Chapter 1

GETTING STARTED

Before Using the Camera

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

Attaching the Wrist Strap

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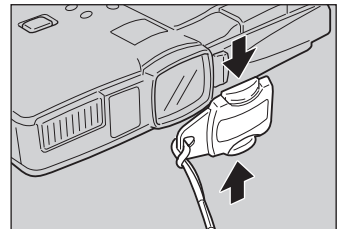

Attaching the Lens Cap

Note

• Attach the lens cap to the wrist strap to prevent it from being lost.
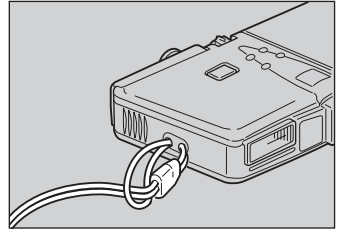
1 **Attach the lens cap by pressing the buttons in the direction of the arrow.**


Remove the lens cap by gripping and pressing the buttons.

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.
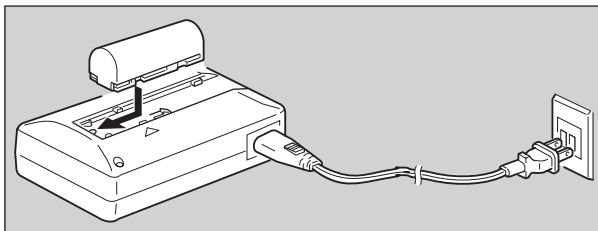
1 Insert the connector of the power cord into the battery charger.

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.**

2 **Load the battery.**

Important Note

- 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)

Important Note

- Do not bring metallic objects, such as a needle, into contact with the battery contact surface or electrical connections. Electrostatic damage could result.
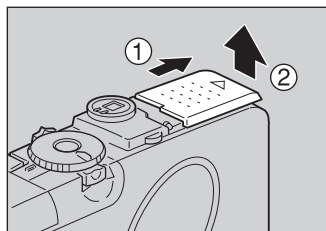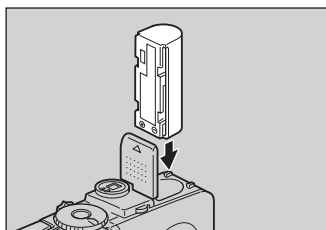
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3 Close the battery cover.
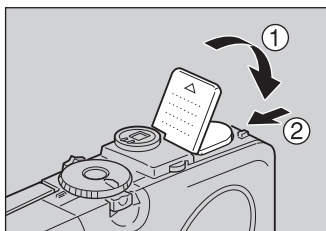
Close the battery cover until it clicks into position.

● **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 **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.

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■ 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.
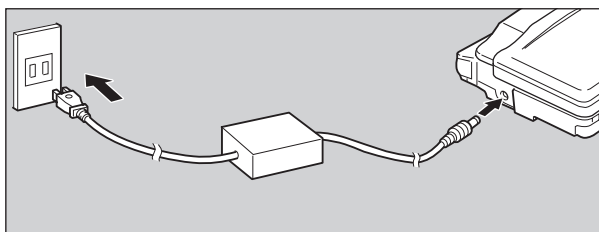
⟨**Note**⟩

- 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.**

See

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

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.

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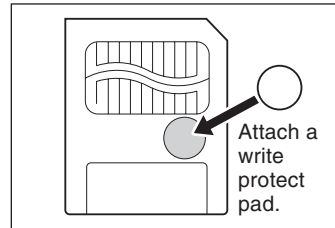
SmartMedia Memory Cards

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

Attach a write protect pad.

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.

• 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.

• 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.

Important Note

• 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.
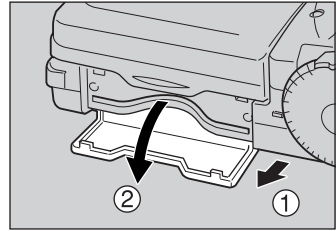
2 Insert the SmartMedia memory card into the card insert slot and close the card door.

