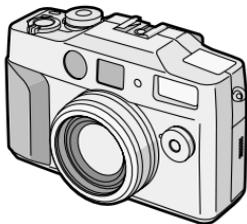


Panasonic®



Digital Camera Operating Instructions

Model No. **DMC-LC5PP**



Before use, please read these instructions completely.

MultiMediaCard™

**LEICA
DC VARIO-SUMMICRON**

For USA assistance, please call: 1-800-272-7033 or send e-mail to : consumerproducts@panasonic.com

For Canadian assistance, please call: 1-800-561-5505 or visit us at www.panasonic.ca

VQT9742

Dear Customer,

We would like to take this opportunity to thank you for purchasing this Panasonic Digital Camera. Please read these Operating Instructions carefully and keep them handy for future reference.

Information for Your Safety

WARNING

TO REDUCE THE RISK OF FIRE OR SHOCK HAZARD AND ANNOYING INTERFERENCE, USE ONLY THE RECOMMENDED ACCESSORIES AND DO NOT EXPOSE THIS EQUIPMENT TO RAIN OR MOISTURE. DO NOT REMOVE THE COVER (OR BACK); THERE ARE NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

Notice:

This product has parts that contain a small amount of mercury. It also contains lead in some components. Disposal of these materials may be regulated in your community due to environmental considerations. For disposal or recycling information please contact your local authorities, or the Electronics Industries Alliance: <<http://www.eiae.org>>

- Please note that the actual controls and components, menu items, etc. of your Digital Camera may look somewhat different from those shown in the illustrations in these Operating Instructions.
- SD Logo is a trademark.
- Other names, company names, and product names printed in these instructions are trademarks or registered trademarks of the companies concerned.

Carefully observe copyright laws. Recording of pre-recorded tapes or discs or other published or broadcast material for purposes other than your own private use may infringe copyright laws. Even for the purpose of private use, recording of certain material may be restricted.

FCC Note: (U.S. only)

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Caution: To assure continued compliance, follow the attached installation instructions and use only shielded interface cables with ferrite core when connecting to computer or peripheral devices.

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

Trade Name: Panasonic
Model No.: DMC-LC5
Responsible party: Matsushita Electric Corporation of America One Panasonic Way, Secaucus, NJ 07094
Support Contact: Panasonic Consumer Electronics Company 1-800-272-7033

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This Class [B] digital apparatus complies with Canadian ICES-003.

Panasonic DMC-LC5



Tested To Comply
With FCC Standards

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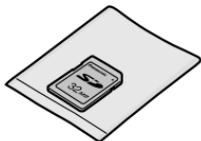
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Components

Before using your camera, check the contents.

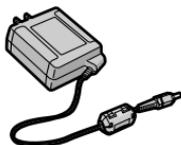
- 1 SD Memory Card (32 MB)
RP-SD032



- 2 Battery Pack
CGR-S602A



- 3 AC Adaptor
DE-877B



- 4 USB Connection Kit



USB Connection Cable
K1HA05CD0001

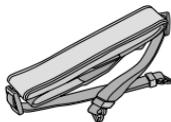


CD-ROM

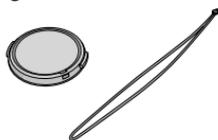
- 5 A/V Cable
K1V204C20002



- 6 Strap
VFC3781



- 7 Lens Cap
VYK0B77
Lens Cap String
VFC3733



- 8 Monitor Hood
VYC0878

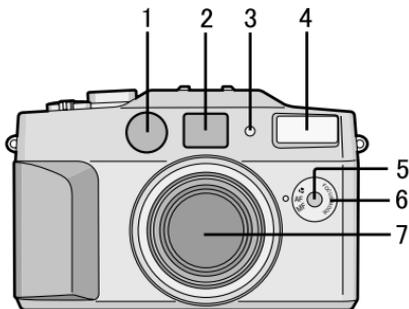


- 9 Metal Plate
VHD1110



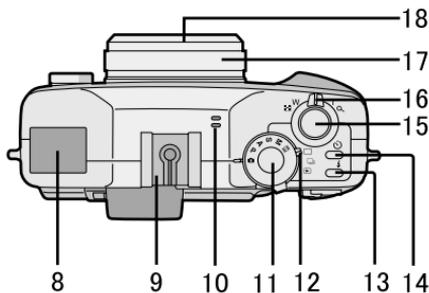
Names of the Components

[Front View]

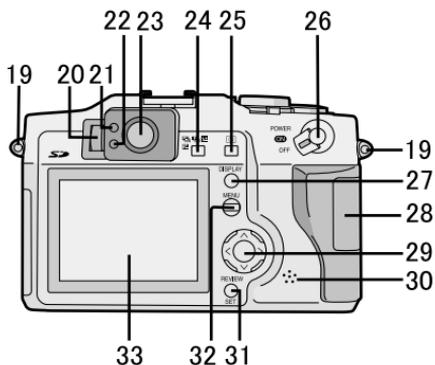


- 1 AF Sensor
- 2 Optical Finder (P19)
- 3 Flash Sensor (P34)
- 4 Flash
- 5 Self-timer Indicator (P35)
- 6 Focus Dial (P55, P57)
- 7 Lens

[Up View]

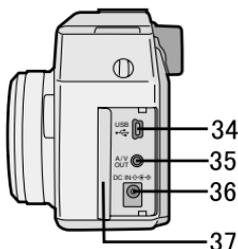


- 8 Display (P12)
- 9 Hot Shoe (P60)
- 10 Microphone (P36, P74)
- 11 REC Mode Dial (P25)
- 12 Operational Mode Dial (P25)
- 13 Flash Mode Button (P33)
- 14 Self-timer Button (P35)
- 15 Shutter Button (P24)
- 16 Zoom Lever (P31, P32)
- 17 Manual Focus Ring (P57)
- 18 Lens Ring (P58)



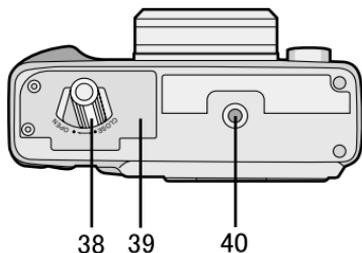
[Back View]

- 19 Strap Eyelet (P20)
- 20 Diopter Adjustment Dial (P19)
- 21 Status Indicator (P23)
- 22 Flash/Access Indicator (P18, P23)
- 23 Optical Finder (P19)
- 24 Button (P43, P44, P45, P46)
- 25 Metering Mode Selection Button (P48)
- 26 Power Switch (P19)
- 27 DISPLAY Button (P23)
- 28 Memory Card Door (P17)
- 29 Cursor (▲/▼/◀/▶) Buttons
- 30 Speaker (P63)
- 31 REVIEW/SET Button (P29)
- 32 MENU Button (P26)
- 33 LCD Monitor (P10)



[Left View]

- 34 USB Socket (5pin) (P85)
- 35 A/V OUT Socket (P83)
- 36 DC IN Socket (P15)
- 37 Terminal Door (P15)

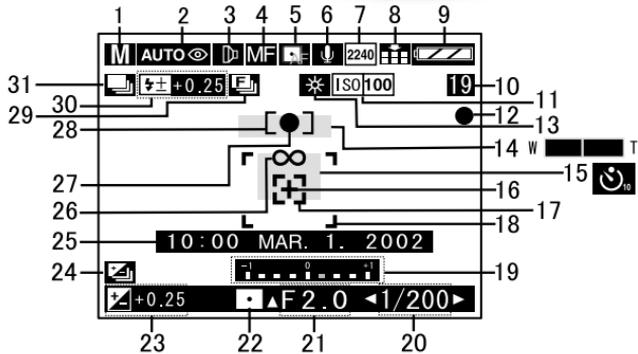


[Bottom View]

- 38 Battery Door Open/Close Lever (P14)
- 39 Battery Door (P14)
- 40 Tripod Receptacle (P22)

LCD Monitor Display

[In recording]



[In recording]

1 REC mode

A: AUTO (P28)

P: Program AE (P39)

A: Aperture-priority AE (P40)

S: Shutter-priority AE (P41)

M: Manual exposure (P42)

: Motion image mode (P30)

2 Flash mode (P33)

AUTO : AUTO

AUTO : AUTO/Red-eye reduction

: Forced ON

: Forced ON/Red-eye reduction

AUTO SLOW : Slow sync./Red-eye reduction (with 2nd curtain **AUTO SLOW2**

: Forced OFF

3 : Conversion (P58)

4 No: Auto focus

: Macro mode (P55)

MF: Manual focus (P57)

5 : Spot AF (P53)
(When using manual focus, this is not displayed)

6 : Audio REC (P36)

7 Picture size (P37)

: 2240 × 1680

: 1600 × 1200

: 1120 × 840

: 640 × 480

8 Quality (data compression ratio) (P38)

: Fine (low compression)

: Standard
(standard compression)

: TIFF (incompression)

9 Battery indicator (P15)
(When using AC adaptor this is not displayed)



10 Frame/Time remain
In motion image mode: XXXS

11 ISO sensitivity (P52)

No: AUTO

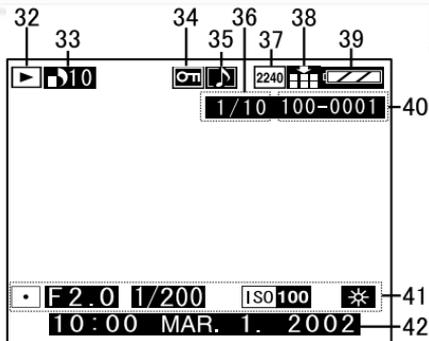
: ISO100

: ISO200

: ISO400

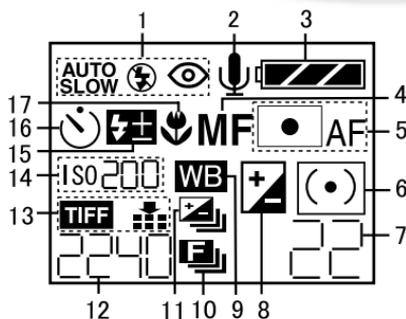
12 : Recording indication

[In playback]



- 13 White balance (P50)
No: AUTO
☀: Daylight
☁: Cloudy
💡: Halogen
💡: Fluorescent
WB: Flash
☑: White set
- 14 Zoom (P31, P32)
(digital zoom area: )
- 15 Self-timer mode (P35)
 : 2 seconds
 : 10 seconds
- 16  : Spot metering indication (P48)
- 17  : Spot focus area (P53)
- 18  : Focus area (P28)
- 19 Exposure assist (P42)
- 20 Shutter speed indication (P41)
- 21 Aperture indication (P40)
- 22 Metering system (P48)
 : Multiple
 : Center weighted
 : Spot
- 23 Exposure compensation (P43)
- 24 Auto bracket (P44)
 : Auto (AE) bracket
- 25 Current date and time (P27)
It is displayed for about 5 seconds when starting/after setting the REC mode/after setting the time.
- 26 ∞: Infinity indication (P57)
- 27 ●: Focus indication (P28, P57)
- 28  : Focus assist (When using MF) (P57)
- 29  : Focus bracket (P45)
- 30 Flash adjustment/External flash mode (P46, P60)
 : Flash adjust indication
 : PRESET (external flash)
 : MANUAL (external flash)
- 31  : Burst mode (P56)
- [In playback]
- 32  : Playback mode
- 33 DPOF  number of sheets to be printed (P69)
- 34  : Protected image (P72)
- 35  : Image with audio (P63)
- 36 Page/Total images
- 37 Picture size (P37) (Reference 7)
- 38 Quality data (compression ratio) (P38) (Reference 8)
 : In motion image mode
- 39 Battery indicator (P15) (Reference 9)
- 40 Folder/File number
- 41 REC data (P62)
It will be displayed when the [DISPLAY] button is pressed.
- 42 Recorded date and time

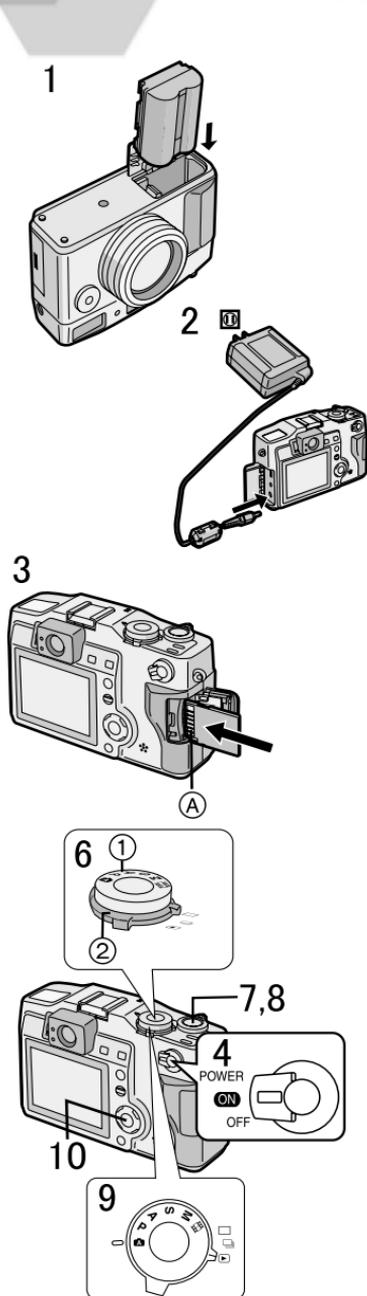
The Display



The displayed contents are the same as those indicated on the LCD monitor. Read page P10, P11.

