctly connected	Check connection			
	Source of interference, such as electric motor, nearby	Relocate camera away from interference source	-		
	SmartMedia memory card contact surface dirty	Clean contact surface with soft dry cloth	P.26		
Replay is not clear Error in internal memory of camera		Copy required files from internal memory onto SmartMedia memory card and format internal memory	P.103 P.120		
	Error in SmartMedia memory card in use	Test camera with another SmartMedia memory card. If second card displays well, problem is with card not camera.	-		
Display shuts off	Battery is exhausted	Charge battery or use AC adapter (optional)	P.21 P.25		
	Camera was left unoperated so auto power off was activated	Turn power on again			
File will not erase or	Camera not set to erase mode	Set the mode dial to (Play) and press the button.			
SmartMedia memory card will not format	Write protect pad on SmartMedia memory card	Remove the pad from the SmartMedia memory card	P.26		
not format	Protected file	Use the playback menu to cancel the protect setting	P.106		

■ Miscellaneous

Symptom	Cause	Remedy	Page
SmartMedia memory card	Wrong type of SmartMedia memory card	Use a SmartMedia memory card specified for the camera	P.27
		Insert the SmartMedia memory card the correct way	P.27
Camera will not	Battery is exhausted	Charge battery or use AC adapter (optional)	P.21
operate even when buttons and switches are operated	Camera malfunction	Turn power off and on once. Set the mode dial to (Still Picture) or (Text).	P.30 P.31 P.140
		Reset the camera. If the problem persist, carry out the following procedures. Remove the battery, then reload the battery. Try operating the camera again.	
Date and time are wrong	Date and time setting is incorrect	Set the correct date and time	P.37
Date and time were set but disappeared	Battery has been removed	The date setting is reset if the battery has been removed for about 1 month. Set the date again.	
Mode settings have changed	Keep settings mode is disabled	Enable the keep settings mode	P.120
Auto power off	Auto power off setting is disabled	Enable setting	P.123
will not activate 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] in the SET menu.	P.124
Remote control unit will not Control unit and camera sensor		Remove obstruction *Sensor is on upper left of LCD monitor	
work	Dirty remote control transmitter or camera sensor	Clean with soft dry cloth	
	Remote control battery expired	Replace CR2032 lithium battery	-
No image on	TV system setting is incorrect	Select correct TV system	
TV screen Incorrect video I/O switch setting on video equipment		Check video I/O switch setting on video equipment	

Error Messages

If any of the error messages or error codes listed below appear on the camera's LCD monitor or on the LCD panel, read the corresponding explanation and take the corrective action suggested.

■ LCD Monitor

Error Message	Explanation and Remedy
-	Indicates low battery. Recharge battery.
NO CARD	A SmartMedia memory card has not been inserted. Insert a SmartMedia memory card.
FORMAT CARD	The SmartMedia memory card is unformatted. Format the card with the camera.
FORMAT INTERNAL MEMORY	Format the internal memory.
CARD ERROR	A SmartMedia memory card of this type is not supported by this camera. Use a different type of SmartMedia memory card.
WRITE PROTECTED	A write-protected SmartMedia memory card is found. Remove the write-protection pad from the card to gain access to it.
FILE PROTECTED	You attempted to erase a protected file. Unprotect the file before erasing it.
NO FILE	There are no files to play. Insert a SmartMedia memory card with files recorded on it.
UNMATCHED FILE	You attempted to play an unplayable file.
FILE NUMBER OVER	The file number limit has been exceeded. Delete unwanted files or use another SmartMedia memory card.
SET DATE/TIME	The date has not been set. Set the date before starting operations with the camera.

■ LCD Panel

Error Code	Explanation and Remedy
CARD no.Fo	The SmartMedia memory card is unformatted. Format the card with the camera before using it.
mno.Fo	Format the internal memory before using it.
CARD E + +	A SmartMedia memory card of this type is not supported by this camera. Use a different type of SmartMedia memory card.

Note

If the error display does not clear, reset the camera to its factory default settings.
 How to reset: With the terminal cover open, press the reset button (p.8). If the error display still won't clear, call your dealer or a Ricoh service center.

Recording Capacities

The table below gives approximate recording picture counts available by SmartMedia memory card capacity and by picture quality/size.

