

GETTING STARTED Chapter

1

Before Using the Camera	22
Checking the Package Contents	22
Installing the strap and lens cap	22
Powering the Camera	23
Charging the Battery	23
Loading the Battery	24
Using an AC Adapter	26
SmartMedia Memory Cards	27
What is a SmartMedia Memory Card?	27
Inserting a SmartMedia Memory Card	28
How to Use the Mode Dial	30
Menus	31
Setting the Date and Time	34
How to Hold the Camera	36
Adjusting the Camera	38
Diopter Adjustment	38
Adjusting the Brightness of the LCD Monitor	38

Before Using the Camera

Checking the Package Contents

Check that your digital camera comes complete with all the accessories listed below. Read the warranty card and keep it in a safe place.

- Digital camera 1
- Lens cap 1
- AV interface cable 1
- Soft case 1
- Battery (Lithium ion battery) 1
- Battery charger 1
- Wrist strap 1
- Operation manual (this manual) 1
- Warranty card/Registration card 1
- PC Connection cable (RS-232C) 1
- Macintosh Cable (AUX) 1
- USB Cable 1
- Software CD-ROM 1

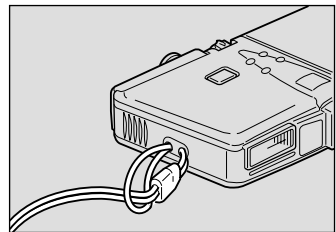
Installing the strap and lens cap

Attach the wrist strap and the lens cap.

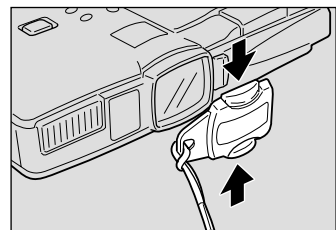
Pass the small loop of the strap through the wrist strap eyelet and pass the other end through the loop as illustrated.



- Do not swing the camera around by its strap.



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

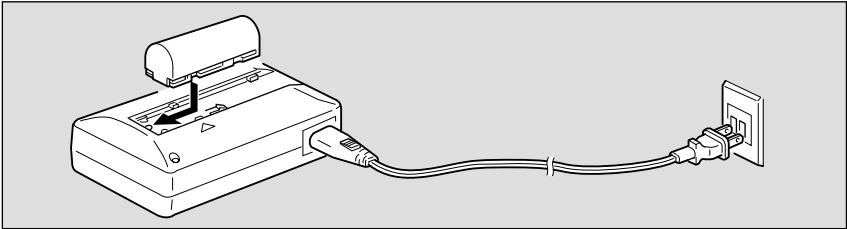


Powering the Camera

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 Set the battery on the battery charger.

2 Insert the plug into an electrical outlet.

Charging will start and continue as shown below. When charging is completed, disconnect the power plug from the power outlet.

Charge lamp	Contents
Lights red	Charging has started.
Lights green	The completion of charging (90% of full charge), after approximately 60 min.
Lamp off	Full charge has been reached, approximately 40 min. after the lamp lights green.

■ Precautions

- Do not use the batteries other than the Ricoh DB-20.
- 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-20 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.

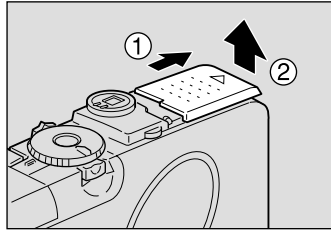
Loading the Battery

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



- 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.23.

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

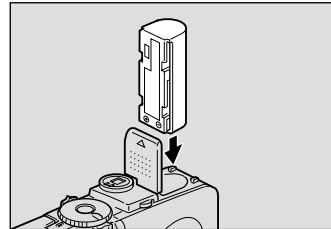


- “Turning on the Camera” (p.41).

- 2 Load the battery.

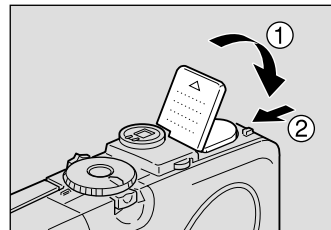


- Do not bring metallic objects, such as a needle, into contact with the battery contact surface or electrical connections. Electrostatic damage could result.



- 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 recording 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)

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

Battery Type	Approximate Recording Time	Approximate Playback Time
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 without using the LCD monitor.