- | | | | |
|---|---|----|---|
| 1 | Flash mode (P33) | 10 | Focus bracket (P45) |
| 2 | Audio REC (P36) | 11 | Auto (AE) bracket (P44) |
| 3 | Battery indicator (P15)
(When using AC adaptor, this is not displayed) | 12 | Picture size (P37)
PLAY: Playback mode display |
| 4 | Manual focus (P57)
(When using AF, this is not displayed) | 13 | Quality (compression ratio) (P38) |
| 5 | Spot AF (P53)
(When using MF, this is not displayed) | 14 | ISO sensitivity (P52) |
| 6 | Metering mode (P48) | 15 | Flash adjustment (P46) |
| 7 | Frame/Time remain | 16 | Self-timer mode (P35)
⌚: setting time is 2 or 10 seconds |
| 8 | Exposure compensation (P43) | 17 | Macro mode (P55) |
| 9 | White balance (P50)
WB : Except when AUTO
(In Auto mode, this will not be displayed) | | |

Quick Guide



Prepare following items.

- Camera
- Battery
- Memory card
- AC adaptor

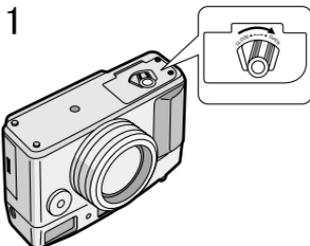
Check that the power switch is set to [OFF].

- 1 Insert the battery into the camera. (P14)
 - 2 Connect the AC adaptor to the camera, in order to charge the battery. (P15)
 - 3 Insert the memory card into the camera. (P17)
Ⓐ: Connection terminal on the back side of the card.
 - 4 Set the power switch to [ON]. (P19)
 - 5 Set date/time. (P27)
 - 6 Set the operational mode dial ② and the REC mode dial ①. (P25)
 - Set the operational mode dial to single mode [□] or burst mode [□].
 - 7 Press the shutter button halfway to set the focus. (P24)
 - 8 Press the shutter button fully to take a picture. (P24)
- [Playback]
- 9 Set the operational mode dial to playback [▶]. (P62)
 - 10 Press ◀/▶ to play back a picture you want to view.

Inserting the Battery

[Preparation]

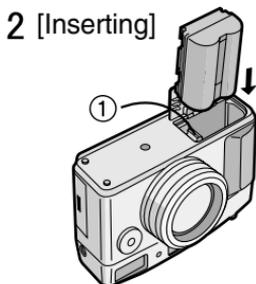
- Set the power switch to [OFF].



- 1 Rotate the lever towards the [OPEN] direction to open the battery door.

- 2 Insert the battery all the way in, until it is locked.

- 3 Close the battery door and rotate the lever towards the [CLOSE] direction.



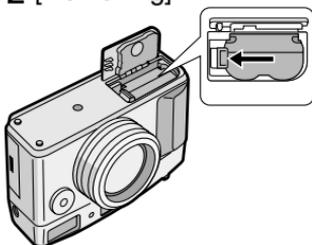
[Removing the battery]

- 1 Rotate the lever towards the [OPEN] direction to open the battery door.

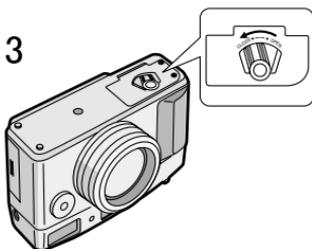
- 2 Press the lock in the direction of the arrow to remove the battery.

- 3 Close the battery door and rotate the lever towards the [CLOSE] direction.

2 [Removing]



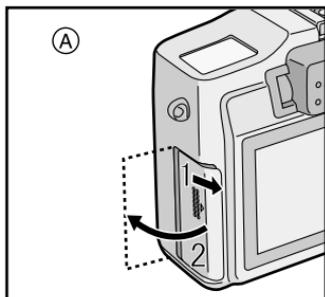
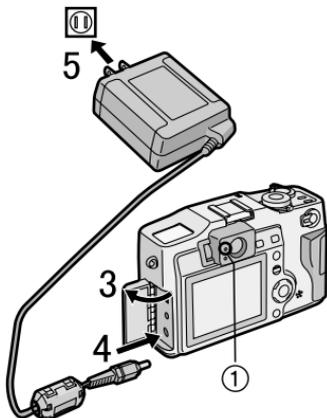
- If you will not use the camera for a long time, remove the battery. (When you insert the battery again, set the date)
- Before removing the battery from the camera, set the power switch to [OFF].
- The supplied battery is for exclusive use with this camera. Do not use it except with this camera.



CAUTION

Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions.

Charging the Battery



- 1 Set the power switch to [OFF].
- 2 Insert the battery into the camera. (P14)
- 3 Open the terminal door.
Ⓐ: How to open the terminal door
- 4 Insert the connection plug of the AC adaptor into the DC IN socket of the camera.

THE SOCKET OUTLET SHALL BE INSTALLED NEAR THE EQUIPMENT AND SHALL BE EASILY ACCESSIBLE.

- 5 Plug the AC adaptor into the electrical outlet.
 - The green status indicator ① blinks and charging starts.
- 6 When the status indicator stops blinking, charging is complete.
 - After charging is finished, remove the AC adaptor from the electrical outlet and then remove the connecting plug from the DC IN socket.

■ Battery indicator

The remaining battery power is displayed on the LCD monitor. (This is not displayed when using AC adaptor)

: The battery power is sufficient

: The remaining power is a little low

: The remaining power is low

: Replace or recharge the battery

■ Charging time and available recording time

(It records once at intervals of 30 seconds. Frash fires 1 time to 2 times.
When the supplied 32 MB SD memory card is used)

	(A)	(B)
Supplied battery pack	Approx. 120 min.	In setting LCD monitor to ON Approx. 120 min. (equal to 240 still pictures)
		In setting LCD monitor to OFF Approx. 180 min. (equal to 360 still pictures)

(A) Charging time

(B) Continuous recording time (recordable number)

■ Charging environment and charging error

- Charge the battery in a place with the temperature of 10 - 35 °C. (The battery should also be the same temperature)
- When charging starts, the status indicator blinks at about 2 second intervals. If, after charging starts, the status indicator blinks quicker, this indicates a charging error.

In this case, remove the AC adaptor from the electrical outlet, remove the battery and check if both room and battery temperature is too low or high and then charge it again. (It is not possible to cancel the error by only turning the power off/on) If the problem persists, consult the dealer.

Connecting to an Electrical Outlet

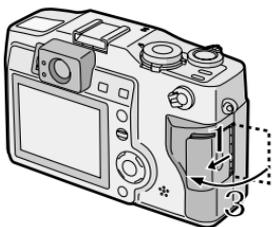
If you use an AC adaptor and connect it to an electrical outlet, you can use the camera without worrying about the battery discharge. The connection method is the same as explained in "Charging the Battery". (P15)

- During use, the camera becomes warm; this is not a malfunction.

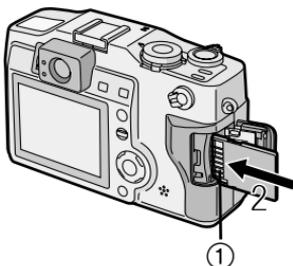
Inserting the Card

[Preparation]

- Set the power switch to [OFF].

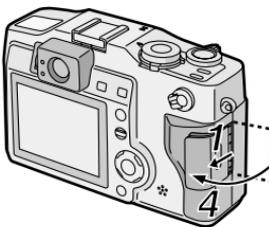


- 1 Open the memory card door.
- 2 Insert the card all the way in until it clicks.
 - Check the direction of the card.
- 3 Close the memory card door.

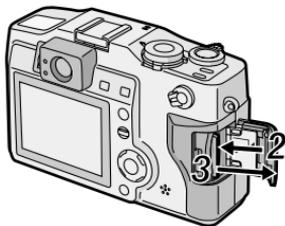


[Removing the card]

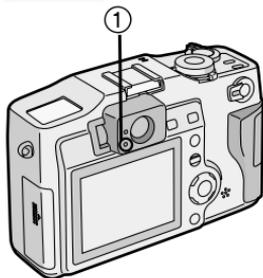
- 1 Open the memory card door.
- 2 Press the card.
- 3 Pull the card out.
- 4 Close the memory card door.



- Do not touch the connection terminal ① on the back side of the card.
- If the memory card door cannot completely close, take the card out and insert it again.
- If the card cannot be fully inserted, verify whether the direction of the card is correct.
- We recommend you to use Panasonic brand card. (Use only the genuine card)



Access to the card



When you access the card, the red flash/access indicator ① lights at quick intervals.

When the flash/access indicator lights, do not remove the battery, open the memory card door, or pull out the card. The card and the card contents may be destroyed and the camera may not operate normally.

As the card contents could be damaged or erased because of the electrical noise, static electricity and camera and card defects, also store the important data on your PC (P85) using the USB socket.

SD memory card (supplied) and MultiMediaCard (optional)

The SD memory card and MultiMediaCard are small, lightweight, removable external cards. The SD memory card is equipped with a writing protection switch that can inhibit writing and formatting. (When the switch is moved towards the [LOCK] side, it is not possible to write or delete data on the card and format it. When the switch is unlocked, these functions become available)

SD memory card

- RP-SDH512 (512MB)
- RP-SDH256 (256MB)
- RP-SDH128 (128MB)
- RP-SD064 (64MB)
- RP-SD032 (32MB)
- RP-SD016 (16MB)
- RP-SD008 (8MB)



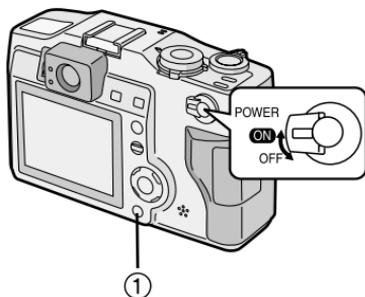
MultiMediaCard

- VW-MMC16 (16MB)
- VW-MMC8 (8MB)



- When using the MultiMediaCard, after recording motion images, the screen may appear grey, but this is not a malfunction.

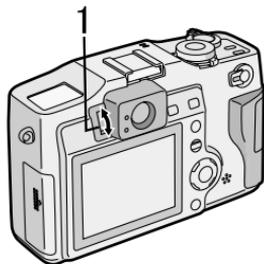
Turning Power on/off



- 1 Set the power switch to [ON].
 - The status indicator lights.
- 2 Set the power switch to [OFF].