			4MB	8MB	16MB	32MB	64MB	128MB
		F	2	5	11	22	44	88
	2272 × 1704	N	5	11	22	44	88	177
	2212 \ 1104	Е	10	21	43	86	173	347
		NC	0	1	2	4	8	16
		F	8	16	33	66	133	266
Still Picture	1120 × 840	N	16	33	66	133	266	532
Mode (No. of		Е	30	62	124	249	499	998
`		NC	2	4	8	16	33	67
images)	640 × 480	F	24	49	99	199	399	798
		N	45	90	166	332	665	1331
		Е	82	165	332	665	1331	2662
		NC	6	12	24	49	99	199
Text Mode (No.	2272 × 1704		10	21	43	86	173	347
of images)	1120 × 840		30	62	124	249	499	998
Motion Picture Mode (Minutes : Seconds)		00:20	00:41	1:22	2:46	5:32	11:05	
Sound Mode (Minutes : Seconds)		8:25	16:57	33:57	68:05	136:19	272:40	

Note

- The figures for SmartMedia cards of the same capacity may vary slightly depending on the type of card.
- · Image quality (compression rate) is as follows.

F: Fine
N: Normal
E: Economy

NC: Non-compressed

- The internal memory is similar to an 8 MB SmartMedia memory card.
- Even when "1" is displayed as the number of recordable pictures in the Text mode, recording may not be
 possible in some cases, depending on the subject.

Accessories

Item		Model	Remarks
AC Adapter		AC-3	For drawing power directly from a household electrical outlet.
Rechargeable Battery		DB-20L	The camera body battery.
Battery Charger		BJ-1	High speed battery charger for rechargeable batteries.
SmartMedia Memory Card			A postage stamp-sized recording media with a thickness of 0.76 mm.
	4 MB	FS-4	Capable of recording a maximum of about 16 images in 1120 N (1120 × 840N) mode.
	8 MB	FS-8	Capable of recording a maximum of about 33 images in 1120 N (1120 × 840N) mode.
	16 MB	FS-16	Capable of recording a maximum of about 66 images in 1120 N (1120 × 840N) mode.
	32 MB	FS-32	Capable of recording a maximum of about 133 images in 1120 N (1120 × 840N) mode.
	64 MB	FS-64	Capable of recording a maximum of about 266 images in 1120 N (1120 × 840N) mode.
Remote Control Unit		DR-3	For remote operation of the camera's recording and playback functions.
PC Card Adapter		FS-B53	Used to insert a SmartMedia memory card directly into a PC card slot.
Floppy Disk Adapter		FS-B10	Used to insert a SmartMedia memory card directly into a PC floppy disk drive.

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 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) equipped 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 television environment.
- If you plan to take the camera with you on a trip abroad, identify the local television system beforehand.

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 impact.
- To avoid overheating, do not use the flash more than necessary in continuous shots.
- Never look through the viewfinder directly at the sun or intense light.
- Do not fire the flash close to an infant's eyes as this may result in impaired eyesight.
- Do not fire the flash into the eyes of someone driving a vehicle as this may result in a traffic accident.
- 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 (optional).
- 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 the card door, terminal cover or battery cover.
- Do not lift the camera by the LCD monitor, card door, terminal cover or battery cover.
- Do not apply unreasonable force when opening or turning the LCD monitor.
- Be careful not to hit the lens unit or the LCD monitor while carrying the camera.
 Make sure to close the LCD monitor when carrying the camera.
- Extreme temperature diferences 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 acclimate to the new temperature before exposing it.

Potential Causes of Condensation

- Suddenly moving the camera from a cold place to a warm place.
- Storing or using the camera in place 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 or AF viewfinder will reduce the image quality so take extra care not to get them dirty.
- Do not wipe dust or smears off the lens or AF viewfinder with your fingers. Use a lens blower, available at most photographic suppliers, to blow dust off, or a soft cloth to wipe it lightly.
- Be particularly diligent in cleaning the lens after use at the beach or in the vicinity of chemicals.
- If your camera should malfunction, take it to your nearest Ricoh service office.
 This product generates high voltage and disassembly is hazardous. Under no circumstances should you attempt to disassemble it yourself.
- Never use solvents, benzine, 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 they are easily scratched.
- To clean the surface of the LCD monitor or LCD panel, wipe it gently with a soft cloth that has been moistened with a small amount of solvent for cleaning LCD displays, sold at camera shops.

Precautions regarding care of your camera

- (1) Make sure that the camera is turned off.
- (2) Remove the battery and AC adapter before cleaning the camera.