■ Handling Precautions

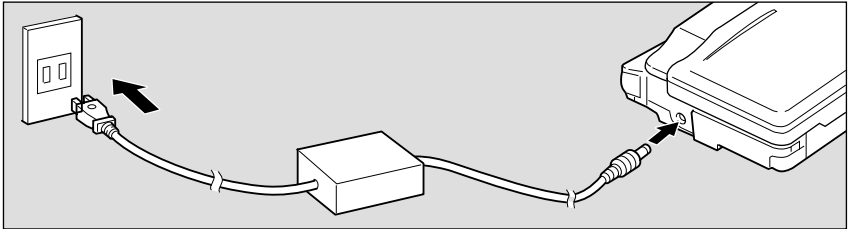
- Read the instruction manual supplied with the battery before using it.
 - Use only the specified lithium ion battery. Check the type of battery in “Accessories” (p.110).
 - Cleaning the contact area of the battery terminal and the battery with a dry cloth may extend the life of the battery.
 - Do not use a battery with a low voltage (such as one which has already caused the battery symbol (⚡) to flash) as this may cause malfunction of the camera (malfunction of the LCD monitor or flashing or lighting of the AF LED, flash LED or self-timer LED).
 - 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 “Using an AC Adapter” (p.26).
 - 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.23).

Using an AC Adapter

When using the camera for long periods of time to record or playback images, 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.

See • “Turning on the Camera” (p.41).

- 2 Insert the power plug into the electrical outlet.

Note • 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.

Important Note

- 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.

SmartMedia Memory Cards

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:

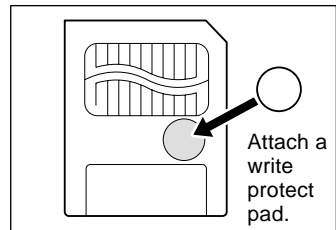
- Capacity: 2 MB, 4 MB, 8 MB, 16 MB, 32 MB, 64 MB
- Operating voltage: 3.3 V

- 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.

■ 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.



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

■ Handling Precautions

● SmartMedia Memory Cards

- Never remove the SmartMedia memory card while data is being recorded or erased.
- Do not bend, subject to strong force or 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.

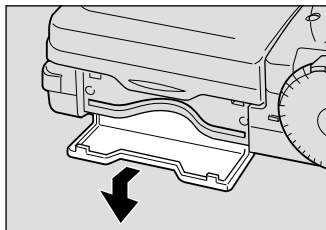


- Never insert or remove a SmartMedia memory card while the camera is turned on. The data stored on the SmartMedia memory card may be lost or damaged, or the camera may malfunction.
- When using a new SmartMedia memory card, or when using a SmartMedia memory card that has been used on other equipment, such as a personal computer, the SmartMedia memory card must first be formatted (initialized) with the camera. See "Formatting a Card/Internal Memory" → (p.98).

■ Inserting Card

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

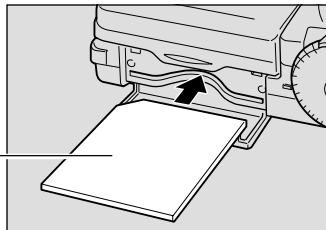
See • "Turning on the Camera" (p.41).



- 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.

Set with the contact surface facing down



- 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.

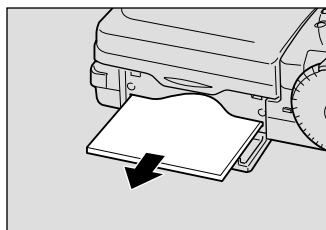
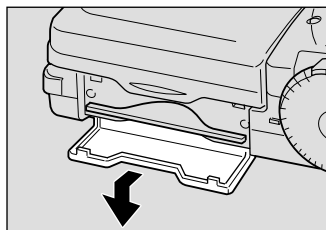
■ Removing Card

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

See • “Turning on the Camera” (p.41).

- 2 **Pull the SmartMedia memory card straight out of the slot.**

- 3 **Close the card door.**









Important Note

- 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.







How to Use the Mode Dial

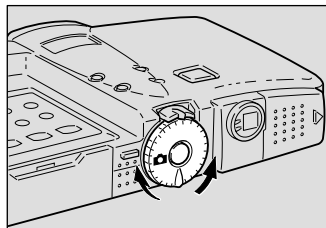
The camera offers a number of recording and playback modes. Select the desired mode with the mode dial.

-  Still picture mode : This mode is used for normal 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 button is depressed.
-  Motion picture mode : This mode is used for recording motion pictures with sound.
-  Play mode : This mode is used for playing recorded image files.
- SET Settings mode : This mode is used for entering or changing the camera settings.