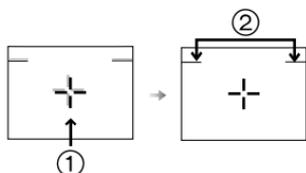
- When switching the power on/off, do not put any obstacle in front of the lens.
- When the operational mode dial is set to the REC mode and the power switch is set to [ON] without removing the lens cap, this message is displayed: "REMOVE LENS CAP AND PRESS SET BUTTON". After removing the lens cap, press the [REVIEW/SET] button ①.

Adjusting the Optical Finder (Diopter Adjustment)



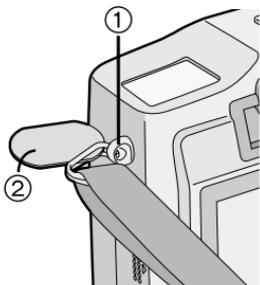
Before using the camera, by adjusting the diopter, it is possible to see the AF target ① inside the viewfinder well.

- 1 Adjust the diopter, rotating the diopter adjustment dial.



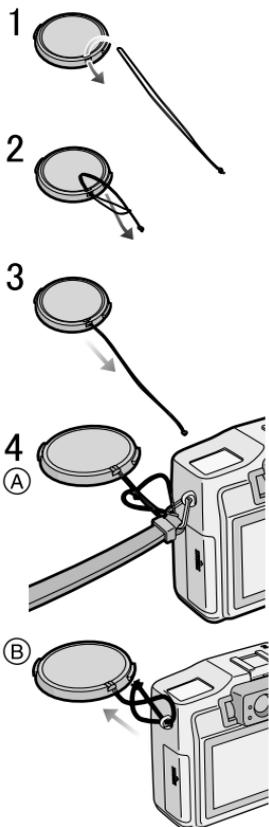
- Moving the zoom lever towards T and taking pictures at a distance of 70 cm - 1 m from the subject, make the top of the subject match with the parallax compensation mark ②, in order not to cut it. When an accurate framing is necessary, use the LCD monitor.

Attaching the Strap



- 1 Open with the supplied metal plate ② the triangular metal top of the strap and attach it to the eyelet ① of the camera.
- 2 Attach the strap to the other side of the camera in the same way.

Attaching the Lens Cap



When you are not recording, protect the lens surface by attaching the supplied lens cap.

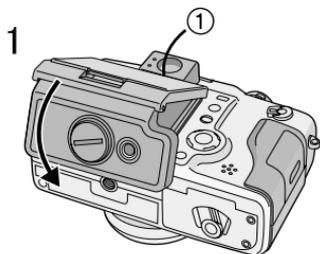
- 1 Let the top of the string pass through the lens cap.
- 2 Let the opposite side of the string pass through the circular part of the string.
- 3 Pull in the direction of the arrow.
- 4 [When attaching the strap (A)] Let the top of the lens cap string pass through the top of the triangular part of the strap and install as shown in the picture.

[When not attaching the strap (B)] Let the top of the lens cap string pass through the strap eyelet as shown in the picture.

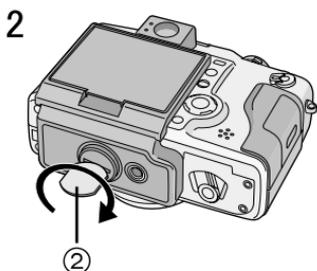
- Remove the lens cap before turning the camera on.

Attaching the Monitor Hood

If you record outdoors and the sunlight is strong, it is difficult to see the LCD monitor. In this case, by attaching the supplied monitor hood, you can see well.



- 1 Let the monitor hood slide in the direction of the arrow, aligning its top with the optical finder base ①.
- 2 Affix it to the camera by turning the screw on the monitor hood with the supplied metal plate ②.

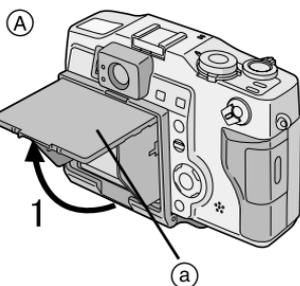


[Opening (A)]

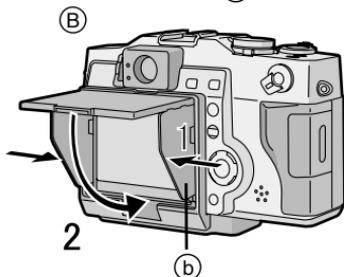
- 1 Open the top hood (a) in the direction of the arrow.
 - Open also the side hood as shown in the left side picture.

[Closing (B)]

- 1 Press both sides of the side hood (b) in the direction of the arrow.
- 2 Close the top hood following the direction of the arrow.

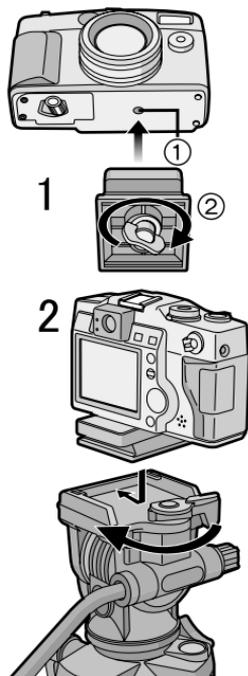


- When changing the battery, remove the monitor hood.
- After installing the monitor hood, it is still possible to attach the tripod.



Using the Tripod

When using the tripod (VZ-CT55, optional), you can also take pictures with low shutter speed and zoom.



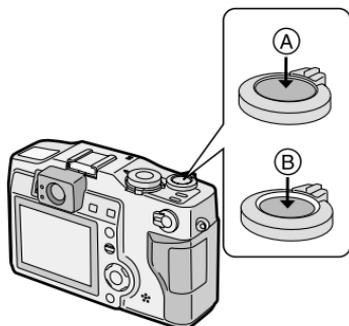
- 1** Align the camera holder ② to the tripod receptacle ① of the camera and attach.
- 2** Install the camera holder into the tripod.

- Read the tripod operating instructions carefully.
- Even when attaching the monitor hood, it is still possible to use the tripod.

The Shutter Button

(Pressing halfway/Pressing fully)

The shutter button is pressed in 2 steps: “pressing halfway” and “pressing fully”.



Pressing halfway (Press lightly) ①

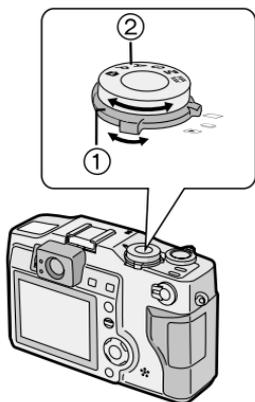
- Focus and exposure are locked.

Pressing fully (Press all the way) ②

- The picture is captured in the card. In motion image mode, the recording starts.

- You can adjust the shutter sound and the volume of the operational sound in menu. (P80)
- When pressing the shutter button fully in one stroke, the camera is shaken or the focus is not adjusted.

The Operational Mode Dial and the REC Mode Dial



Operational mode dial ①

With this dial you can set REC (single mode or burst mode) and playback modes.

[In recording]

- : Single mode
When taking a picture, as you press the shutter button once, a picture is captured. Set to single mode [] also when you record motion images.
-  : Burst mode (P56)
When taking pictures, if you keep pressing the shutter button in sequence, you can take a sequence of pictures.

[In playback]

-  : Playback (P62)
Playback recorded images.

REC mode dial ②

You can choose among 6 REC modes, as shown below.

A: AUTO (P28)

When taking pictures, the shutter speed and the aperture value are automatically adjusted.

P: Program AE (P39)

When taking pictures, the shutter speed and the aperture value are automatically adjusted. In addition, there are also settings that can be used simultaneously.

A: Aperture-priority AE (P40)

When taking pictures, the shutter speed is adjusted automatically, according to the set aperture value.

S: Shutter-priority AE (P41)

When taking pictures, the aperture value is adjusted automatically, according to the set shutter speed.

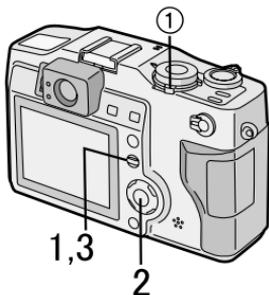
M: Manual exposure (P42)

If the shutter speed and aperture value are difficult to adjust automatically, adjust them manually and take pictures.

: Motion images (P30)

Recording motion images

Operating the Menu



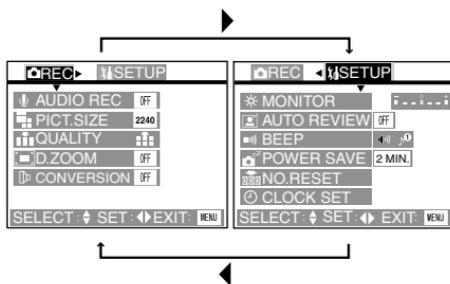
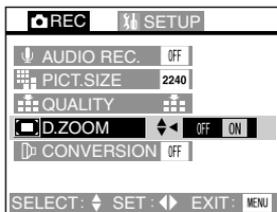
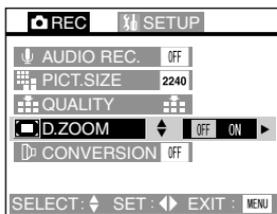
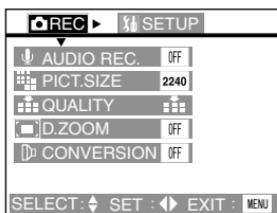
By operating the menu it is possible to set the settings REC or playback mode. It is also possible to set the date and time, the operational sound, the shutter sound and various other settings. Follow these instructions while looking at the LCD monitor.

1 Press the [MENU] button.

- If you set the operational mode dial ① to the single mode [□] or burst mode [⏏], the REC menu is displayed; if you set it to the playback mode [▶] the playback menu is displayed.

2 Press ▲/▼ to choose the item and press ◀/▶ to confirm this setting.

- First, with step 2, by pressing ▶, you will access the setup menu. (If you press ◀, it will return)

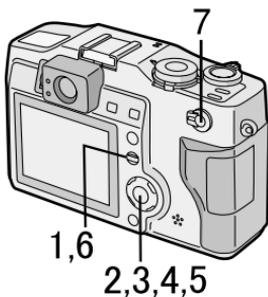


3 Press the [MENU] button.

- The menu will disappear.

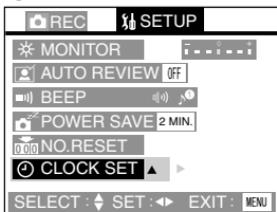
Setting the Date/Time (Clock Set)

It is possible to set the year from 2001 to 2099. The 24-hour system is used.

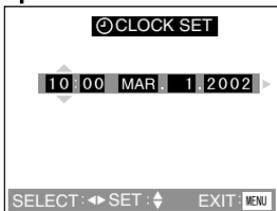


- 1 Press the [MENU] button.
- 2 Press **▶** to make the setup menu appear.
- 3 Press **▲/▼** to select [CLOCK SET], and then press **▶**.
- 4 Press **▲/▼** to select [M/D/Y] or [D/M/Y], and then press **▶**.
- 5 Press **▲/▼/◀/▶** to set date and time.
- 6 Press the [MENU] button twice.
 - The menu will disappear.
- 7 Check if the date/time setting is displayed correctly, after turning the camera [OFF] and [ON].

3



4



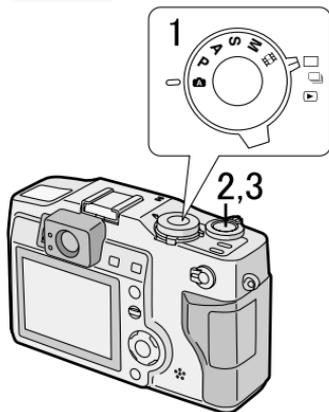
- Even if the battery is not inserted or the AC adaptor is not connected, the camera can store the correct time for about 5 hours with its backup built-in-power source. But, after about 5 hours the set time is cancelled, so set date and time again.

Taking Pictures (AUTO Mode)

By only pressing the shutter button, the exposure (shutter speed and aperture value) will be automatically adjusted and the picture will be taken.

