Camera User Guide
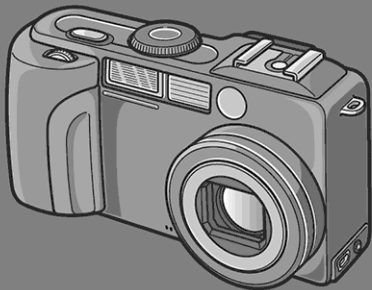
The serial number of this product is given on the bottom face of the camera.

1	Quick Guide
2	A Variety of Shooting Techniques/Playback
3	Changing Camera Settings
4	Installing Software
5	Troubleshooting

Caution!

Do not connect the USB cable yet!

If you connect the camera to a computer through the USB cable before installing the provided software on the computer, the software required for connection between camera and computer may not be installed appropriately.

Be sure to connect the camera to your computer after installing the provided software.

For how to install the software, see P.130.

About other documentation

Detailed explanations on how to use the provided software can be found in "Software User Guide" (PDF format file) included on the supplied CD-ROM.

For how to display the PDF file, see P.132.

Preface

This manual provides information on how to use the shooting and playback functions of this product, as well as warnings on its use. To make the best use of this product's functions, read this manual thoroughly before use. Please keep this manual handy for ease of reference.

Safety Precautions	For the safe use of your camera, be sure to read the safety precautions thoroughly.
Test shooting	Please be sure to do some test shooting to make sure it is recording properly before normal use.
Copyright	Reproduction or alteration of copyrighted documents, magazines, music and other materials, other than for personal, home or similarly limited purposes, without the consent of the copyright holder is prohibited.
Exemption from Liability	We assumes no liability for failure to record or play back images caused by malfunction of this product.
Warranty	This product is manufactured to local specifications and the warranty is valid within the country of purchase. Should the product fail or malfunction while you are abroad, the manufacturer assumes no responsibility for servicing the product locally or bearing the expenditure incurred thereof.
Radio Interference	Operating this product in the vicinity of other electronic equipment may adversely affect the performance of both devices. In particular, operating the camera close to a radio or television may lead to interference. If interference occurs, follow the procedures below. • Move the camera as far away as possible from the TV, radio or other device. • Reorient the TV or radio antenna. • Plug the devices into separate electrical outlets.

• This publication may not be reproduced in whole or in part without the express written permission.
• The contents of this document may be changed in the future, without prior notice.
• This booklet was created with thorough attention to its content. If, however, you have a question, spot an error, or find a description lacking, please refer to the end of this booklet for information on how to contact us.
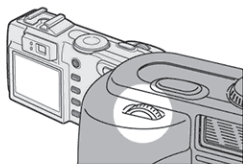
Key Features

The effective number of pixels is 8,240,000 and a high-performance 28 mm wide zoom lens is mounted

Digital zooming up to four times ensures high picture quality even for a remote object zoomed in on.

Even with ultra-macro shooting up to 1 cm, it does capture fine feel of the texture.

High-end specifications with Aperture Priority Mode and Manual Exposure Mode

The aperture and shutter speed can be set easily with the up/down dial of high operability. This is a compact, lightweight, thin high-end model that can compete with a digital single-lens reflex camera.

Rapid shutter response to capture a moment (P.33)

The shutter release time lag is as short as 0.1 seconds.
Hybrid auto focusing system technology even keeps action shots looking good.

1-cm macro (P.39) and close flashing for 15 cm (for Telephoto) or 20 cm (for Wide-angle) (P.40)

The unsurpassed macro function allows you to capture details from a very close distance at only 1 cm. The camera also has a built-in flash for very close shots within 15 cm (for Telephoto) and 20 cm (for Wide-angle). This combination will give you clear macro shots even under low light conditions.

AF target shift function for easy focus lock even on a tripod (P.85)

The camera has an AF target shift function. At macro shooting, the AF target shift function allows you to lock the focus by button operation, without moving the camera itself.
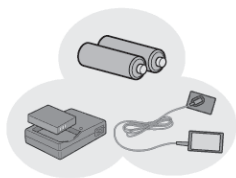
Choice of three power sources makes sure you wont miss any shooting opportunities (P.17)

The camera can be used with one of three power supplies: Dedicated large-capacity rechargeable battery (sold separately), an AA alkaline battery easily available anywhere (available in stores), and an economical AC adapter (sold separately) useful for transfer to a computer.

Adjust (ADJ.) button for easy customizing to optimum setting (P.59)

The ADJ. button reduces button operation steps. It allows you to quickly adjust the exposure, white balance, and ISO sensitivity with minimum steps. You can also assign a function as required.

High-quality movie with sound of 30 frames/second (P.94)

A high-quality movie of 320 x 240 pixels can be shot at 30 frames/second with sound.

## Scene mode for easy and beautiful shooting (P.43)

In Scene Mode, you need only to select from among six types of shooting modes for shooting with optimal settings for the scene.
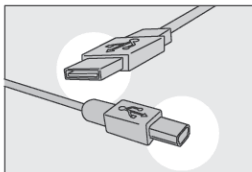
Instant transfer to PC through the USB cable

If the provided software is installed on your computer, just connecting the camera to your computer with the provided USB cable will automatically transfer images to your computer.

Since the camera supports USB Ver.2.0, file transfer is very fast. (Your computer also needs to support USB Ver.2.0.)
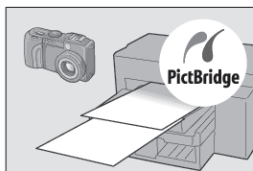
Direct printing without requiring any computer (P.54)

A direct print compatible printer can be connected to the camera with the USB cable for direct transfer. This allows for easy printing without using a computer.

Contents

Chapter 3　　Changing Camera Settings

Chapter 4   Installing Software

Chapter 5   Troubleshooting

Using Manuals

The two manuals included are for your camera.

	Camera User Guide (This booklet)
	This guide explains the usage and functions of the camera.You will also see how to install the provided software on your computer.
	Software User Guide (PDF file)
	This guide explains how to download images from the camera to your computer, and display and edit them on your computer. *The Software User Guide is available from the following folder on the provided CD-ROM.