① 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.41
-  (sound) → p.50
-  (text) → p.49
-  (continuous shooting) → p.50
-  (motion picture) → p.51
-  (play) → p.76
- SET (settings) → p.98



Menus

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 setting mode (SET).
To exit the set menu, turn the mode dial to select another mode.


SET	▼ 1 / 3
FORMAT	➡
SERIAL TRANSFER	➡
KEEP SETTINGS	➡
LCD CONFIRMATION	1SEC.
AUTO POWER OFF	1MIN
SELECT: ▲▼	CHANGE: ◀▶
SEL.: ENTER	

● SHOTTING Menu

Set the mode dial to shooting mode
( •  •  •  • ) and press the MENU button.
To exit the record menu, press the MENU button again.




SHOOTING MODE	▼ 1 / 3
IMAGE WITH SOUND	OFF
FOCUS	AF
FLASH STRENGTH	NORMAL
REDEYE REDUCTION	OFF
ISO SENSITIVITY	AUTO
SELECT: ▲▼	CHANGE: ◀▶
BACK: MENU	SEL.: ENTER


● PLAYBACK Menu

Set the mode dial to play mode () and press the MENU button.
To exit the playback MENU, press the MENU button again.

PLAYBACK MODE	▼ 1 / 2
MULTI IMAGE	➡
ZOOM PLAYBACK	➡
AUTO PLAYBACK	1SEC.
COPY	➡
SELECT FOLDER	➡
SELECT: ▲▼	CHANGE: ◀▶
BACK: MENU	SEL.: ENTER

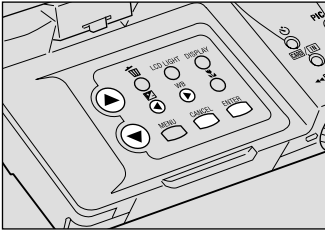
● ERASE Menu

Set the mode dial to play mode () and press the  button.
To exit the erase menu and return to play mode, press the  button again.

ERASE	
	
ERASE SINGLE IMAGE	
ERASE ALL IMAGES	
ERASE SELECTED IMAGES	
SELECT: ▲▼	
BACK: CANCEL	SEL.: ENTER

Note • For details of the settings that can be made on each menu, see “Menu Settings” (p.32).

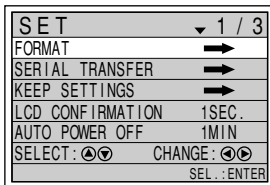
■ Selecting, Setting and Cancelling Items



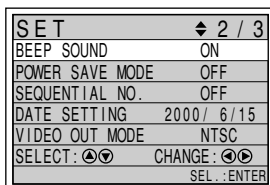
- ENTER button : Enters the setting. Enters the selected setting at the position indicated by the arrow (➔) and proceeds to the next display.
- CANCEL button : Cancels the setting and returns to the previous display.
- ◀ or ▶ button : Changes the setting.
- ▲ or ▼ button : Selects the setting you want to change.

■ Menu Settings

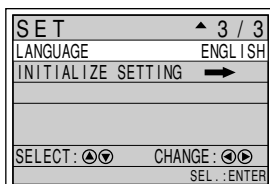
● SET Menu



- FORMAT : Formats the internal memory or SmartMedia memory card. → (p.98)
- SERIAL TRANSFER : Used to transfer recorded files to a personal computer.
- KEEP SETTINGS : Saves the camera settings. → (p.99)
- LCD CONFIRMATION : Sets the confirmation time for images after shooting. → (p.100)
- AUTO POWER OFF : Enables or disables the automatic power off feature. → (p.100)



- BEEP SOUND : Switches the beep sound on and off. → (p.101)
- POWER SAVE MODE : Decreases the brightness of the LCD monitor to conserve battery power. → (p.101)
- SEQUENTIAL NO. : Switches consecutive numbering of files on and off. → (p.102)
- DATE SETTING : Sets the date and time. → (p.34)
- VIDEO OUT MODE : Switches between NTSC and PAL when the camera is connected to a TV set. → (p.103)





- LANGUAGE : Selects the language of the LCD monitor display. → (p.103)
- INITIALIZE SETTING : Returns all the settings to their initial status. → (p.104)

Note • [SERIAL TRANSFER] is used to transfer recorded files to a personal computer by serial connection.