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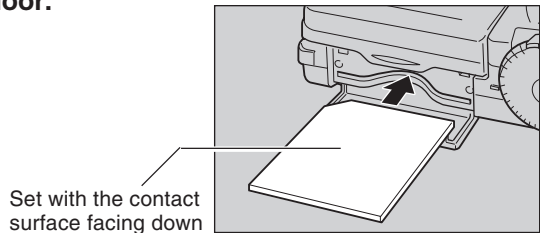
Push the SmartMedia memory card fully into position, with the contact surface facing down.

■ Removing Card

1 Check that the camera is turned off, and then open the card door.
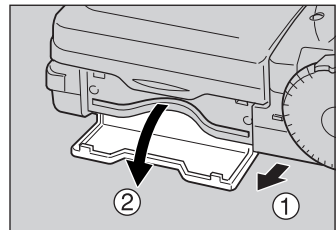
2 **Pull the SmartMedia memory card straight out of the slot.**
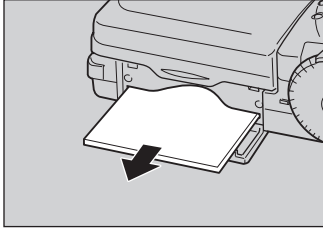
3 **Close the card door.**

Getting Started

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.
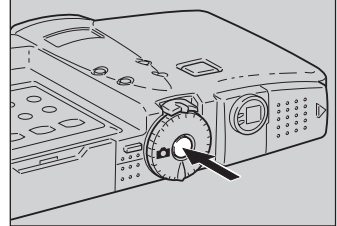
Tips | **Auto Power Off**

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
📷	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 release button is depressed.
🎥	Motion Picture mode	This mode is used for recording motion pictures with sound.
▶	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.

1 Turn the mode dial to select the desired mode.
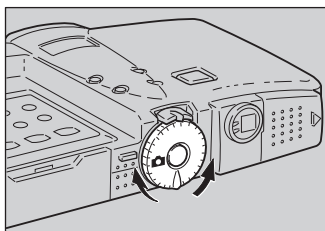
The information displayed on the LCD monitor varies depending on the mode. For details, see the reference pages listed below.

- 📷 (Still Picture) (p.45)
- 🎤 (Sound) (p.56)
- 📄 (Text) (p.55)
- 🔄 (Continuous Shooting) (p.56)
- 🎥 (Motion Picture) (p.57)
- ▶ (Playback) (p.92)
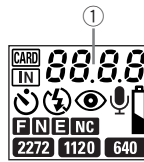- SET (Settings) (p.120)
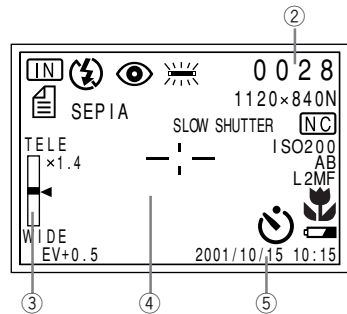
Explanation of Information Displays

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

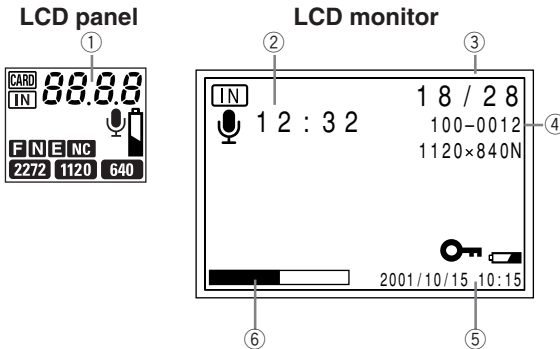| **LCD panel** | **LCD monitor** |

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

	LCD panel	**LCD monitor**
Storage memory	**CARD** **IN**	**CARD** **IN**
Flash mode	⊛ ⚡ ⚡ (lit)	⊛ ⚡ ⚡ (lit) ⚡A
Red-eye reduction mode	◉	◉
Black/white contrast in Text mode	—	◑ −2 • ◑ −1 • 0 (no display) • ◑ +1 • ◑ +2
White balance	—	AUTO (no display) ☀ ☁ ☼ ⚟ 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	**F** **N** **E** **NC**	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	⟳	⟳
Battery symbol	▯ *	▭ *
Exposure compensation	—	EV –2.0 – EV+2.0

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

Playback Mode Display

LCD panel

①

CARD
IN **88.8.8**

🎤 ▯

F N E NC
2272 1120 640

LCD monitor

② ③

IN   18 / 28
🎤 1 2 : 3 2   100–0012 ④
                 1120×840N

                    ⛏ ▭
              2001 / 10 / 15 10 : 15

⑥   ⑤

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	F N E NC	F • N • E • NC
Battery symbol	▯ *	▭ *
Image protect mark	—	⛏
Sound recording	🎤	🎤

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

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 [SET].