■ Storage

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

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

Specifications

■ General

● Video Signal Protocol : NTSC/PAL : Battery: 3.7V

AC: 5V

◆ Dimensions
 ∴ 135.4 × 74.0 × 26.6 mm (5.3 × 2.9 × 1 in.)
 ◆ Mass
 ∴ Approx. 270 g (9.5 oz) (excluding battery)

• Operating Temperature : 0°C to 40°C (32°F – 104°F)

Range

● Operating Humidity Range : 85% or less

● Storage Temperature : −20°C to 60°C (−4°F − 140°F)
Range

■ Camera

• CCD : 4,130,000 pixels (Number of Total Pixels)

Number of Effective Pixels
 ∴ 3,950,000 pixels
 ∴ Zoom lens F=2.6 – 3.4

• Focal length : f=7.3 - 21.9 mm (equivalent to 35 - 105 mm in 35mm camera format)

Minimum shooting range
 Approx. 24 cm (9.4 in) (wide angle)
 Approx. 1 - 24 cm (0.4 in - 9.4 in)

Macro shooting range
 Approx. 1 - 24 cn
 Digital Zoom
 ×1.4, ×1.8, ×3.6

ViewfinderType : Real image

• Parallax correction : Yes (-2 - +1 dpt)

● Monitor

• Display size : 2.0"

Drive system
 No. of pixels
 TFT Active Matrix System
 Approx. 200,000

 White Balance : Auto/Preset (Daylight, Overcast, Tungsten Light, Fluorescent Light)

Exposure Compensation

• Light metering system : Centerweighted, Multi, Spot

• Exposure memory : Auto backlighting compensation/Manual exposure mechanism compensation ±2.0 EV (in 0.25 EV steps)

• Metering system : TTL-CCD

Flash automatic exposure
 Shutter speed
 Yes (daylight synchro)
 1- 1/2000 in still picture mode, 1/30 - 1/2000 in motion

picture mode

• ISO sensitivity : ISO Approx. equivalent to 150 (AUTO), ISO 200, ISO 400, ISO 800

Distance Adjustment

Autofocus system
 Normal shooting domain: TTL-CCD, macro domain: CCD
 Autofocus range
 Normal shooting domain: approx. 24 cm - ∞ (9.4 in - ∞),

macro domain: 1 - 24 cm (0.4 – 9.4 in.)

Built-in Flash
 Range
 Approx. 0.6 - 2.5 m (2.0 ft - 8.2 ft)

Modes : Off/Forced flash/Slow synchro/Auto/Red-eye reduction

■ Image Data Recording and Playback

Resolution

• Still picture mode : 2272 × 1704, 1120 × 840, 640 × 480 pixels

• Text mode : 2272 × 1704, 1120 × 840 • Motion Picture mode : 288 × 216 pixels

File Format

• Still picture mode : Compressed: JPEG (Exif2.1), Non-compressed: TIFF

(Exif2.1)

• Text mode : TIFF (G4 MMR)

• Motion Picture mode : AVI (conforms to Open DML Motion JPEG format)

• Sound mode : WAV (Exif 2.1)

Camera File System : DCF (Design rule for Camera File system standardized)

Standard by JEITA)

● Compression Format : JPEG baseline system

File Sizes

• 2272 × 1704 : F: approx. 1.5 MB, N: approx. 726 KB, E: approx. 363

KB, NC: approx. 7.7 MB

• 1120 × 840 : F: approx. 470 KB, N: approx. 235 KB, E: approx. 118

KB, NC: approx. 1.8 MB

• **640** × **480** : F: approx. 152 KB, N: approx. 72 KB, E: approx. 40 KB,

NC: approx. 614 KB

■ Input/Output Terminal

Power Input
 S V (AC adapter)
 Video Output
 1.0 Vp-p (75 Ω)

USB : For connecting to a PC

■ Body

● Tripod Screw Hole : Yes (1/4-20 UNC)

: Less than 6.0 mm (0.24 in.)

■ Power Supply

Main Battery

• Type : Rechargeable lithium ion battery

• Voltage : 3.7 V

■ Date Retention Time : Approx. 20 days

■ Auto Power Off : Off/Activated after more than 1 min., 3 min. or 5 min.

■ Internal Memory

• Capacity : 8 MB

■ Compatible Memory Cards for Recording and Playback

• Type of Memory : SmartMedia memory card • Capacity : 4, 8, 16, 32, 64, 128 MB

• Operating voltage : 3.3 V

About the Warranty and Servicing

- 1. The Ricoh Caplio RR1 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 your nearest Ricoh service office. Please note that you will be liable for any costs incurred in taking the camera to the Ricoh service office.
- 2. This warranty does not cover any damage resulting from:
 - 1) Failure to follow the instructions in the instruction manual:
 - ② Repair, modification or overhaul not conducted by an authorized service center specified in the instruction manual;
 - (3) Fires or natural disaster:
 - ① Improper storage, such as exposing the camera to high temperatures, humidity, or insecticide; storing it with a leaking battery; 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 liable for all repair fees, including those incurred at an authorized service center.
- 4. You will be liable 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 has been changed or is not indicated on the card.
- 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.
- This warranty only applies to the camera and not to the accessories, such as the 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 nearest Ricoh service representative even after the seven year period.
- 10. Please note that if the camera is seriously damaged by flooding, submergence, infiltration of sand or mud, violent shocks or dropping, the camera may not be repairable, and restoration of its original condition may be determined to be impossible.