● Record Menu


SHOOTING MODE	▼ 1 / 3
IMAGE WITH SOUND	OFF
FOCUS	AF
FLASH STRENGTH	NORMAL
REDEYE REDUCTION	OFF
ISO SENSITIVITY	AUTO
SELECT: ▲▼	CHANGE: ●◎
BACK: MENU	SEL.: ENTER

- IMAGE WITH SOUND : Records with sound in  (still picture) and  (text) modes. → (p.52)
- FOCUS : Switches between auto focus and manual focus. → (p.62)
- FLASH STRENGTH : Selects the level of strength of the flash. → (p.55)
- REDEYE REDUCTION : Lessens the red-eye phenomenon when using the flash. → (p.63)
- ISO SENSITIVITY : Selects the ISO setting. → (p.64)

SHOOTING MODE	◆ 2 / 3
DATE IMPRINT	OFF
SOFT MODE	OFF
MONOCHROME MODE	OFF
INTERVAL MODE	→
AUTO BRACKET	OFF
SELECT: ▲▼	CHANGE: ●◎
BACK: MENU	SEL.: ENTER

- DATE IMPRINT : Records images with the date imprinted. → (p.64)
- SOFT MODE : Records images with a soft outline. → (p.65)
- MONOCHROME MODE : Records images in monochrome or sepia. → (p.66)
- INTERVAL MODE : Selects interval shooting. → (p.67)
- AUTO BRACKET : Records three images at -0.5 EV, 0 and +0.5 EV based on the current exposure compensation level. → (p.68)

SHOOTING MODE	▲ 3 / 3
NO COMPRESSION	OFF
PRO	OFF
TIME EXPOSURE	OFF
SELECT: ▲▼	CHANGE: ●◎
BACK: MENU	SEL.: ENTER

- NO COMPRESSION : Records in non-compressed mode. → (p.69)
- PRO : Records in PRO mode. → (p.70)
- TIME EXPOSURE : Set when photographing a bright subject in a dark place with  (still image) set. → (p.72)

● Play Menu

PLAYBACK MODE	▼ 1 / 2
MULTI IMAGE	→
ZOOM PLAYBACK	→
AUTO PLAYBACK	1SEC.
COPY	→
SELECT FOLDER	→
SELECT: ▲▼	CHANGE: ●◎
BACK: MENU	SEL.: ENTER

- MULTI IMAGE : Displays 6 files at once. → (p.77)
- ZOOM PLAYBACK : Displays an enlarged file. → (p.81)
- AUTO PLAYBACK : Automatically plays all files. → (p.82)
- COPY : Copies recorded files from the internal memory onto a SmartMedia memory card, and vice versa. → (p.83)
- SELECT FOLDER : Plays files shot with another (Ricoh or non-Ricoh) digital camera. → (p.84)

PLAYBACK MODE	▲ 2 / 2
ROTATION	OFF
PROTECT	→
DPOF	→
SELECT: ▲▼	CHANGE: ●◎
BACK: MENU	SEL.: ENTER

- ROTATION : Turns a file 90 degrees right, 90 degrees left, or 180 degrees. → (p.82)
- PROTECT : Protects files from erasure. → (p.85)
- DPOF : Sets the number of copies, etc. when submitting recorded files to digital printing services. → (p.86)

● Erase Menu

ERASE	
[IN]	
ERASE SINGLE IMAGE	
ERASE ALL IMAGES	
ERASE SELECTED IMAGES	
SELECT: ▲▼	
BACK: CANCEL	SEL.: ENTER

- ERASE SINGLE IMAGE : Erases selected images one at a time. → (p.92)
- ERASE ALL IMAGES : Erases all the recorded files. → (p.93)
- ERASE SELECTED IMAGES : Erases multiple selected images. → (p.94)

* Protected files cannot be erased.

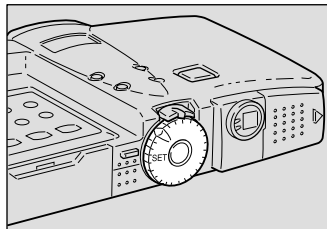
Setting the Date and Time

The set date and time are recorded when you shoot a picture. You will need to adjust these settings when you first use the camera and each time you change time zones on trips.

- 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.

- 1 Press the power switch to turn the camera on and set the mode dial to [SET].**

See "Turning on the Camera" (p.41).