[Preparations]

- Insert the card. (P17)
- Set the power switch to [ON]. (P19)
- Set the operational mode dial to the single mode [□]. (P25)



1 Set the REC mode dial to AUTO mode [A].

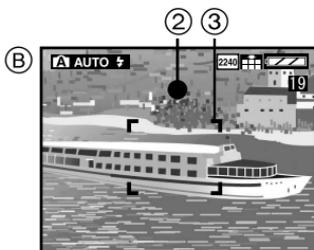
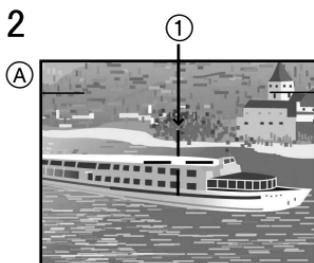
2 [A Optical finder]

Let the subject be centered in the AF target ① inside the optical finder and press the shutter button halfway.

[B LCD monitor]

After centering the subject in the focus area ③ on the LCD monitor, press the shutter button halfway.

- When the focus is adjusted, the focus indication [●] ② appears.
- The shutter speed and the aperture value are automatically adjusted and displayed on the LCD monitor.
- When the subject is out of the AF target or the focus area, take the AF/AE lock. (P47)

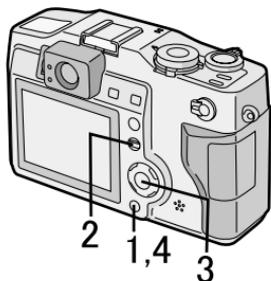


3 Press the shutter button fully to take the picture.

- After taking a picture, when the auto review (P79) is set to [ON], the picture is displayed on the LCD monitor for about 2 seconds.

- When power saving time is set, if you do not operate the camera, it is automatically turned off at the set time. To operate the camera again, turn the power switch first to [OFF] and then to [ON], or press the shutter button. (P81)
- There are times when the brightness of the LCD monitor differs from that of the recorded pictures. In particular, when taking pictures in dark places with a long time exposure, darkness appears on the LCD Monitor, but the recorded pictures are bright.

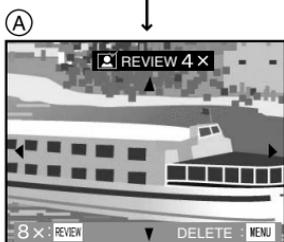
Checking the Last Picture (Review)



After taking a picture, when auto review (P79) is set to [ON], the captured picture is displayed on the LCD monitor for about 2 seconds, but you can also check the picture by following the methods shown below.

1 After taking a picture, press the [REVIEW/SET] button.

- The last captured picture is displayed for about 3 seconds. If you press the [REVIEW/SET] button again, the captured picture is zoomed 4 times (A) and 8 times if you press once again.



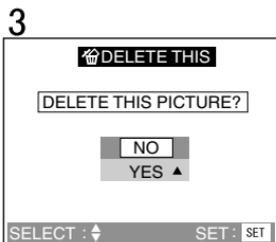
■ Erasing the captured picture during the review

2 Press the [MENU] button.

3 When the message [DELETE THIS PICTURE?] is displayed, press ▲/▼ to select [YES].

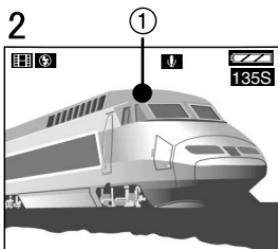
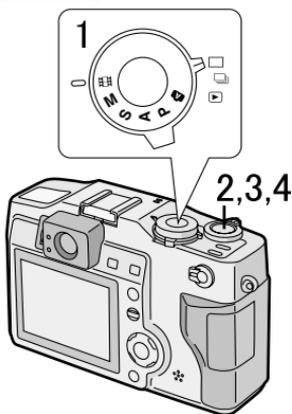
4 Press the [REVIEW/SET] button.

- The picture is erased.
- Once erased, pictures cannot be recovered.



- When using the burst mode [, you can see only the first picture with the review.
- In motion image mode [, the review cannot be used.
- When you turn the power switch to [OFF] or change the setting of the REC mode dial and operational mode dial, the review cannot be displayed.

Recording Motion Images



With this camera you can also record motion images. (If using the supplied 32MB SD memory card, it is possible to record for about 160 seconds)

[Preparations]

- Insert the card. (P17)
- Set the power switch to [ON]. (P19)
- Set the operational mode dial to single mode [□]. (P25)

- 1 Set the REC mode dial to motion image mode [RECORDING].
- 2 Center the subject in the focus area on the LCD monitor and press the shutter button halfway.
 - When the focus is adjusted, the focus indication [●] appears. (① AF target)
- 3 By pressing the shutter button fully, the recording starts.
 - The audio REC starts simultaneously.
- 4 By pressing the shutter button fully again, recording stops.
 - If during the recording the memory of the card becomes full, the recording is stopped automatically.

■ Available settings in motion image mode

- Macro mode (P55)
- Manual focus (P57)
- Conversion (P58)

■ The settings that can be fixed in motion image mode

- Picture size (P37)
- Built-in flash (P33)
- White balance (P50)
- Metering mode (P48)
- ISO sensitivity (P52)

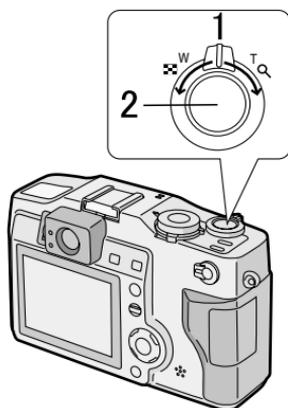
- The remaining time displayed on the LCD monitor is an approximation.
- It is not possible to record motion images without audio.
- If using the MultiMediaCard, after recording motion images, the screen may appear grey, but this is not a malfunction.
- When recording starts, the auto focus and zoom are locked (with the first frame).
- Except with the supplied card (e.g. MultiMediaCard), when recording motion images, it could happen that the recording suddenly stops.

Using the Optical Zoom

With this function, you can make people and subjects closer, and landscapes can be captured in wide angle, with the 3 times optical zoom. (P25)

[Preparation]

- Set the operational mode dial and REC mode dial.



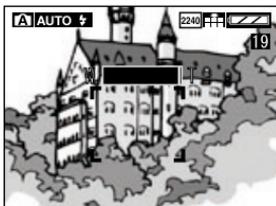
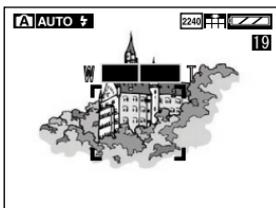
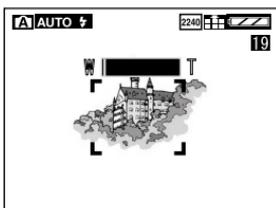
- 1 Aim the camera at the subject and adjust the size with the zoom lever.

To make subjects closer (Tele):
Rotate towards T.

To make subjects wider (Wide angle):
Rotate towards W.

- 2 Take pictures.

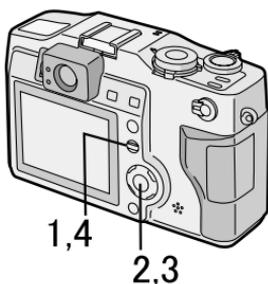
- The recording method is the same as in "Taking Pictures (AUTO Mode)". (P28)



- The focus is adjusted at a distance of more than 30 cm. In regards Macro mode, read P55.

Using the Digital Zoom

It is possible to further magnify a subject already magnified 3 times with the optical zoom by 2 more times, with the digital zoom, thereby reaching a maximum of 6 times.



[Preparation]

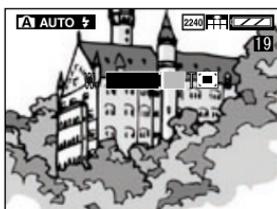
- Set the operational mode dial and REC mode dial. (P25)

- 1 Press the [MENU] button.
- 2 Press ▲/▼ to select [D. ZOOM].
- 3 Press ◀/▶ to set to [ON].
- 4 Press the [MENU] button.

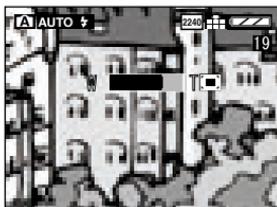
- The menu will disappear.

- The zoom adjustment and recording method are the same as in “Using the Optical Zoom”. (P31)

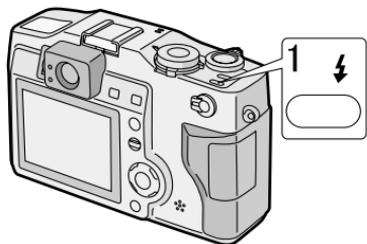
2,3



- In motion image mode [], you cannot use the digital zoom.
- When setting the digital zoom to [ON], the display of the LCD monitor is not set to off.
- When using the digital zoom the picture quality becomes deteriorated.



Taking Pictures with the Built-in Flash



[Preparation]

- Set the operational mode dial and REC mode dial. (P25)

1 Press [].

- Every time you press, the available settings will appear as shown below. (There are settings that cannot be set according to the REC mode. Those that cannot be set are not displayed when pressing the [] button. Refer to the table on the left.)

	A	P	A	S	M	
AUTO	○	○	○	○	○	—
AUTO	○	○	○	○	○	—
	○	○	○	○	○	—
	—	○	○	○	○	—
AUTO SLOW	—	○	○	—	—	—
	○	○	○	○	○	○



AUTO : AUTO

The flash fires automatically according to the recording situation.

AUTO : AUTO/Red-eye reduction

The flash fires automatically according to the recording situation and simultaneously it reduces the red-eye phenomenon (when a subject's eyes appear red in flash light).

Use it when a subject is recorded in dark places.

: Forced ON

The flash is forced to fire.

You will use it when a subject is backlighted.

: Forced ON/Red-eye reduction

The flash is forced to fire and simultaneously the red-eye phenomenon is reduced.

AUTO SLOW  / **AUTO SLOW 2**  (In 2nd curtain):

Slow sync./Red-eye reduction

When you take a picture with a dark background landscape, it makes the flash fire and the shutter speed be slow, so that the dark background landscape will become bright. Simultaneously it reduces the red-eye phenomenon.

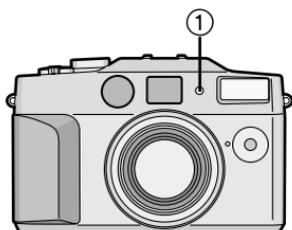
- It is possible to set rear curtain and front curtain modes. (P54)



: Forced OFF

Even being in dark places, the flash does not fire.

Set it when you take pictures in places where flash is forbidden.



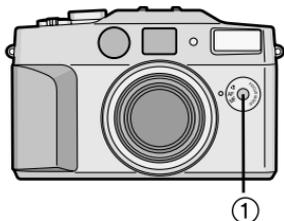
2 Take pictures.

The recording method is the same as in "Taking Pictures (AUTO Mode)". (P28)

- The available flash range is about 30 cm - 4.5 m at a maximum wide angle and about 30 cm - 3.5 m at a maximum telephoto setting. (In macro mode, at a maximum wide angle setting it is about 10 cm - 50 cm, at a maximum telephoto setting it is about 20 cm - 50 cm)
- Do not cover the flash sensor ① with your fingers or other items. Otherwise, brightness cannot be perceived.
- In motion image mode [, setting is fixed to the forced OFF [].
- When you set to burst mode [, auto bracket or focus bracket, only 1 picture is taken for every flash firing.
- Adjust the brightness with the flash adjustment (P46).

Taking Pictures with the Self-timer

When you set the self-timer, the picture is automatically taken after 10 seconds (or 2 seconds).

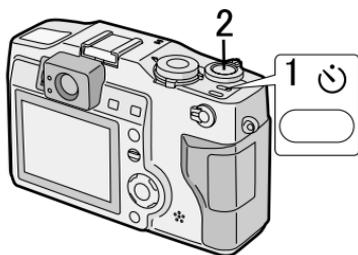


[Preparation]

- Set the operational mode dial and REC mode dial. (P25)

1 Press the [] button.

- Every time you press it, what is displayed changes as shown below.