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

```
┌──────────────────────────────┐
│ S E T              ▾ 1 / 3   │
│ FORMAT                  ━━▶   │
│ KEEP SETTINGS           ⇒     │
│ LCD CONFIRMATION     1SEC.    │
│ AUTO POWER OFF       1MIN      │
│ BEEP SOUND           ON       │
│ SELECT : ⊛⊛    CHANGE : ⊛⊛    │
│                     SEL . : ENTER │
└──────────────────────────────┘
```

● SHOOTING MODE 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 / 4   │
│ IMAGE WITH SOUND     OFF       │
│ FOCUS                AF        │
│ FLASH STRENGTH       NORMAL    │
│ REDEYE REDUCTION     OFF       │
│ ISO SENSITIVITY      AUTO      │
│ SELECT : ⊛⊛    CHANGE : ⊛⊛    │
│ BACK : MENU         SEL . : ENTER │
└──────────────────────────────┘
```

● **PLAYBACK MODE Menu**

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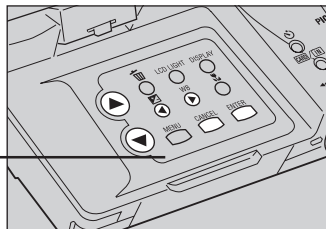To exit the playback MENU, press the Menu button again.

```
PLAYBACK MODE      ▼ 1 / 2
MULTI  IMAGE             ➡
AUTO PLAYBACK       1SEC.
CROPPING               ⇒
COPY                   ⇒
SELECT FOLDER          ⇒
SELECT: ▲▼    CHANGE: ◀▶
BACK:MENU          SEL.:ENTER
```
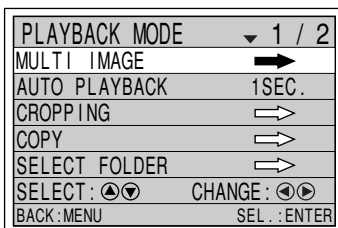
● **ERASE Menu**

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

```
ERASE
    IN

ERASE SINGLE IMAGE
ERASE ALL IMAGES
ERASE SELECTED IMAGES
SELECT: ▲▼
BACK:CANCEL        SEL.:ENTER
```
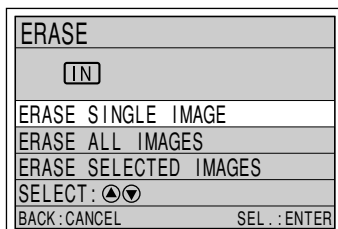
■ Selecting, Setting and Cancelling Items

Operation Panel

● **Selecting the Item**

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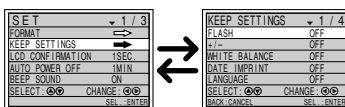
　　　　⊛ **button**　　　　⊛ **button**
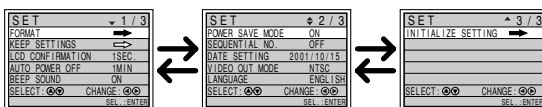
　　　　⊛ **button**　　　　⊛ **button**

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.
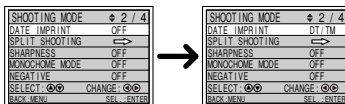
● **Cancelling the Setting**

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.

1 **Press the POWER switch to turn the camera on and set the mode dial to [SET].**
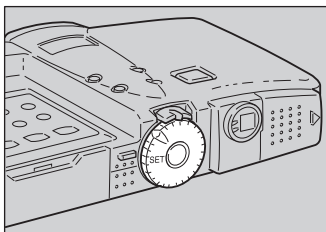
2 **Press the ⊙ or ⊙ button to select [DATE SETTING].**