Windows

Each language has its own Software User Guide in the respective folder.

```
☐ 💿 CD-ROM(D:)
   ☐ 📁 DSC Manual
        📁 Chinese_Simplified
        📁 Chinese_Traditional
        📁 English
        📁 French
        📁 German
        📁 Italian
        📁 Japanese
        📁 Korean
        📁 Spanish
```

Macintosh

Each language has its own Software User Guide in the respective folder.

```
🔵 DSC Software
▶ 📁 Manuals
▶ 📁 Mac OS X
▶ 📁 MacOS9
```

To copy the Software User Guide onto your hard disk

Copy the PDF file from the above folder.

How to Use This Guide

Chapter 1 explains the basic operations of this product.
If you are using the camera for the first time, read from this chapter.

The following symbols are also used in this guide:

Important	This indicates important notices and restrictions for using this camera.
Note	This indicates supplementary explanations and useful tips about camera operations.
Term	This indicates terms that are useful for understanding the explanations.
Reference	This indicates page(s) relevant to a particular function.

The LCD Monitor Display examples may be different from actual display screens.

Chapter 1

Quick Guide

If you are using the camera for the first time, read from this chapter.

Before Shooting

Packing List

Open the package and make sure all the items are included.

• Digital Camera

• AA Alkaline Batteries (LR6) (2)
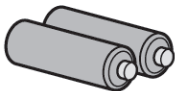
• AV Cable

Used when viewing your images on a TV unit.

• USB Cable

Used to connect the camera to a computer or Direct Print supported printer.

• Handstrap

Note

Attaching the hand strap to the camera

Thread the tips of the strap through the camera's strap eyelet and loop them as shown.
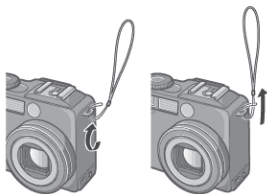
The serial number of this product is given on the bottom face of the camera.

• Camera User Guide
  (This booklet)

• Warranty

• Safety Precautions

• CD-ROM
  The provided software and the Software
  User Guide are included on this CD-ROM.

Optional Accessories

• AC Adapter
  Used for power supply from a home outlet
  to the camera. Connect this adapter for
  long time play or image transfer to a
  personal computer.
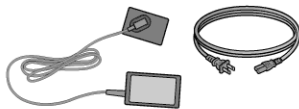
• Rechargeable Battery
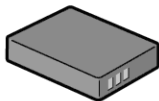
• Battery Charger

Names of parts

Camera
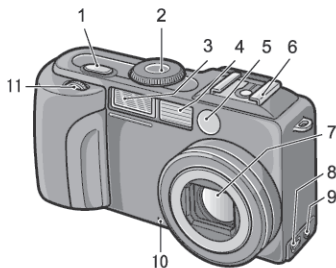
Front View

	Item Name	Refer to
1	Shutter Release Button	P.31
2	Mode Dial	P.14
3	Flash	P.40
4	AF Window	-
5	Viewfinder	-
6	Hot Shoe	-
7	Lens	P.31
8	USB Terminal	P.136
9	AV-Out Terminal	P.49
10	Microphone	P.96
11	Up/down Dial	P.14

Caution

To avoid damaging the connectors, do not plug any objects into the camera's microphone or speaker holes.

Rear View
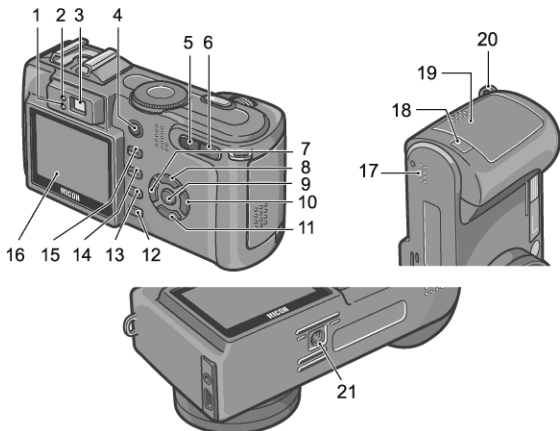
	Item Name	Refer to		Item Name	Refer to
1	Flash Lamp	P.40	12	DISP. Button	P.29
2	Auto Focus Lamp	P.34	13	🗑 (Delete) / ⟳ (Self-timer) Button	P.51 P.86
3	Viewfinder	-	14	MENU Button	P.61 P.98
4	Power Button	P.26	15	ADJ. Button	P.59
5	[●] (Wide-angle) / ▣ (Thumbnail Display) Button	P.38 P.47	16	LCD Monitor	-
6	[●] (Telephoto)/ Q (Enlarged View) Button	P.38 P.48	17	Speaker	-
7	◀ /🆀(Quick Review) Button	P.45	18	Power (DC in) Cable Cover	-
8	▲ Button	-	19	Battery/Card Cover	-
9	OK Button	-	20	Strap Eyelet	P.10
10	▶/⚡(Flash) Button	P.40	21	Tripod Screw Hole (underside)	-
11	▼/🌷 (Macro) Button	P.39			-

How to Use the Mode Dial

The Mode Dial is on the top of the camera.
The Mode Dial is used to select the desired mode and operation for shooting and playback (still image viewing).

1. **Turn the Mode Dial to the symbol of the mode you want to use.**
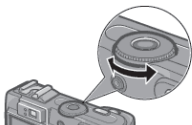
Mode Dial Symbols and Functions

Symbol	Mode Name	Function
SETUP	Setup Mode	Allows you to set and confirm camera settings.
🎤	Voice Memo Mode	Allows you to record sounds.
🎬	Movie Mode	Allows you to record movies.
SCENE	Scene Mode	Allows you to optimize the camera settings for six different scenes.
A/M	Aperture Priority/Manual Exposure Mode	Allows you to set the f-number and shutter speed manually for taking still pictures.
◻	Shooting Mode	Allows you to shoot still images.
▶	Playback Mode	Allows you to playback and delete still images and movies.

Using the up/down dial

With the up/down dial, you can easily use various functions of the ▲▼◀▶ buttons.

How to use the up/down dial

Turn the up/down dial as shown in the figure.