: Self-timer set to 10 seconds

: Self-timer set to 2 seconds

When these indicators are not displayed, self-timer setting is cancelled.

2 Press the shutter button fully.

- The self-timer indicator ① blinks and the shutter is activated after 10 seconds (or 2 seconds).
- When setting the self-timer, the focus and exposure are not adjusted by pressing the shutter button halfway. When pressing the button fully, they are automatically adjusted just before recording.
- Before taking a picture, if you press the [MENU] button, the self-timer setting is cancelled.



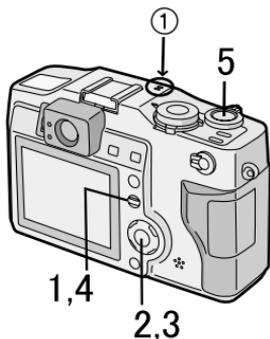
- In AUTO mode [], you can only set to 10 seconds [].
- In motion image mode [], it is not possible to use the self-timer.
- In burst mode [], the self-timer setting covers only the first picture.

Taking Pictures with Audio

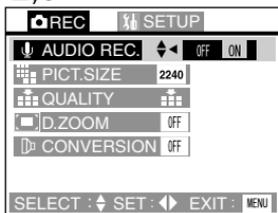
You can take a picture with audio for 5 seconds.

[Preparation]

- Set the operational mode dial and REC mode dial. (P25)



2,3



5

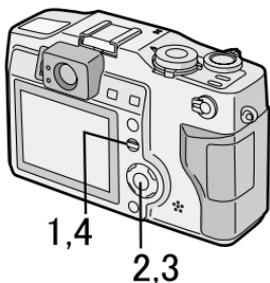


- 1 Press the [MENU] button.
- 2 Press ▲/▼ to set to [AUDIO REC.].
- 3 Press ◀/▶ to set to [ON].
- 4 Press the [MENU] button.
 - The menu will disappear.
 - This icon [🔊] will appear on the LCD monitor.
- 5 Press the shutter button fully and take a picture.
 - It is not necessary to continue pressing the shutter button.
 - Audio is recorded from the built-in microphone ① of the camera.
 - 5 seconds later, the audio recording is stopped automatically.

- When setting quality to TIFF [TIFF], to burst mode, auto bracket or focus bracket, it is not possible to take a picture with audio. (P38, P44, P45, P56)

Changing the Picture Size

You can choose among 4 kinds of picture size settings.



[Preparation]

- Set the operational mode dial and REC mode dial. (P25)

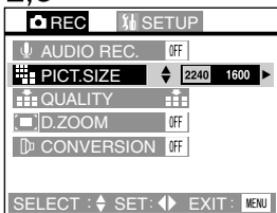
- 1 Press the [MENU] button.
- 2 Press ▲/▼ to select [PICT. SIZE].
- 3 Press ◀/▶ to set the picture size.

- **2240** : 2240 × 1680 pixels
- **1600** : 1600 × 1200 pixels
- **1120** : 1120 × 840 pixels
- **640** : 640 × 480 pixels

- 4 Press the [MENU] button.

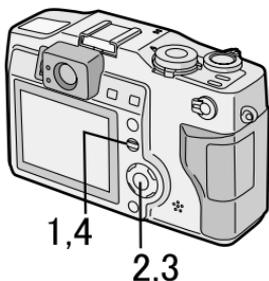
- The menu will disappear.

2,3



- In motion image mode [**MOVIE**], the picture size is fixed to 320 × 240 pixels.
- The smaller you set the picture size, the more pictures you can store on the memory card. In addition, a small data volume allows you attach the picture to an e-mail or post it on a web site more easily.
- If you set a large picture size, the printed picture will be clearer.

Changing the Quality (Data Compression Ratio)



You can choose among 3 kinds of quality levels (Data Compression Ratio).

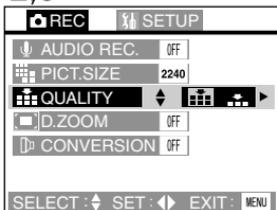
[Preparation]

- Set the operational mode dial and REC mode dial. (P25)

- 1 Press the [MENU] button.
- 2 Press ▲/▼ to select [QUALITY].
- 3 Press ◀/▶ to select the quality (Data Compression Ratio).

- **[FINE]**: Fine (Low compression)
It gives priority to picture quality and record high quality pictures.
- **[STD]**: Standard (Standard compression)
It gives priority to the number of recordable pictures and record standard quality pictures.
- **[TIFF]**: TIFF (Incompression)
It is suitable when editing and processing pictures with a retouch software.

2,3



(A)

(a)	(b)		
	[FINE]	[STD]	[TIFF]
2240 x 1680	15	31	2
1600 x 1200	31	61	4
1120 x 840	61	118	10
640 x 480	145	236	29
(c)	Approx. 160 s		

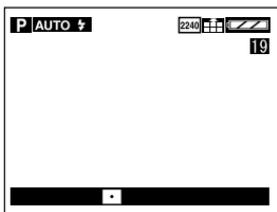
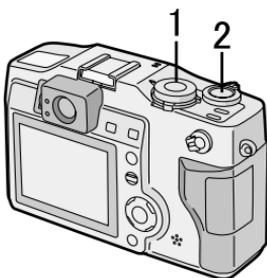
(A): Quality and number of recordable pictures

(a) Picture size, (b) Quality, (c) In motion image mode) (With the supplied 32MB SD memory card)

- 4 Press the [MENU] button.
 - The menu will disappear.

- In AUTO mode [**A**], you cannot select TIFF [**TIFF**].
- In motion image mode [**[M]**], quality cannot be modified.
- It could happen that pictures are like a mosaic depending on the scene characteristics.
- The number of recordable pictures corresponds to the capacity of the supplied 32MB SD memory card. (If you mix fine quality and standard quality, the number of recordable pictures changes)
- Remaining frame which is displayed on the LCD monitor may not correspond with recorded frames. However, this is not a malfunction.

Taking Pictures with Program AE Mode



The shutter speed and aperture value are set automatically according to the brightness of the subject. The combination of the shutter speed and aperture value is the same as that of the AUTO mode (P28), but also the settings listed below are available. (It is not possible to set in AUTO mode)

- Forced ON/red-eye reduction of the built-in flash []
- Slow sync./red-eye reduction [] (P33)
- 2 seconds self-timer (P35)
- TIFF [] quality (compression ratio) (P38)
- Exposure compensation (P43)
- Auto bracket (P44)
- Focus bracket (P45)
- Flash adjustment (P46)
- Metering mode (P48)
- Picture adjustment (P49)
- White balance (P50)
- ISO sensitivity selection (P52)
- Spot AF (P53)
- [MANUAL] of the external flash (P60)

[Preparation]

- Set the operational mode dial. (P25)

1 Set the REC mode dial to program AE [].

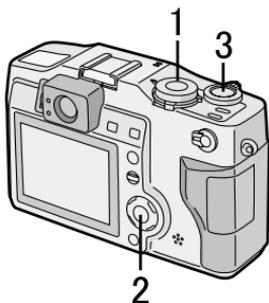
2 Take a picture.

- The recording method is the same as in “Taking Pictures (AUTO Mode)”. (P28)

- When taking pictures in dark places, as the exposure time becomes longer and it is difficult to stabilize the camera, the use of a tripod is recommended.
- If the aperture value is not properly set, the color of the F and the shutter speed values becomes red.

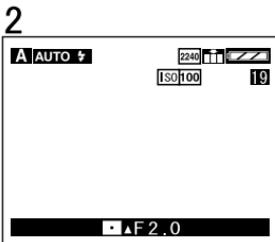
Taking Pictures with Aperture-priority AE

When aperture value is set, the shutter speed is set automatically according to the subject brightness. If you change the aperture value, as the changing involves the background of the subject, you can take a sharp or fade picture.



- 1 Set the REC mode dial to aperture-priority AE [**A**].
- 2 Press **▲/▼** to set the aperture value.
- 3 Take a picture.

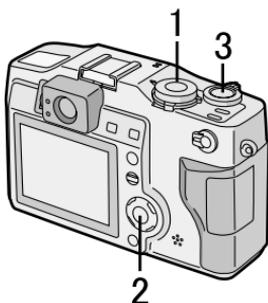
- The recording method is the same as in “Taking Pictures (AUTO Mode)”. (P28)



- The available setting range of the aperture value is from F2.0 to F8.0.
- The aperture value can change according to zoom position.
- It is not possible to select ISO sensitivity [AUTO].
- If the aperture value is not properly set, the color of the F and the shutter speed values becomes red.

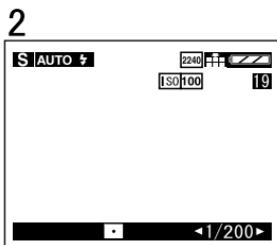
Taking Pictures with Shutter-priority AE

When the shutter speed is set, the aperture value is set automatically according to the subject brightness.
e.g.: when recording a moving subject, set to high speed.



- 1 Set the REC mode dial to shutter-priority AE [**S**].
- 2 Press ◀/▶ to set the shutter speed.
- 3 Take a picture.

- The recording method is the same as in “Taking Pictures (AUTO Mode)”. (P28)

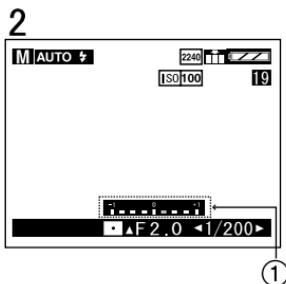
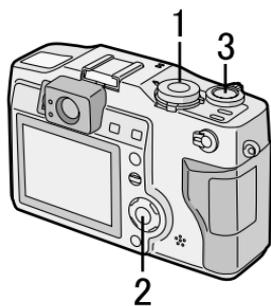


- In shutter-priority AE mode [**S**], it is not possible to choose the settings listed below.

Slow sync./red-eye reduction [**AUTO SLOW**] (P33) of the built-in flash
[AUTO] ISO sensitivity (P52)

- The available setting range of the shutter speed is from 8 to 1/1000.
- When the shutter speed is slow, the use of tripod is recommended.
- If the aperture value is not properly set, the color of the F and the shutter speed values becomes red.
- If the shutter speed is faster than 1/500, the aperture value is limited.

Taking Pictures with Manual Exposure Setting



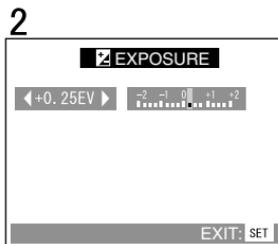
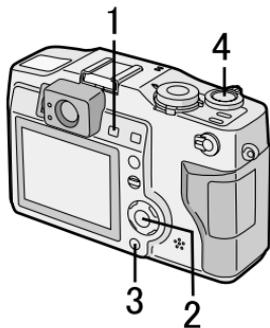
This mode is particularly suitable for locking the exposure of the background when there are white and dark subjects.

- 1 Set the REC mode dial to manual exposure [M].
 - On the LCD monitor there is an exposure assist ① that shows the exposure state.
- 2 Following the exposure assist indication, press ◀/▶ to adjust the shutter speed and press ▲/▼ to adjust the aperture value.
- 3 Take a picture.
 - The recording method is the same as in “Taking Pictures (AUTO Mode)”. (P28)

- In manual exposure mode [M], the settings listed below are not available.
 - Slow sync./red-eye reduction [AUTO SLOW] (P33) of the built-in flash
 - Exposure compensation (P43)
 - [AUTO] ISO sensitivity (P52)
- The available setting range of the aperture value is from F2.0 to F8.0.
- The available setting range of the shutter speed is from 8 to 1/1000.
- If the shutter speed is faster than 1/500, the aperture value is limited.

Compensating the Exposure

If there is a difference between the subject and background brightness, since you cannot set the correct exposure, you can compensate it.



[Preparation]

- Set the operational mode dial and REC mode dial. (P25)

1 Press the $\left[\begin{matrix} \text{Z} \\ \text{Z} \\ \text{Z} \\ \text{Z} \end{matrix} \right]$ button to select $\left[\begin{matrix} \text{Z} \\ \text{Z} \\ \text{Z} \\ \text{Z} \end{matrix} \right]$ EXPOSURE].