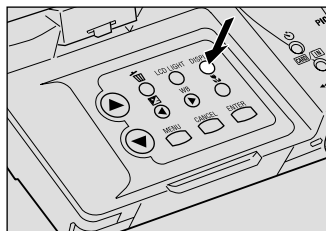


- 2 Press the ▲ or ▼ button to select [DATE SETTING].**

SET		◆ 2 / 3
BEEP SOUND	ON	
POWER SAVE MODE	OFF	
SEQUENTIAL NO.	OFF	
DATE SETTING	2000 / 6 / 15	
VIDEO OUT MODE	NTSC	
SELECT : ▲▼	CHANGE : ◀▶	
SEL. : ENTER		

- 3 Press the DISPLAY button to select the date display method.**

There are three ways of displaying the date:
 2000/5/15 → May 15 2000 → 15 May 2000
 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 ▲ or ▼ button to change the flashing digit.**

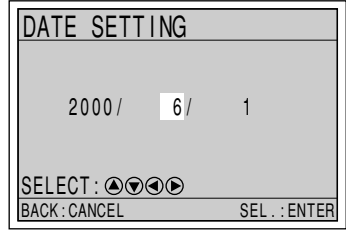
Press the ▲ button to increase the digit and the ▼ button to decrease the digit. Pressing the button continuously increases the speed.

DATE SETTING		
2000 /	1 /	1
SELECT : ▲▼◀▶		
BACK : CANCEL		SEL. : ENTER

6 Press the ◀ or ▶ button to highlight the digit you wish to change.

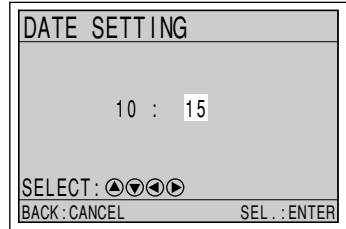
Make the required changes by repeating steps 5 and 6.

Note 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.



- Note**
- The accurate time can be set by pressing the ENTER button at the same time as a time broadcasting signal.
 - The set date and time will be reset about 1 month after the battery has been removed, for example when changing the battery. In this case, reset the date and time.

Tips 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 Function" → (p.48).

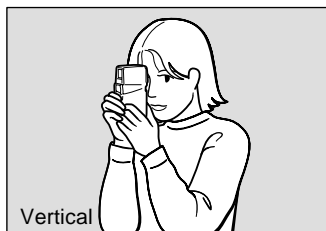
How to Hold the Camera

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.

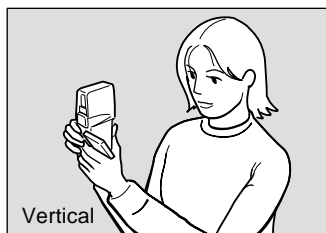
● When viewing through the viewfinder

With the camera pressed lightly to your face, aim it at your subject while looking through the viewfinder.

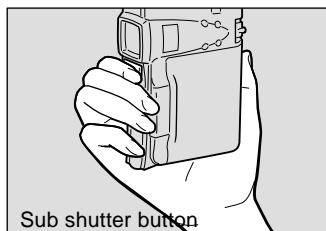
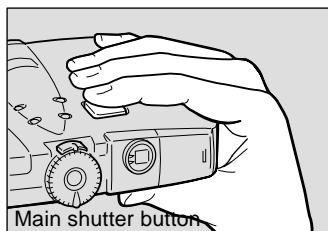


● When viewing on the LCD monitor

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



② Press the shutter release button lightly with your fingertip.



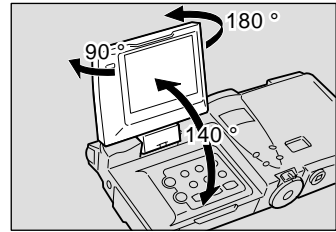


- Keeping your finger away from the shutter button and then pressing the shutter button in one go may result in a blurred image.
- Do not move the camera until the beep sound is heard.

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

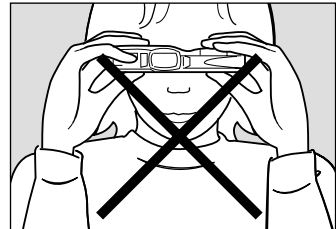


- The LCD monitor can only be turned when it is open at an angle of 90°.



■ Usage Precautions

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



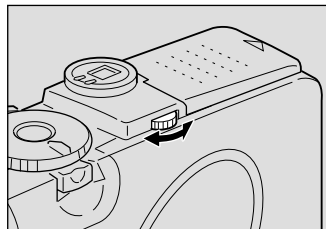
Adjusting the Camera

Adjust the brightness of the LCD monitor and the diopter.

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.

① 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.