Reference

About LCD Monitor Display

Screen Examples when Shooting Pictures
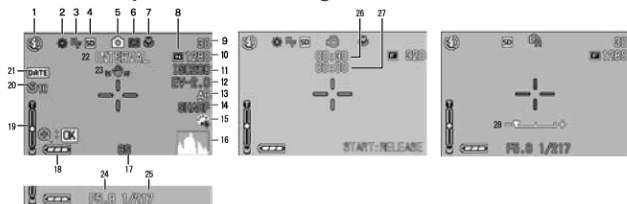
(When the shutter release
button is half-pressed)

Still Image Mode

Movie Mode

A/M Mode

	Item Name	Refer to		Item Name	Refer to
1	Flash	P.40	15	Color Depth	P.82
2	White Balance	P.79	16	Histogram	P.30
3	Focus	P.64	17	Time Exposure	P.72
4	Recording Destination	P.24	18	Battery	P.17
5	Mode Types	-	19	Zoom Bar	P.38
6	Photometry	P.67	20	Self-timer	P.86
7	Macro Shooting	P.39	21	Date/Time	P.77
8	Picture Quality	P.62	22	Interval	P.74
9	Remaining Number of Still Images	P.160	23	Camera Shake	P.32
10	Image Size	P.62	24	Aperture Value	P.34
11	ISO Setting	P.81	25	Shutter Speed	P.34
12	Exposure Comp.	P.78	26	Remaining Recording Time	P.160
13	Auto Bracket	P.69	27	Recording Time	P.160
14	Sharpness	P.68	28	Manual Exposure Indicator	-

Note

- The number of remaining shots available may differ from the actual number of shots, depending on the subject.
- Even between cards of the same capacity, the number of remaining shots and other values may vary with the manufacturer, type, and shooting condition.
- The continuous shooting (recording) time depends on the card type, capacity, and performance.
- When the number of remaining shots is 10,000 or more, "9999" is displayed.

The Screen During Playback

Still Image Mode

Movie Mode
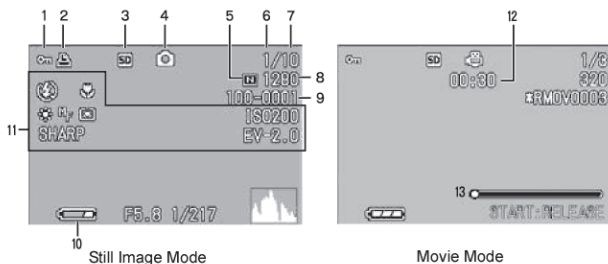
	Item Name	Refer to		Item Name	Refer to
1	Protect	P.100	8	Image Size	P.62
2	DPOF	P.103	9	File No.	-
3	Playback Data Source	P.46	10	Battery	P.17
4	Mode Types	-	11	Setting at Shooting (Recording)	-
5	Picture Quality	P.62	12	Recording Time or Lapsed Time	-
6	Number of Playback Files	-	13	Indicator	-
7	Total Number of Files	-			

Note

The LCD monitor may display messages to inform you of operational instructions or the camera's status while in use.

Getting Ready to Shoot

Turn the power on and get ready to shoot.

📝 Note

If you have already used this camera, follow the
steps below to make sure it is turned off before
removing or loading batteries.

1. Make sure the LCD monitor is turned off.
2. Make sure the lens barrier (built-in lens
   protection) is closed.

For how to turn the camera off, see P.26.

About the Batteries

The following batteries can be used in the camera. Please choose
which kind to use according to your needs.

- **Rechargeable Battery**

  This is a lithium-ion battery. This is economical
  because you can recharge it using the battery charger
  and use it over and over again. They last a long time,
  so they are convenient for travel.
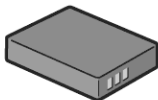
- **AA Alkaline Batteries (LR6) (available in stores)**

  You can obtain them anywhere, so they are
  convenient for travel.
  However, in a low-temperature environment the
  number of shots you can take will decrease. Warm the batteries before use.
  It is recommended that you use the rechargeable battery when using the
  camera for a long time.
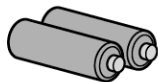
- **AA Nickel Batteries (available in stores)**
- **AA-size Oxyride (oxy nickel hydroxide) dry cell (available in stores)**

  These batteries are not rechargeable. However, they
  last a long time as compared with AA Alkaline
  Batteries when used with a digital camera.

17
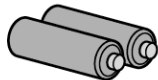
- **Nickel-Hydrogen Battery (available in stores)**

  This is economical because you can recharge and use it over and over again. Use a charger (available in stores) for charging.

  The battery may be inert and consequently it may not supply power immediately after it is purchased or left unused for more than a month. In such a case, recharge the battery two or three times before use. The battery self-discharges with time even if the camera is not used, so recharge it before use.
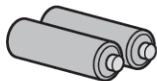
In addition to the batteries, you can use the AC Adapter (P.157).

Batteries (Cells) Not Acceptable

The camera does not accept the following batteries (cells):

- Manganese dry cell (R6)
- Ni-Cd battery
- CR-V3

Note

Indication of the number of images you can take

Battery Type	Number of Shots
Rechargeable Battery	Approx. 400
AA Alkaline Batteries (LR6)	Approx. 80

- The number of shots is based on a temperature of 22 degrees Celsius, shooting at 30 second intervals and one out of every two being shot with the flash. If you set the camera to the Power-Save or Synchro-Monitor mode, the number of shots you can take will increase.
- The number of shots is for reference only. If the camera is used for long periods of time for setting and playback, the shooting time (the number of shots) will decrease.

Reference

- For how to insert the Rechargeable Battery , see P.21.
- For how to use the AC Adapter, see P.22.

⚡ Caution

- Please remove the batteries if you are not going to use the camera for a long period of time.
- The life of an AA alkaline battery (LR6) depends on the brand and the storage time from the date of production. In addition, the life of an alkaline battery becomes shorter at low temperatures.
- The Nickel-Hydrogen Battery is not factory-charged. Charge it before use.
  Immediately after the purchase or after a long storage, the battery may not be charged fully. Repeat charging and discharging before use. For details, see the documentation that came with the battery or charger.
- The battery may become very hot immediately after operation. Turn the camera off and leave it to cool down sufficiently before removing the battery.

Battery level indication

A battery mark appears at the lower left of the LCD monitor to indicate the battery level. Prepare new batteries before the batteries wear out.