2 Press \leftarrow / \rightarrow to compensate the exposure.

- You can compensate from -2 EV to +2 EV with 0.25 EV step. (EV is an abbreviation of Exposure Value, and it is the amount of light given to the CCD by the aperture value and the shutter speed. EV0: the exposure capacity with the aperture value F1.0 and the shutter speed 1 second. When the aperture value or shutter speed rises, EV1, EV2, EV3... rise too.)

- The compensation state is not reflected on the LCD monitor.

3 Press the [REVIEW/SET] button.

- The compensation window will close.

4 Take a picture.

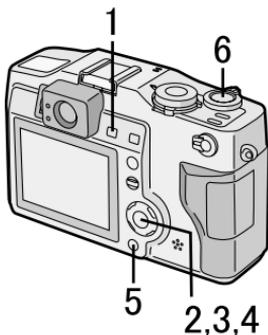
- The recording method is the same as in "Taking Pictures (AUTO Mode)". (P28)

(A)

Shutter speed	Aperture value
8 - 1/500	2.0 - 8.0
1/750	5.6 - 8.0
1/1000	8.0

- When the shutter speed is faster than 1/500, the range of aperture value which is possible to compensate exposure will be limited. (A)
- In AUTO $\left[\begin{matrix} \text{A} \\ \text{A} \\ \text{A} \\ \text{A} \end{matrix} \right]$, manual exposure $\left[\begin{matrix} \text{M} \\ \text{M} \\ \text{M} \\ \text{M} \end{matrix} \right]$ or motion image $\left[\begin{matrix} \text{M} \\ \text{M} \\ \text{M} \\ \text{M} \end{matrix} \right]$ mode, it is not possible to compensate exposure.

Taking Pictures with Auto (AE) Bracket



Pressing the shutter button once, the camera will automatically take 3 (or 5) pictures changing exposure according to the set exposure compensation value.

[Preparation]

- Set the operational mode dial and REC mode dial. (P25)

1 Press the [] button to select [] AUTO BRACKET.

2 Press / to set the exposure compensation.

- Select among 0.25EV, 0.5EV, 0.75EV, 1.0EV. Setting to [OFF], auto bracket is unavailable.

3 Press .

- Press / to select step 2 or 4.

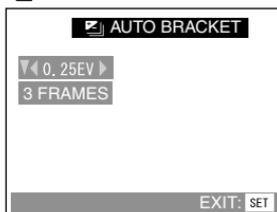
4 Press / to set the number of pictures (3/5).

5 Press the [REVIEW/SET] button.

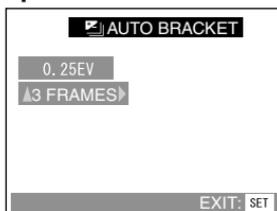
6 Take a picture.

- The recording method is the same as in “Taking Pictures (AUTO Mode)”. (P28)

2

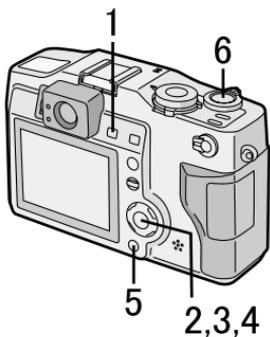


4



- In AUTO mode [], you cannot record using auto bracket.
- Setting quality to TIFF [], you cannot record using auto bracket.
- Setting quality to fine [], the number of pictures is set to 3.
- When flash fires, you can take only 1 picture.

Taking Pictures with Focus Bracket



Pressing the shutter button once, 3 (or 5) pictures are automatically taken, while focus changes according to the lens depth-of-focus scale.

[Preparation]

- Set the operational mode dial and REC mode dial. (P25)

1 Press the [] button to select [] FOCUS BRACKET.

2 Press to set to [ON].

- When set to [OFF], focus bracket is not available.

3 Press .

- Press / to select step 2 or 4.

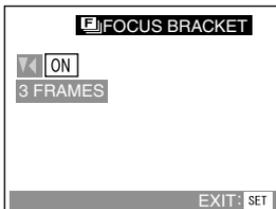
4 Press / to set the number of pictures (3/5).

5 Press the [REVIEW/SET] button.

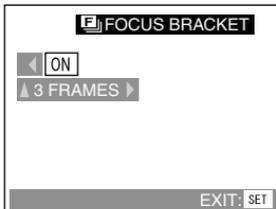
6 Take a picture.

- The recording method is the same as in “Taking Pictures (AUTO Mode)”. (P28)

2



4



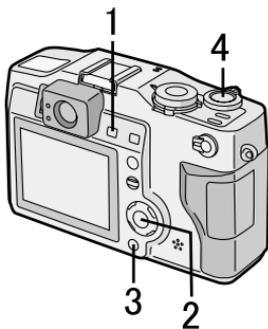
- In AUTO mode [], you cannot record using focus bracket.
- Setting quality to TIFF [], you cannot record using focus bracket.
- Setting quality to fine [], the number of pictures is set to 3.
- When flash fires, you can take only 1 picture.

Adjusting the Flash Output

It is possible to adjust the flash output.

[Preparation]

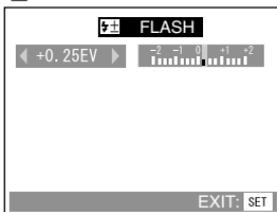
- Set the operational mode dial and REC mode dial. (P25)



- 1 Press the [] button to select [FLASH].
- 2 Press to set the flash output.
- 3 Press the [REVIEW/SET] button.
- 4 Take a picture.

- You can adjust the range from -2EV to +2EV with 0.25 EV steps.

2



- The recording method is the same as in "Taking Pictures (AUTO Mode)". (P28)

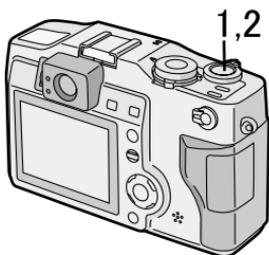
- In AUTO [] or motion image [] mode, it is not possible to adjust the flash output.

Using the AF/AE Lock

If the subject is out of the AF target or the focus area and you press the shutter button, the subject's focus is not adjusted. After locking focus and exposure (AF/AE lock), you can take a clear picture with adjusted focus.

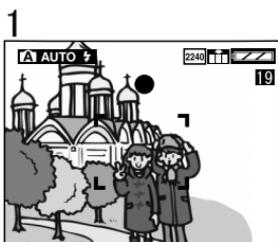
AF: Auto focus

AE: Auto exposure



[Preparation]

- Set the operational mode dial and REC mode dial. (P25)



- 1 Aim the camera at the subject on which you want to adjust the focus to enter the focus area on the LCD monitor and then press the shutter button halfway (AF/AE lock) to set it.

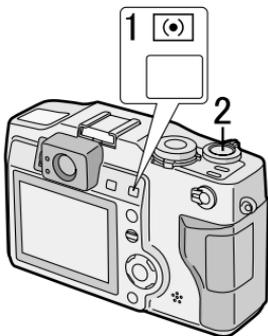
- When the focus is adjusted, the focus indication [●] appears.



- 2 Move the camera keeping the chosen composition and press the shutter button all the way.

- Before pressing the shutter button, you can set the AF/AE lock any time you want.

Selecting the Metering Modes



The camera is usually set to multiple [☉], but it is possible to switch to center weighted [☐] or spot [●] mode.

[Preparation]

- Set the operational mode dial and REC mode dial. (P25)

1 Press the metering mode selection button.

- Every time you press this button, what is displayed changes as shown below.



☉: Multiple

Considering the brightness variation on the whole screen, adjust the exposure correctly.

☐: Center weighted

Let the subject be centered on the LCD monitor and set the metering mode.

●: Spot

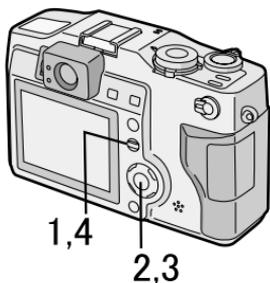
Set the metering mode using the spot metering indication that is displayed on the LCD monitor.

2 Take a picture.

- The recording method is the same as in “Taking Pictures (AUTO Mode)”. (P28)

- When taking pictures with spot mode [●], it is recommended to use the LCD monitor.
- When recording in AUTO [A] or motion image [MOV] mode, the camera is set to multiple.

Picture Adjustment (Contrast/Sharpness/Saturation)

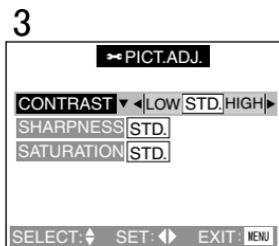
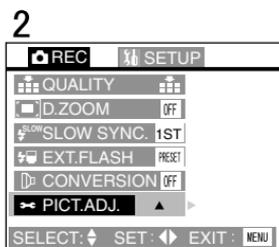


[Preparation]

- Set the operational mode dial and REC mode dial. (P25)

- 1 Press the [MENU] button.
- 2 Press ▲/▼ to select [PICT. ADJ.] and press ►.
- 3 Press ▲/▼/◀/▶ to set [CONTRAST], [SHARPNESS] and [SATURATION].
- 4 Press the [MENU] button twice.

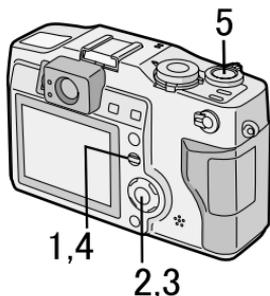
- The menu will disappear.



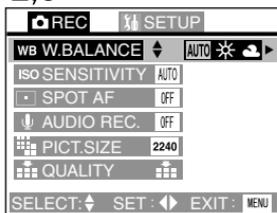
- When recording in AUTO [A] or motion image [MOVIE] mode, it is not possible to adjust quality.

Setting the White Balance

With the auto white balance you can automatically adjust the natural color tone, but in some particular situations, depending on light and environment conditions, you cannot do it and you have to adjust the white balance manually.



2,3



[Preparation]

- Set the operational mode dial and REC mode dial. (P25)

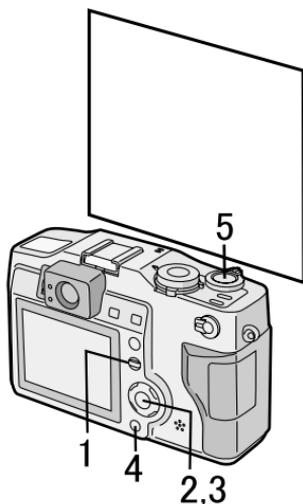
- 1 Press the [MENU] button.
- 2 Press $\blacktriangle/\blacktriangledown$ to select [W.BALANCE].
- 3 Press $\blacktriangleleft/\blacktriangleright$ to select the mode.
 - AUTO: if the auto white balance is set
 -  (Daylight): for recording outdoors on a bright day
 -  (Cloudy): for recording under cloudy and shady sky
 -  (Halogen): for recording under halogen lamp
 -  (Fluorescent): for recording under fluorescent lamp
 -  (Flash): for taking a picture with flash light only
 -  (White set): for manual setting (Read the following page where the manual setting is explained in detail)
- 4 Press the [MENU] button.
 - The menu will disappear.
- 5 Take a picture.
 - The recording method is the same as in "Taking Pictures (AUTO Mode)". (P28)

- In AUTO mode [**A**], the white balance is set to [AUTO].

Here the white set mode of white balance is explained.

[Preparation]

- Set the operational mode dial and REC mode dial. (P25)



- 1 Press the [MENU] button.
- 2 Press ▲/▼ to select [W.BALANCE].
- 3 Press ◀/▶ to set to white set [☐].

Only when setting the white balance again

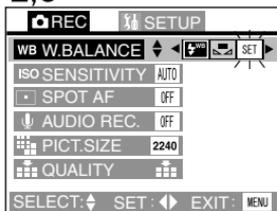
- 4 Press the [REVIEW/SET] button.

- The menu will disappear.

- 5 Aim the camera at a white paper or similar objects so that it completely fills the frame to white on the screen and press the shutter button all the way.