```
SET                    ◆ 2 / 3
POWER SAVE MODE        ON
SEQUENTIAL NO.         OFF
DATE SETTING       2001/ 1/ 1
VIDEO OUT MODE         NTSC
LANGUAGE             ENGLISH
SELECT: ⊙⊙     CHANGE: ◐◐
                     SEL.:ENTER
```

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

37
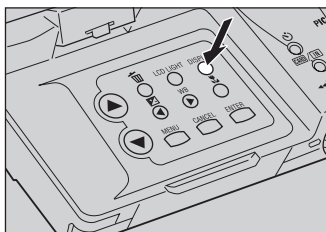
There are three ways of displaying the date:

2001/10/15 → Oct 15 2001 → 15 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 ⊕ or ⊙ button to change the highlighted digit.

```
DATE SETTING

    2 0 0 1 /  1 /  1

              0 : 0 0

SELECT : ⊕⊙⊛⊛
BACK : CANCEL          SEL . : ENTER
```

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

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

```
DATE SETTING

    2 0 0 1 / 1 0 / 1 5

              1 0 : 1 5

SELECT : ⊕⊙⊛⊛
BACK : CANCEL          SEL . : ENTER
```

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

7 **After setting the minutes, press the ENTER button.**

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

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" (p.46, p.97).

⟨**Note**⟩

• 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.
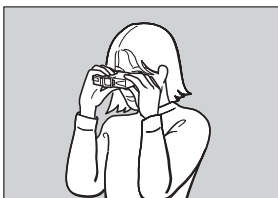
How to Hold the Camera

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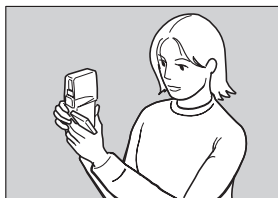With the camera pressed lightly to your face, aim it at your subject while looking through the viewfinder.

Horizontal   Vertical

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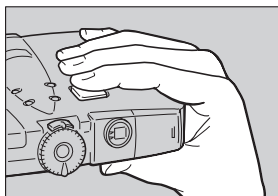Hold the camera firmly in both hands, and aim it at your subject while looking at the LCD monitor.
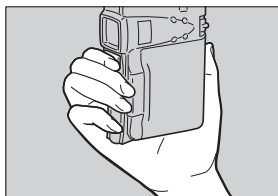

Horizontal   Vertical

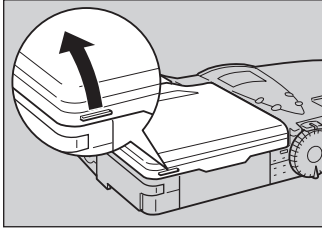## *2* Press the shutter release button lightly with your fingertip.
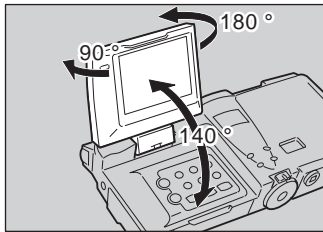

Main shutter release button   Sub shutter release button

■ **LCD Monitor**

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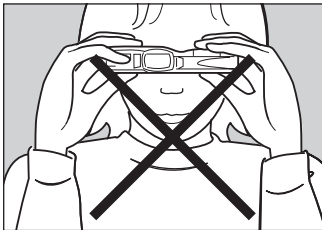

You can turn the LCD monitor as shown in the diagram, allowing you to shoot at any angle you wish.

■ **Usage Precautions**

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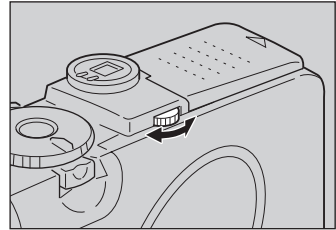
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Getting Started

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Adjusting the Camera

Adjust the brightness of the LCD monitor and the dioptor.

Diopter Adjustment

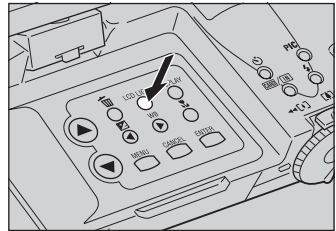Adjust the diopter so that the subject is clearly visible through the viewfinder.

1 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.