Battery Mark	Description
🔋	Sufficient battery charge
🔋	Low remaining charge: Prepare new batteries.
🔋	No remaining charge: Replace the batteries.

⚡ Caution

- If you are using nickel metal hydride batteries, 🔋 may not appear or 🔋 or 🔋 may appear immediately depending on the battery type and environmental conditions. Check the batteries at hand before use.
- If you are using the AC Adapter, 🔋 may appear. This does not indicate malfunction and you can continue to use the camera.

Loading the Batteries

If you have already used this camera, make sure it is turned off before loading batteries.

1. **Open the battery/card cover.**

The cover slides open in two steps.
First slide the cover toward the face of the camera, then lift it to expose the battery compartment.
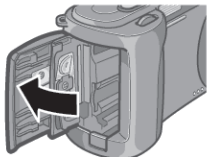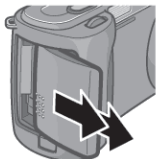
2. **Insert the two batteries, making sure they are facing the correct way.**
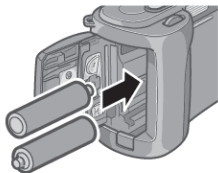
3. **Close the battery/card cover and slide it back into place.**

Inserting the rechargeable battery (sold separately)

Rechargeable battery (sold separately), available for this camera, is convenient because it lasts for a long time and can be used over and over again by being recharged.
If you have already used this camera, make sure it is turned off before loading batteries.

1. **Open the battery/card cover.**

The cover slides open in two steps.
First slide the cover toward the face of the camera, then lift it to expose the battery compartment.

2. **Insert the rechargeable battery.**

3. **Close the battery/card cover and slide it back into place.**

⚡ **Caution**

• Please remove the rechargeable batteries if you are not going to use the camera for a long period of time.
• Use the battery charger (sold separately) to recharge the battery.

Rechargeable battery charging time
Approx. 220 min. (at room temperature)

Removing the rechargeable battery

If you have already used this camera, make sure it is turned off before removing batteries.

1. **Open the battery/card cover.**

    The cover slides open in two steps.
    First slide the cover toward the face of the camera, then lift it to expose the battery compartment.

2. **Remove the battery.**

3. **Close the battery/card cover and slide it back into place.**

Note

Store the removed battery in a dry cool place.

Using the AC Adapter (sold separately)

When shooting or viewing still images for a long time, or when connecting to your computer, using the AC Adapter (sold separately) is recommended.
If you have already used this camera, make sure it is turned off before loading the AC Adapter Battery.

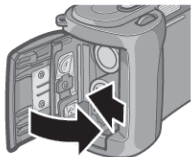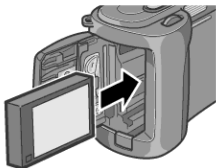1. **Open the battery/card cover.**

    The cover slides open in two steps.
    First slide the cover toward the face of the camera, then lift it to expose the battery compartment.

2. **Insert the AC Adapter Battery.**

3. **Open the power (DC input) cable cover and take the cable out.**

4. **Close the battery/card cover and slide it back into place.**

5. **Plug the power cord into an outlet.**

Removing the AC Adapter

If you have already used this camera, make sure it is turned off before removing the AC Adapter Battery.

1. **Unplug the power plug from the outlet.**

2. **Open the battery/card cover.**
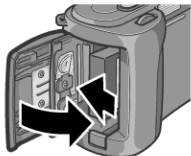
The cover slides open in two steps.
First slide the cover toward the face of the camera, then lift it to expose the battery compartment.

3. **Remove the battery.**

4. **Close the battery/card cover and slide it back into place.**

⚠ Caution

- Be sure to firmly attach cables and plug in cords.
- When you are not using the camera, unplug the AC Adapter from the camera and the power outlet.
- While in use, if you detach the AC Adapter or unplug it from the outlet, data may be lost.
- When using the AC Adapter, the battery level indication may not reach the full area.

About an SD Memory Card (available in stores)

You can store still images you have taken either in the camera's internal memory or on an SD Memory Card (available in stores). The internal memory capacity is 26 MB.
When you want to record a lot of still images, movies or sounds at high resolutions, use a high-capacity SD Memory Card.
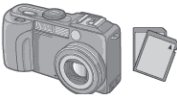
Note

Where images are recorded

When no SD memory card is inserted, the camera records images in the internal memory; when an SD memory card is inserted, it records images on the memory card.

When no memory card is loaded	When an SD Memory Card is loaded
Records to internal memory	Records to the SD memory card

Caution

- If an SD memory card is loaded, the camera will not record to the internal memory, even if the card is full.
- Take care not to get the metal parts of the card dirty.

Note

Write-protecting your images

If you move the card's write-protection switch to LOCK, your still images cannot be accidentally erased and the memory card cannot be formatted. If you release the protection (by returning the switch to its original position), it is once again possible to erase images and format the card.
So it's a good idea to switch to LOCK when you have some important data recorded. Note that you cannot shoot images in the LOCK state because no data can be recorded on the card. Unlock the card when shooting.
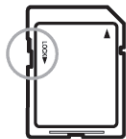
Reference

- For switching between the SD Memory Card and internal memory during playback, see P.46.
- For recording capacities, see P.160.

Inserting an SD Memory Card

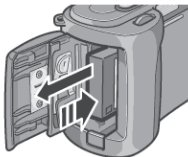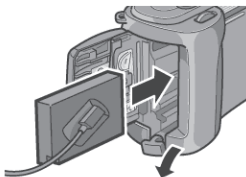If you have already used this camera, make sure it is turned off before loading an SD memory card.
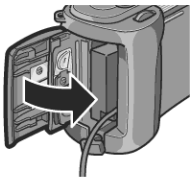
1. **Open the battery/card cover.**

The cover slides open in two steps.
First slide the cover toward the face of the camera, then lift it to expose the battery compartment.
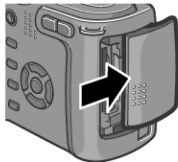
2. **Make sure the card is facing the right way and push the card all the way in until it clicks.**

3. **Close the battery/card cover and slide it back into place.**
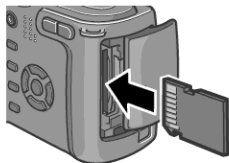
Turning the Power On/Off

1. **Press the power button.**

After the start sound, the flash lamp and
auto-focus lamp blink alternately for several
seconds.
For power-off, press the power button again.