- Before sbumitting the camera for repair, check the battery and read this operation 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 recommend that you keep this manual and a spare battery on
 hand.

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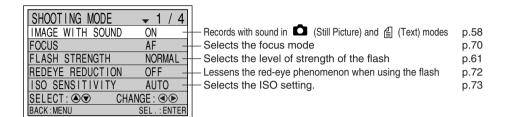
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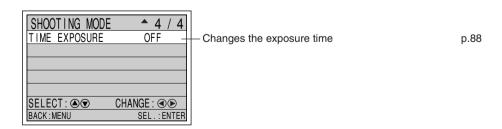
■ Shooting Mode [**△** • **△** • **♦** • **□** • **△**]

♦ MENU Button



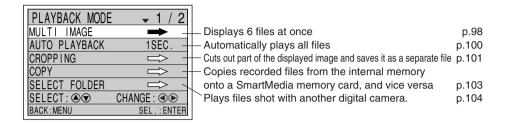
SHOOTING MODE	\$ 2 / 4		
DATE IMPRINT	OFF -	Records images with the date imprinted	p.74
SPLIT-SCREEN	\Rightarrow $+$	Records an image divided into two halves	p.75
SHARPNESS	OFF -	Selects the degree of emphasis of the outline of the subject	p.79
MONOCHOME MODE	OFF -	Records images in monochrome or sepia	p.80
NEGATIVE	OFF -	Mode setting for shooting 35mm negatives	p.81
SELECT: ▲♥	CHANGE: ③▶		
BACK: MENU	SEL . : ENTER		

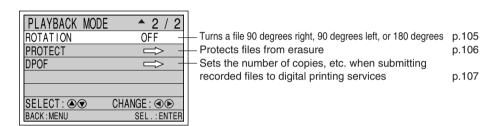
SHOOTING MODE	\$ 3 / 4		
INTERVAL MODE	-	Selects interval shooting	p.82
AUTO BRACKET	OFF -	Records three images at -0.5EV, 0 and +0.5EV	
NO COMPRESSION	OFF \	based on the current exposure compensation level	p.83
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S MODE	OFF \	Selects the exposure metering system	p.86
SELECT: ♠®	CHANGE: ③▶	Reduces camera shake when shooting in dark	
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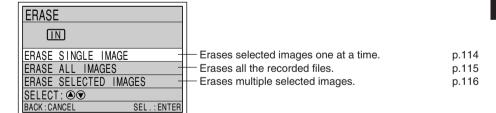
■ Playback Mode [▶]

◆ MENU Button

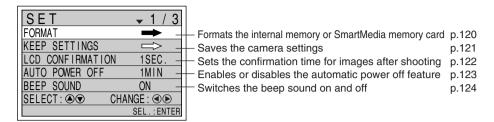


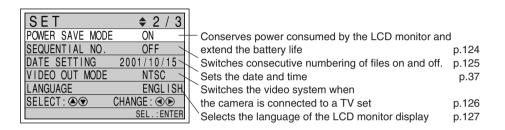


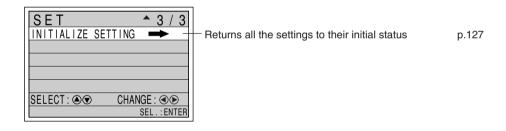
◆ 前 Button



■ SET Mode [SET]









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: DIGITAL CAMERA

Model Number: Caplio RR1

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

5 Dedrick Place, West Caldwell NJ, 07006 Tel.: 1-800-225-1899

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 numerique 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.

Telephone Support Numbers in Europe

UK (from within the UK) 01844 219 342

(from outside of the UK) +44 1844 219 342

Deutschland (innerhalb Deutschlands) 06331 268 438

(außerhalb Deutschlands) +49 6331 268 438

France (à partir de la France) 0800 91 4897

(en dehors de la France) +33 800 91 4897

Italia (dall'Italia) 02 696 33 451

(dall'estro) +39 02 696 33 451

España (desde España) 91 406 9148

(desde fuera de España) +34 91 406 9148