- White balance is set.

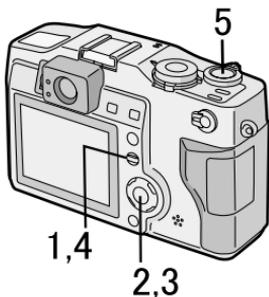
2,3



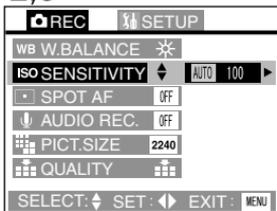
5



Setting ISO Sensitivity



2,3



ISO sensitivity is a value that corresponds to the sensitivity to light. The higher it is, the better the camera performances are in dark places.

[Preparation]

- Set the operational mode dial and REC mode dial. (P25)

- 1 Press the [MENU] button.
- 2 Press ▲/▼ to select [SENSITIVITY].
- 3 Press ◀/▶ to select the sensitivity.

- AUTO: If “AUTO” is selected and Flash mode is “Forced OFF”, if available light needs shutter speed slower than 1/30, the ISO sensitivity is automatically adjusted up to ISO 200 and shutter speed stays 1/30, to reduce the affect of a camera jiggle. In case if your picture is still too dark, please use the flashlight.

- ISO100
- ISO200
- ISO400

- 4 Press the [MENU] button.

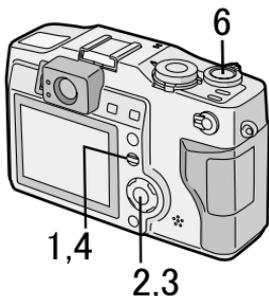
- The menu will disappear.

- 5 Take a picture.

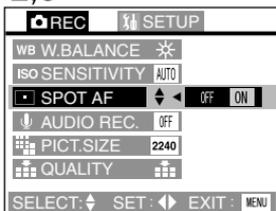
- The recording method is the same as in “Taking Pictures (AUTO Mode)”. (P28)

- In aperture-priority AE [A], shutter-priority AE [S] or manual exposure [M] mode, it is not possible to set to [AUTO] ISO sensitivity.
- In AUTO[A] or motion image [MOVIE] mode, it is set to [AUTO].

Using the Spot AF



2,3



You can record a subject focused in its single part with a smaller focus area than usual. This setting is particularly suitable to focus on the eye when you record one's face.

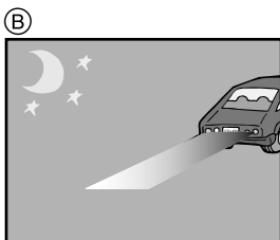
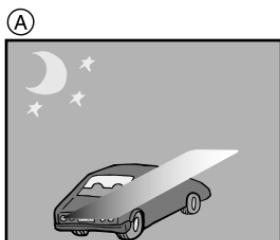
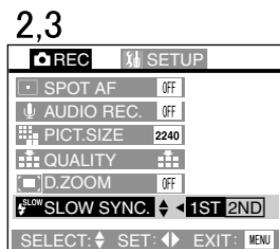
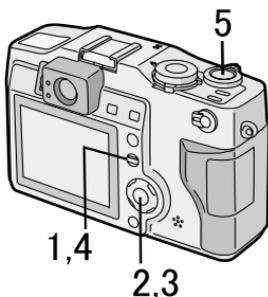
[Preparation]

- Set the operational mode dial and REC mode dial. (P25)

- 1 Press the [MENU] button.
- 2 Press ▲/▼ to select [SPOT AF].
- 3 Press ◀/▶ to set to [ON].
- 4 Press the [MENU] button.
 - The menu will disappear.
- 5 Center the subject in the spot focus area.
- 6 Take a picture.
 - The recording method is the same as in "Taking Pictures (AUTO Mode)". (P28)

- In AUTO [A] or motion image [MOVIE] mode, it is not possible to record with the spot AF.

Taking Pictures with 2nd Curtain Synchro



When recording with normal flash and setting to 1st curtain, as the flash fires the shutter curtain is simultaneously opened. When recording a moving subject and setting to 2nd curtain, the flash fires just before the shutter curtain is closed. The light source is captured following the moving subject fired by the flash.

[Preparations]

- Set the operational mode dial and REC mode dial. (P25)
- Press the flash mode button to select slow sync./red-eye reduction.

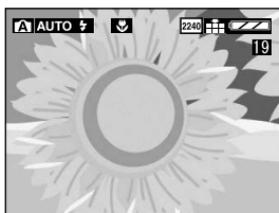
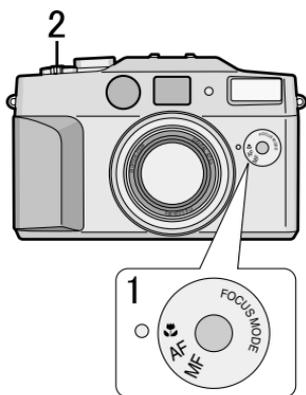
- 1 Press the [MENU] button.
- 2 Press ▲/▼ to select [SLOW SYNC.].
- 3 Press ◀/▶ to set to [1ST] or [2ND].
 - 1st curtain (A)
 - 2nd curtain (B)
- 4 Press the [MENU] button.
 - The menu will disappear.
- 5 Take a picture.
 - The recording method is the same as in "Taking Pictures (AUTO Mode)". (P28)

- In AUTO [A], shutter-priority AE [S], manual exposure [M] and motion image [] mode, it is not possible to set this mode.
- When recording in slow synchro mode, the use of a tripod is recommended.
- Recording in slow synchro mode is available only when the flash mode is set to slow sync./red-eye reduction.

[AUTO SLOW] / [AUTO SLOW2] :when setting 1st curtain/2nd curtain (P34)

Taking Pictures with Macro Mode

If the camera lens is at a distance from 6 cm to 50 cm from the subject, set macro mode [🌱].



AF (T/W) 30 cm ∞

🌱 (T/W) 6 cm 20 cm 50 cm

[Preparation]

- Set the operational mode dial and REC mode dial. (P25)

1 Set the focus dial to macro mode [🌱].

- [🌱] will be displayed.

2 Take a picture.

- The recording method is the same as in “Taking Pictures (AUTO Mode)”. (P28)

- In motion image mode [📹], it is also possible to set macro mode.
- When selecting the macro mode, optical finder functionality is limited. Use the LCD monitor.
- If recording in AUTO [A] and macro modes, the aperture value is set from F4.0 to F8.0.
- If you use the close-up lens (DMW-LC52, optional), you can record from a shorter distance.

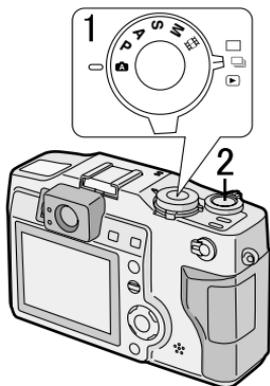
When using close-up lens (optional)

AF (T/W) 16 cm 33 cm

🌱 (T/W) 4.5 cm 12 cm 20 cm

Taking Pictures with Burst Mode

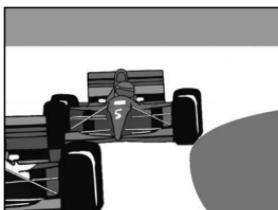
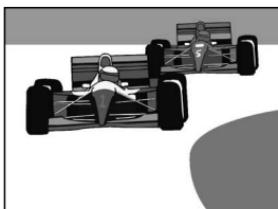
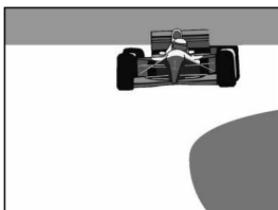
By continuously pressing the shutter button, it is possible to record in burst mode. (4 frames/second maximum of 8 frames)



[Preparation]

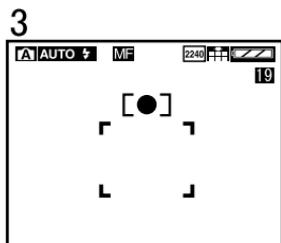
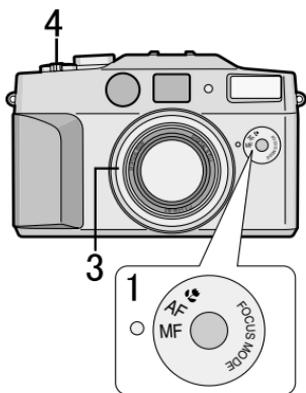
- Set the operational mode dial and REC mode dial. (P25)

- 1 Set the operational mode dial to burst mode [].
- 2 Press the shutter button halfway to lock the focus, then press it fully to take pictures in sequence.



- It is possible to record in burst mode 4 frames in 1 second, at a shutter speed higher than 1/25, but the flash does not fire simultaneously.
- If the flash fires, it is possible to record only 1 frame.
- When quality is set to TIFF [], it is not possible to use the burst mode.
- When quality is set to fine [], it is possible to record in burst mode a maximum of 4 frames.
- In motion image mode [], the burst mode cannot be used.
- Only the first picture recorded is displayed on the LCD monitor.

Taking Pictures with Manual Focus



Use the manual focus setting when you record landscapes and want to lock infinity distance, or, on the contrary, when the distance from the subject is locked and you do not want to operate the auto focus.

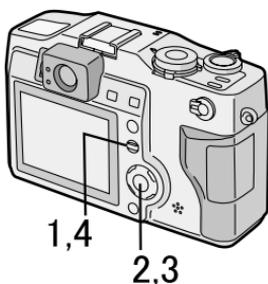
[Preparation]

- Set the operational mode dial and REC mode dial. (P25)

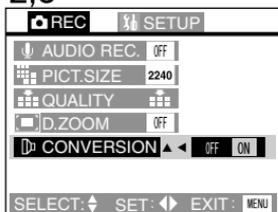
- 1 Set the focus dial to [MF].
- 2 Center the subject in the focus area.
 - The focus area becomes the selected area in AF setting. (e.g.: When the spot AF mode is changed to the manual mode)
- 3 Turn the focus ring.
 - When a subject is near the focus, the focus assist [] on the center of the LCD monitor will be displayed; if the focus is adjusted, the focus indication ● will appear inside [] and the operation beep will sound.
- 4 Take a picture.
 - The recording method is the same as in “Taking Pictures (AUTO Mode)”. (P28)

- In motion image mode [], the manual focus can also be used. When motion image recording starts, the focus is locked.
- When focus is adjusted in wide angle mode, focus cannot be adjusted properly in close-up mode.
- Even when adjusting focus in tele mode, after operating zoom, it could happen that focus is not adjusted.
- In dark places, the focus assist does not appear.
- When setting infinity distance mode, the infinity indication [∞] will appear on the LCD monitor.
- If you reset the focus ring a little, by turning it slowly in the same direction, after the focus assist has been displayed, it is easier to adjust the focus.

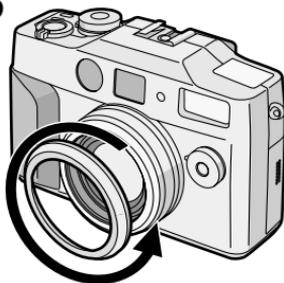
Using the Conversion Lens



2,3



5



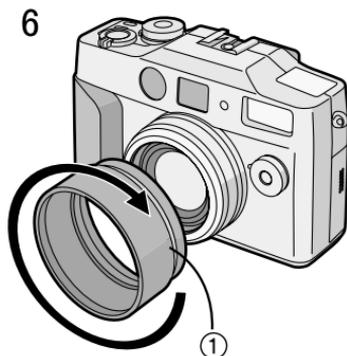
Using the tele conversion lens (DMW-LT52, optional), it is possible to zoom in much more; using the wide conversion lens (DMW-LW52, optional), it is possible to widen much more. (When attaching the conversion lens to the camera, the conversion lens adaptor (DMW-LA1) is necessary)

[Preparation]

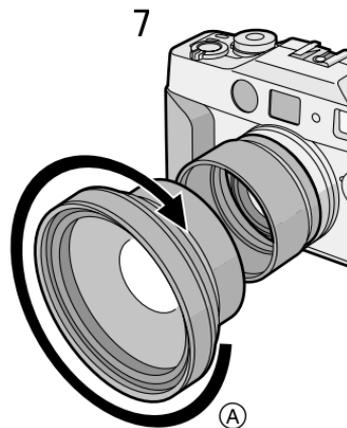
- Set the operational mode dial and REC mode dial. (P25)

- 1 Press the [MENU] button.
- 2 Press $\blacktriangle/\blacktriangledown$ to select [CONVERSION].
- 3 Press $\blacktriangleleft/\blacktriangleright$ to select [ON].
- 4 Press the [MENU] button.
 - The menu will disappear.
- 5 Remove the lens ring.