POWER

Caution

It takes longer from power-on until the camera becomes ready for shooting when the flash is
enabled than when it is disabled.

Note

If the LCD monitor does not come on

When the Power-Save mode is set to ON, the LCD monitor does not come on during the
Shooting mode. Turn the mode dial to SETUP to turn the Power-Save mode OFF.

Power-Save mode

The power consumption of the LCD monitor can be reduced and the battery life extended by
setting the Power Saving mode to on.

Auto Power Off

If the camera goes unused for a set period of time, it will automatically turn itself off to save
power. To use the camera again, simply press the power switch.

Reference

- For how to change the Auto Power Off setting, see P.117.
- For how to change the Power-Save Mode setting, see P.119.

Setting the language

When the power is turned on for the first time, the language setting screen appears (for the LCD monitor display language). After setting the language, go on to the date/time setting (for printing the date and time on your photos).
You can shoot without these settings. However, be sure to set the language, and the date/time later. Use the SETUP screen for these settings.

📝 Note

To display the SETUP screen, turn the mode dial to SETUP.

1. **Turn the power on for the first time after purchase.**

The language selection screen appears.
To skip language setting, press the MENU button.
When the MENU button is pressed, the language setting is cancelled and the video signal format-setting screen appears.

2. **Press the ▲▼◀▶ buttons to select a language.**

3. **Press the OK button.**

The display language is set, and the date/time setting screen appears.

LANGUAGE	
日本語	ESPAÑOL
▪ENGLISH	简体中文
DEUTSCH	繁体中文
FRANÇAIS	한국어
ITALIANO	
MENU CANCEL	OK OK

🗁 Reference

For how to set the display language and date/time on the SETUP screen, see "Changing the Display Language (LANGUAGE)" and "Setting the Date and Time (DATE SETTINGS)" in this guide.
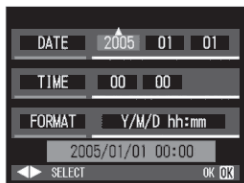
Setting the date and time

When the power is turned on for the first time and the language setting is completed, the date/time setting screen appears.

1. **Press the ▲▼◄► buttons to set the year, month, date and time.**

   Change the value with ▲▼ and move the frame with ◄►.

DATE	2005	01	01
TIME	00	00	
FORMAT	Y/M/D hh:mm		

2005/01/01 00:00

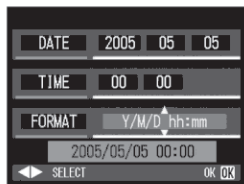◄► SELECT   OK OK

Setting at shipping

2. **In [FORMAT], choose the Date and Time format.**

   Select the format with ▲▼.

3. **Check the display on the bottom of the screen and then press the OK button.**

   The date is set.

DATE	2005	05	05
TIME	00	00	
FORMAT	Y/M/D hh:mm		

2005/05/05 00:00

◄► SELECT   OK OK

Note

If the batteries are removed for more than one week, the date and time settings will be lost. These settings must be made again. Any other changes you made with the Setup mode and Shooting setup menu will also be reset.

Reference

- For how to correct the date and time, see P.120.
- For how to put a date stamp on each frame, see P.77.

DISP.

Changing the Display

If you press DISP., you can change the screen display mode, such as switching between display/no display of symbols, etc. Every time you press the DISP. button, the view cycles in the order of Histogram On, Grid Guide, No Display, LCD Monitor Off, and Normal Symbol Display.
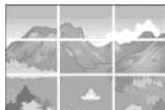
Normal Symbol Display   Histogram On   Grid Guide

Switches screens with the DISP button

LCD Monitor Off (Synchro-Monitor Mode)   No Display

Term

Grid Guide

Displays auxiliary lines on the LCD monitor to help shooting. These lines are not recorded with images.

Synchro-Monitor Mode

Keeps the LCD monitor off except when the camera is operated. This mode is effective for saving power consumption. With this mode, half-pressing the shutter release button turns the LCD monitor on. Subsequently, full-pressing the shutter release button displays the shot image on the LCD monitor, and then turns the LCD monitor off.

Histogram Display

When histogram display is on, a histogram appears in the lower right corner on the LCD monitor screen.

A histogram is a graph indicating the number of pixels on the vertical axis and the brightness on the horizontal axis. The brightness is shadow (dark), halftone, and highlight (light) from the left.

By using the histogram, you can judge the brightness of an image without being affected by the brightness around the LCD monitor. This also helps preventing voids and solids.

If the histogram has only peaks on the right side without anything else, this picture is over-exposed with too many pixels only for highlight sections.

If the histogram has only peaks on the left side without anything else, this picture is under-exposed with too many pixels only for shadow sections.

Correct the exposure to an appropriate level.

📄 Note

- The histogram displayed on the LCD monitor is for reference only. Depending on the shooting condition (flashing is required, the surrounding light is dark, and so on), the exposure level indicated in the histogram may not correspond to the brightness of the shot image.
- Exposure compensation has its limitation. It does not necessarily achieve the best possible result.
- The histogram having peaks in the center part does not necessarily provide the best result to suit your particular requirements.
  For example, an adjustment is required if you want to intentionally achieve under or over exposure.

📁 Reference
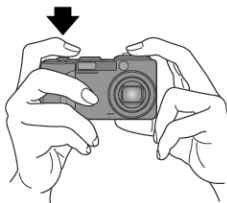
Basic Shooting

Now you are ready. Let's shoot!

How to Hold the Camera

Hold the camera as illustrated below for best results.

1. **Hold the camera with both hands and lightly press both elbows against your body.**

2. **Put your finger on the shutter button.**

📝 **Note**

Be careful when you are shooting not to get a finger, your hair, or the strap in front of the lens or the flash.

Preventing camera shake

If the camera moves when you press the shutter button, the still image might not come out clearly (due to camera shake). The mark displayed on the LCD monitor indicates that camera shake should be avoided under the current shooting condition.

To prevent camera shake, use a tripod or hold the camera securely with both hands when you shoot.
Note that camera shake tends to occur in the following cases:

• When shooting in a dark place without using the flash
• When shooting in Slow Sync Mode (P.40)
• When using the Zoom function

If the camera shake mark ( ) is displayed, try the following:

• Using the flash (Set the camera to Forced Flash Mode) (P.40).
• Raising the ISO sensitivity (P.81).
• Using the self-timer (P.86)

Capturing the Moment Shooting (Full-press)

The shutter release button works in two steps.
There are two methods of using the shutter button; pressing the shutter button all the way down at once (full-press) and pressing it halfway (half-press).
Full-press the shutter release button for quick focusing not to miss a shooting opportunity.

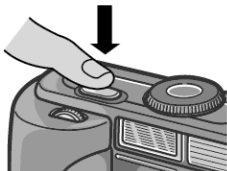**1. Make sure the power is on, then turn the Mode Dial to ▢ or A/M.**

2. Compose your shot either by looking through the viewfinder or at the LCD monitor.

3. Put the subject of your photo right in the middle and press the shutter release button fully.

During card writing, the flash/auto-focus lamp blinks.

Note

• The still image you have taken freezes for a moment on the LCD Monitor and is recorded. (P.116)

• Full-press is apt to cause camera shake. Hold the camera firmly with both hands and shoot.

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Checking the Focus and Shooting (Half-press)

When you press the shutter release button halfway (half-press), the autofocus function is triggered to determine the focal distance. Subsequently press it all the way down (full-press) to shoot. This is useful when the subject is not in the middle (see P.36).
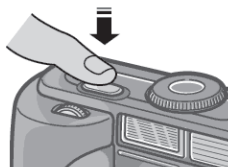
1. **Make sure the power is on, then turn the Mode Dial to ⚪ or A/M.**

*2.* **Compose your shot either by looking through the viewfinder or at the LCD monitor.**

3. **Put the subject of your photo right in the middle and press the shutter release button half-way.**

The f-stop (aperture size) and shutter speed are displayed in the bottom part of the screen, and the camera focuses. Once focused, the exposure and white balance are fixed.
If the automatic focusing fails, the crosshairs in the center of the LCD monitor turn red and the auto-focus lamp in the upper left of the viewfinder blinks in green.

Auto Focus/Flash Lamp
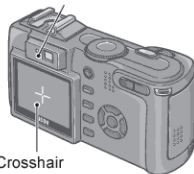
Crosshair

	Color of crosshairs	Auto Focus Lamp
Before focusing	White	Off
Focused	Green	On (green)
Focusing failure	Blink (red)	Blink (green)

Reference

When specifying a focus position at macro shooting, use the AF target shift function. (P.85)

4. **Gently press the shutter release button all the way down.**

During card writing, the flash/auto-focus lamp blinks.
The still image you have taken freezes for a moment on the LCD monitor and is recorded.

Note

Certain subjects are hard to bring into focus:

It may be impossible to bring the following subjects into focus.

- Subjects lacking contrast (the sky, a white wall, the hood of a car, etc.)
- Flat two-dimensional objects with only horizontal lines and no significant protrusions.
- Quickly moving objects.
- Things in poorly lit places.
- Areas with strong backlighting, or reflections.
- Things that flicker, such as fluorescent lights.

When you want to shoot subjects like this, first focus on an object the same distance as your subject and then shoot. (see P.36)

- Press gently to prevent camera shake when you press the shutter release button.
- During distance measurement for auto focusing, the white dot at the center of the cross on the LCD monitor blinks.
- The ⌂ mark indicates that blurring may occur. Hold the camera still and focus the camera again.
- When shooting in a dark place, the camera raises the focusing performance (auto focus precision) by preliminary flashing immediately before shooting. This preliminary flashing is skipped for shooting in no-flash mode.
- When the [LCD CONFIRM] is set to OFF in the setup screen, the still image shot will not be displayed on the LCD monitor.

When the Subject is not Centered (Shooting with Focus-lock)

When your subject is not in the center of your composition, compose your photo after focusing. (Focus-lock)

Example: Taking a photograph of the castle in the background with the camera focused on a person in front.

Shooting range   Subject to be focused on

Final still image

1. **Make sure the power is on, then turn the Mode Dial to ○ or A/M.**

2. **Put the subject of your photo right in the middle of the LCD monitor or the viewfinder and press the shutter release button half-way.**

The F value (aperture size) and shutter speed are displayed on the bottom part of the screen when the camera focuses.

3. **With the shutter half-pressed, move the camera and compose your shot.**

4. Gently press the shutter release button all the way.

Note

At macro shooting, the AF target shift function allows you to lock the focus without moving the camera. This function is useful when a tripod is used.

Reference

- For details about macro shooting, see P.39.
- For details about the AF target shift function, see P.85.

Using the Zoom Function

If you use the ⬜ (Wide angle)/ ⬜ (Telephoto) button, you can alter the size of the subject in your photo without having to change your distance from it.
By pressing the ⬜ button, the field in the LCD monitor and the viewfinder becomes wider. By pressing the ⬜ button, the subject you see in the LCD monitor and the viewfinder becomes larger.

Wide angle   Telephoto
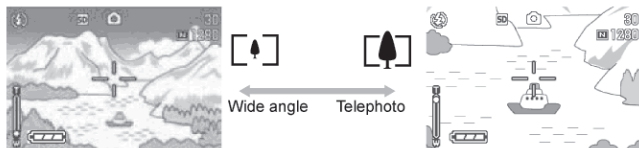
1. With the camera ready to shoot, press the ⬜ button or the ⬜ button.

You can check the Zoom status on the Zoom Bar of the LCD monitor.

2. Compose your picture and half-press the shutter release button.

3. Press the shutter release button all the way.
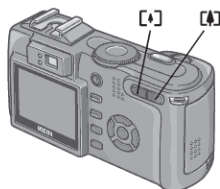
Note

Using the Step Zoom

When the step zooming function is set to ON in SETUP Mode, the optical zooming focal length can be fixed to any of four levels (28, 35, 50, and 85 mm as converted equivalent to 35 mm).

Using the Digital Zoom

Digital zooming enables you to enlarge the subject more than the maximum magnification (x4.0) that can be specified by pressing the ⬜ (Telephoto) button (up to x3.0).
For digital zooming, release the ⬜ button once when the zoom reaches the limit on the ⬜ (Tele) end on the Zoom Bar, and then hold the button down again.

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Shooting Close-Ups (Macro-Mode)

Using the ❀ (Macro) button allows you to take a tight close-up (Macro Photo).
It is good for shooting small subjects because you can get up to one centimeter (1/2 inch) away.

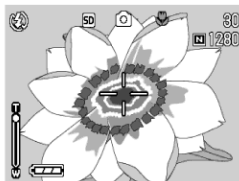1. **With the camera ready to shoot, press the ❀ button.**
   ❀ is displayed momentarily in a large size at the center of the LCD monitor and then at the upper part.

2. **Compose your picture and half-press the shutter release button.**

3. **Press the shutter release button all the way.**
   To get out of Macro Mode, press the :❀ button again.

📝 **Note**

- When using the zoom, you can shoot close-ups within the following distances from the front of the lens:
  In Wide-Angle (W): About 1 cm from the front of the lens
  In Telephoto (T): About 10 cm from the front of the lens
- During Macro Shooting, the Viewfinder cannot be used. Use the LCD Monitor.
- The AF target shift function enables you to lock the focus for macro shooting only by button operation without moving the camera. This function is useful for shooting on a tripod. (P.85)

Using the Flash

Press the ⚡ button to switch between flash modes. By default, your camera is set to Flash Off.
From the front edge of the lens, flashlight reaches about 0.2 to 5.0 m (W) or about 0.15 to 2.9 m (T) when ISO sensitivity is set to AUTO.

Flash Modes

	Flash Off	The flash will not fire.
	Auto	When your subject is poorly lit or backlit, the flash fires automatically.
	Red-eye reduction	Reduces the red-eye phenomenon, in which people's eyes appear red when shooting images of people.
	Forced Flash	The flash fires, whatever the light conditions are, when you shoot.
	Slow Synchro	The flash fires with the shutter speed slowed. This is suitable when taking portrait pictures in a nightscape. It is recommended to use a tripod.

1. **Turn the Mode Dial to ▢, A/M, or SCENE.**

2. **Pressing the ⚡ button switches to Flash Mode.**

   The Flash mode mark appears momentarily in a large size at the center of the LCD monitor and then is displayed at the upper left.
   The flash starts recharging. While the flash is charging, the LCD Monitor goes off and the flash lamp blinks. Once the flash is charged, the lamp goes off and it is possible to shoot.

Note

- The settings are saved until you press the ⚡ button to change them.
- When shooting movies or in Multi-Shot mode, the flash turns off.
- When shooting in a dark place, the camera raises the focusing performance (auto focus precision) by preliminary flashing immediately before shooting. This preliminary flashing is skipped for shooting in no-flash mode.
- If you are using a battery other than a lithium ion type, the LCD Monitor is turned off during flash charging.
- Since the camera has a hot shoe, you can connect an external flash (available in stores) for use.

How to use the hot shoe

Since the camera has a hot shoe, you can connect an external flash (available in stores) for use.

X contact
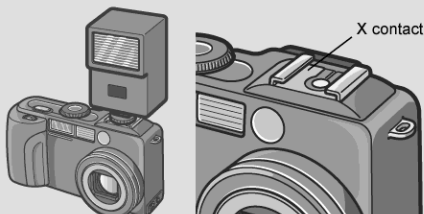
Adjust the exposure using the exposure compensation (P.78) or manual exposure function (P.87).
For details, see the documentation that came with the external flash.

To attach an external flash to the hot shoe, follow the steps below.

1. **With the camera and external flash powers off, attach the external flash to the hot shoe.**

2. **Turn the camera power on and the Mode Dial to A/M for Aperture Priority Mode (P.87).**

3. **Set the ISO sensitivity of the camera to other than AUTO.**

4. **Turn the external flash on, set the flash to Auto, and adjust the f-number and ISO sensitivity of the flash to those of the camera.**

   When removing the external flash from the camera, first turn the external flash off.

⚙ Caution

- Irrespective of flash setting, a flash ON signal is output to the X contact of the hot shoe. To stop an external flash, use a switch on the flash.
- Exposure may not be appropriate even when the f-number and ISO sensitivity of the external flash are the same as those of the camera. If so, change the f-number and ISO sensitivity of the flash.
- As the flash ON signal, the camera outputs a positive pulse to the X pulse contact.
- A flash on the market rarely have an X contact of the opposite polarity. This kind of flash may not only not work but also cause a problem to the camera. For the terminal specifications, contact the manufacturer of the external flash.
- Use an external flash of a lighting angle covering the angle of view of the shooting lens.
- Use an external flash basically at a distance where the internal flash is not adequate (long distance). Shooting at a short distance may end in over-exposure.
- Do not use an external flash having a special signal pin. Using such a flash may cause inappropriate exposure or damage of the camera circuit.

Shooting with Scenery-Matching

If you use the Scene Mode, you can select from among six types of still image modes and shoot automatically with optimal settings for that kind of scene.

	PORTRAIT	Use when taking portrait pictures.
	SPORT	Use when taking pictures of moving objects.
	LANDSCAPE	Use when you are taking scenery pictures with abundant greens or blue sky.
	NIGHTSCAPE	Use when shooting night scenes. You can also shoot with persons in the frame.
	TEXT MODE	Use when capturing text images, for example, notes written on the whiteboard at a meeting.
	HIGH SENSITIVITY	Use when taking pictures in dimly lit places. Also, LCD monitor becomes brighter.

1. **Make sure the power is on and turn the Mode Dial to SCENE.**

The scene-selection screen is displayed.

2. **Press the ▲▼ button to move the blue rectangle to the mode you want to select.**

3. **Press the OK button.**

The Mode's symbol is displayed on the upper part of the LCD monitor.

4. **Press the shutter release button.**

If you press the ▲ button again, the scene selection screen is displayed and you can change the scene.

In Nightscape Mode, the flash works when all of the following conditions are satisfied:
- The flash is set to Auto.
- Flash is judged to be necessary because it is dark around.
- There is a figure or any other object nearby.

- For how to change PIC QUALITY/SIZE, see P.62.
- For how to change to density in TEXT Mode, see P.84.
- For the list of Shooting Setting menu items in Scene Mode, see P.158.
- For combination of Scene Mode with other functions, see P.157.

Playing Back

Checking the image you just took (Quick Review)

You can view the image you just took on the LCD monitor. If you are not pleased with the way the photo came out, you can erase it then and there.

1. While still in the Still Image Mode, press the ⊡ button.

The last image you took is displayed on the LCD monitor.
Press ⊡ again and the camera is ready to shoot.

In Quick Review	
⊡ Button	Returns to Shooting Mode.
Q Button	Enlarges the displayed still image. You can move around on the displayed image by pressing the ▲▼◀▶ buttons.
▣ Button	Reduces the displayed still image enlarged by pressing the Q button.
OK Button	Displays the still image at the maximum available ratio or returns it to its original size.
🗑 Button	Deletes the currently displayed file. When the 🗑 button is pressed, a warning message about deleting the file appears. Select [DELETE] and press the OK button.

Note

- Once the power is turned off, the image you took cannot be displayed in the still image mode even if you press the ⊡ button.
- If you use Quick Review to view the image taken in Text mode (see P.43), the displayed image may have slightly lower quality than the recorded one.

Viewing Your Images

In the Playback Mode you can check still images you have taken. You can also delete or zoom in on them.

1. **Turn the Mode Dial to ▶.**

The camera switches to Playback mode and the last still image you took is displayed.
You can view your pictures in order by using the ◀▶ button.

To Previous   To Next

Note

Where images are played back from

When no SD memory card is inserted, the camera plays back from the internal memory.
When an SD memory card is inserted, it plays back from the SD memory card.

Reference

Thumbnail Display

You can view your images in sets of six.
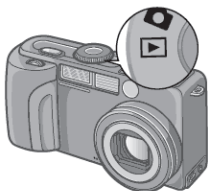You can then select an image to erase or magnify.

1. Turn the Mode Dial to ▶ .

The last image you took is displayed.

2. Press the ⊞ button.

The screen is split into six sections with
six images displayed.

To display just one photo

**1. Use the ▲▼◀▶ buttons to select
an image.**

**2. Press the ⊕ button twice, or press
the OK button.**

The Selected Image

Reference

For how to erase the selected image, see P.51.

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Magnifying Images

You can enlarge a still image displayed on the LCD Monitor.

1. Turn the Mode Dial to ▶ .

The last image you took is displayed.

2. Display image you want to view magnified.

3. Press the ⊕ button.

The image is enlarged.
The enlargement ratio changes each time you press the ⊕ button or the ▣ button.

In Enlarged View	
⊕ Button	Enlarges the displayed still image. You can move around on the displayed image by pressing the ▲▼◀▶ buttons.
▣ Button	Reduces the displayed still image enlarged by pressing the ⊕ button.
OK Button	Displays the still image at the maximum available ratio or returns it to its original size.

📖 Note

• Enlarged view is also available in the Quick Review mode.
• The maximum magnifications are as follows:

3264x2448	2592x1944	2048x1536	1280x960	640x480
x8	x8	x8	x6.7	x3.4

Viewing on a Television

You can view still images you have taken on a TV screen. The camera displays everything on the TV screen just as it would on the LCD Monitor.
To use your television for viewing, connect your camera to the television with the AV cable that came with your camera.
To view still images on a television, follow the steps below.

1. Securely connect the AV cable to the Video In terminal on the television.

Connect the white plug of the AV cable to the audio input terminal (white) of the TV unit and the yellow plug to the video input terminal (yellow).

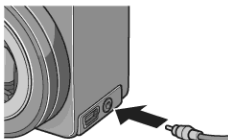Video input terminal (yellow)
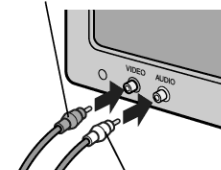
Audio input terminal (white)

2. Make sure the camera power is off.

3. Securely connect the AV cable to the Video Out terminal.

POWER

4. Set the television to "Video" mode. (Set the input to "Video".)
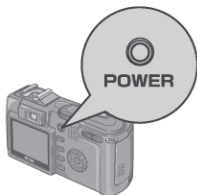
For details, see the documentation that came with the television.

5. Turn the camera's Mode Dial to ▶.

6. Turn your camera on by pressing the power button.

Connecting the AV cable to the camera turns off the LCD monitor display and the speaker output.

POWER

📑 **Note**

- If you connect the AV cable to your video recorder's In terminal, you can record what you have shot onto video.
- Your camera is set to NTSC playback format (used in Japan and other countries) for use with television equipment, etc. If the equipment you want to connect to uses PAL format (used in Europe and else-where), then switch your camera to PAL format in the Setup Menu before connecting.

📑 **Reference**

For how to change the video out mode, see P.122.

Erasing

Erasing Unwanted Images

You can erase unwanted images from the internal memory or SD Memory Card.
You can erase them in the following three ways:
•One file at a time
•Deleting all frames at once
•Select multiple frames and erase together

1. **Turn the Mode Dial to ▶ .**

   To erase pictures one at a time, display the picture you want to erase.

2. **Press the 🗑 button.**

3. **Press the ▶ button, select [DELETE ONE] or [DELETE ALL] and press the OK button.**

If you selected [DELETE ONE]:

The display indicates deletion is in progress; once finished, it returns to the playback screen.

If you selected [DELETE ALL]:

You will be prompted to confirm that you want to erase; if so, press the ▶ button to select [Yes], and then press the OK button.

Erasing Multiple Frames at One Time
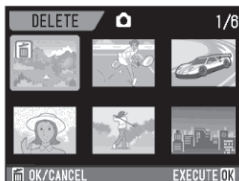
1. **Turn the Mode Dial to ▶ .**

2. **Press the ⊞ button.**

The screen is divided into a display of six thumbnails.

3. **Press the ▲▼◀▶ buttons to select the image you want to erase and press the 🗑 button.**

The trash symbol is displayed in the upper left corner of the image.

DELETE   □   1/6

🗑 OK/CANCEL   EXECUTE OK

4. **Repeat Step 3. to select all the still images you wish to erase.**

If you selected an image by mistake, you can deselect it by selecting the image and pressing the 🗑 button again.

5. **Press the OK button.**

6. **Press the ▶ button to select [YES] and then press the OK button.**

The display indicates deletion is in progress; once finished, the Thumbnail Display screen returns.

ℹ DELETE ALL SELECTED
FILES

NO   YES