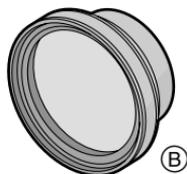
- 6 Attach the conversion lens adaptor ①.



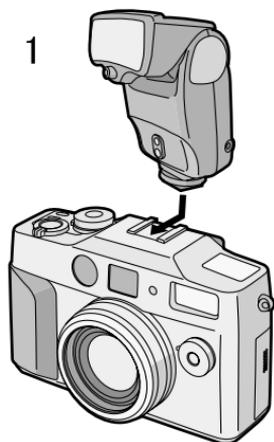
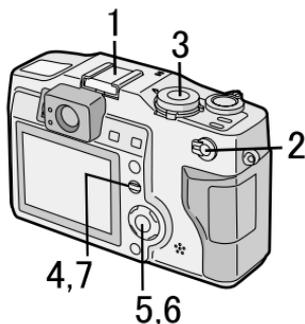
- 7 Install the tele conversion lens ② or the wide conversion lens ③.



- In motion image mode [RECORD], it is possible to use the conversion lens (optional).
- When attaching the tele conversion lens and rotating the zoom lever towards W, a vignetting effect occurs. Only rotate towards T.
- When using the conversion lens, the built-in flash is set to forced OFF.
- When attaching the conversion lens, use the LCD monitor.
- To prevent the lens from being stained with water or oil, attach both the optional conversion lens adaptor and the optional MC protector to protect the lens.
- For further information, read the conversion lens operating instructions.



Using the External Flash



5,6

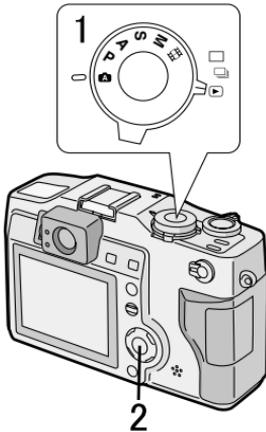


When attaching the external flash (DMW-FL28, optional), it is possible to record from further distances as compared to built-in flash in dark places.

- 1 Install the external flash on the hot shoe.
- 2 Turn the power switch to [ON].
- 3 Set the operational mode dial and REC mode dial.
- 4 Press the [MENU] button.
- 5 Press ▲/▼ to select [EXT.FLASH].
- 6 Press ◀/▶ to select [PRESET] or [MANUAL].
 - If you select [PRESET], aperture value, shutter speed and ISO sensitivity are set automatically regardless of the REC mode. Set aperture value to F2.8 and ISO sensitivity to 100 on the external flash side. (Shutter speed is set to 1/60)
 - Usually it is recommended to select [PRESET].
 - When installing the external flash and if the [MANUAL] mode is set, it is possible to choose these settings.
- 7 Press the [MENU] button.
 - The menu will disappear.
- 8 Turn on the external flash.

- In AUTO mode [**A**], [MANUAL] mode cannot be selected.
- When selecting [MANUAL] in external flash mode, set the REC mode dial to the aperture-priority AE [**A**], or the manual exposure [**M**], and set the aperture value with the camera, even on the flash side. (As the aperture value changes in shutter-priority AE mode [**S**], it is not possible to obtain the correct exposure. Moreover, as in program AE [**P**] the aperture value cannot be locked, the external flash output cannot correctly operate).
- When using the external flash in the aperture-priority AE mode [**A**], the shutter speed becomes 1/30-1/125.
- In motion image mode [**M**], the external flash cannot be used.
- DMW-FL28 can be used at a maximum distance of 10 m.
- When using the external flash, it is recommended to set the built-in flash to off.
- When installing the external flash, the camera becomes unstable.
- Remove the external flash when you carry the camera.
- For further information, read the external flash operating instructions.

Playing Back Still Pictures



1 Set the operational mode dial to playback [].

- The last recorded picture is played back.

2 Press  to play back the previous picture.
Press  to play back the following picture.

- Every time you press, the previous (following) picture is played back.
- The picture following to the last one is the first picture.

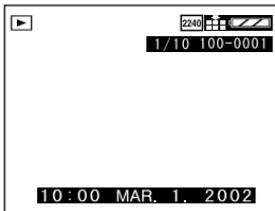
[Fast forwarding/Fast rewinding]

During playback, continue pressing .

: Fast forward

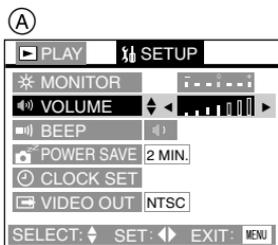
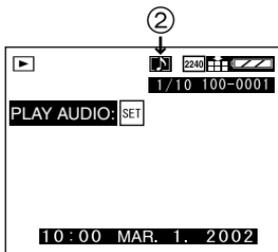
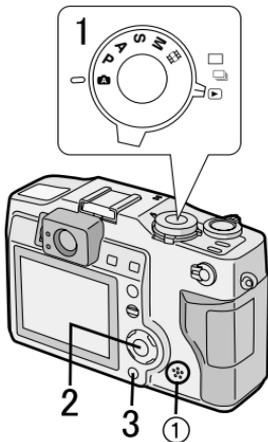
: Fast rewind

- The file number increases/decreases.
When releasing , the picture corresponding to the current file number is displayed.



- This camera is based on the DCF standards (Design rule for Camera File system) which were established by the Japan Electronic Industry Technology Association (JEITA).
- The file format that can be played back with this camera is JPEG. (There are also pictures that cannot be played back in JPEG format)
- When playing back still pictures that have been recorded with other equipments, the quality of pictures may be deteriorated and pictures could not be played back.
- When playing back a file out of standard, the folder/file number is indicated by [-] and the screen becomes black.

Playing Back Still Pictures with Audio



- 1 Set the operational mode dial to playback [].
- 2 Press to select the file with audio icon [] ②.
- 3 By pressing the [REVIEW/SET] button, audio is played back.
 - You can hear audio from the speaker ①.

■ Following the steps listed below, it is possible to adjust the sound volume. ①

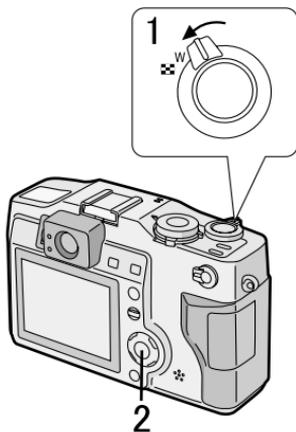
- 1 Set the operational mode dial to playback [].
- 2 Press the [MENU] button.
- 3 Press to select the setup menu.
- 4 Press to select [VOLUME].
- 5 Press to adjust the sound volume.
- 6 Press the [MENU] button.
 - The menu will disappear.

9 Images Multi Playback

It is possible to display 9 images at once.

[Preparation]

Set the operational mode dial to playback [▶].

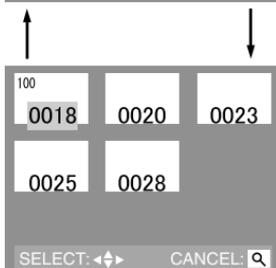
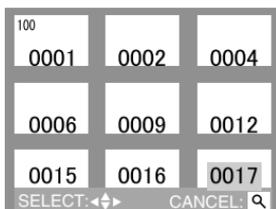


1 During playback, rotate the zoom lever towards [W].

- Multi playback (9 frames) starts.

2 Press ▲/▼/◀/▶ to select images.

- To return to the normal indication, rotate the zoom lever towards [Q]. The image with the file number colored in yellow is displayed.

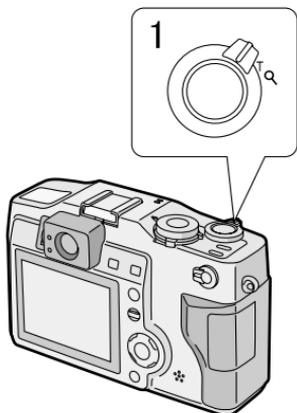


Using the Playback Zoom

During playback it is possible to enlarge pictures.

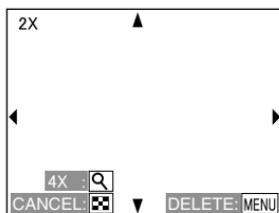
[Preparation]

- Set the operational mode dial to playback [▶].



- 1 During playback, rotate the zoom lever towards [Q].

- The more the zoom lever rotates towards [Q], the more the zoom magnification ratio increases.
- The more the zoom lever rotates towards [■], the more the zoom magnification ratio decreases.
- Use ▲/▼/◀/▶ to change the area to be enlarged.



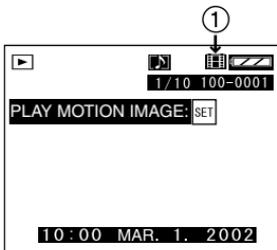
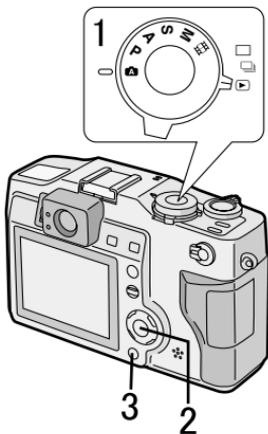
■ To delete a picture during the playback zoom

Press the [MENU] button.

When this message is displayed "DELETE THIS PICTURE?", press ▲/▼ to select [YES], and press the [REVIEW/SET] button.

- In motion image playback, it is not possible to magnify.
- The more the zoom magnification increases, the more the picture quality deteriorates.
- The playback zoom may not operate if pictures have been recorded with other equipments.

Playing Back Motion Images



- 1 Set the operational mode dial to playback [▶].
- 2 Press ◀▶ to select the file with the motion image icon [▶] ①.
- 3 By pressing the [REVIEW/SET] button, the motion image will be played back.
 - By pressing ▼, motion image playback will stop.

[Fast forwarding/Fast rewinding]

During motion image playback, continue pressing ◀▶.

▶: Fast forward

◀: Fast rewind

- When releasing the button, it turns to normal playback.

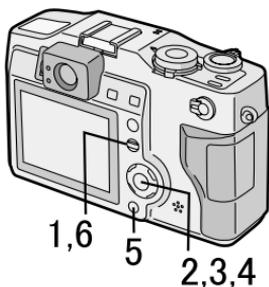
[To pause]

Press ▲ during motion image playback.

Press ▲ again to resume playback.

- When playing back motion images that have been recorded with other equipments, the quality of images may be deteriorated and images may not be played back.
- The file format that can be played back with this camera is QuickTime Motion JPEG.
- It could happen that the Motion JPEG file recorded by PC or other equipments cannot be played back with this camera.
- When using a wide capacity memory card, it could happen that fast rewinding may be slower.

Deleting Images



2,3



(A)



(B)



Images recorded on the card can be deleted.

Once deleted, images cannot be recovered.

[Preparations]

- Set the operational mode dial to playback [▶].
- When an image is protected, it cannot be deleted. Cancel the protect setting. (P72)

[Delete single image] (A)

- 1 Press the [MENU] button.
- 2 Press ▲/▼ to select [DELETE] and press ▶.
- 3 Select [SINGLE] and press ▶.
- 4 Press ◀/▶ to select the image to be deleted.
- 5 Press the [REVIEW/SET] button.
 - The selected image is deleted.
- 6 Press the [MENU] button twice.
 - The menu will disappear.

[Delete multi images] (B)

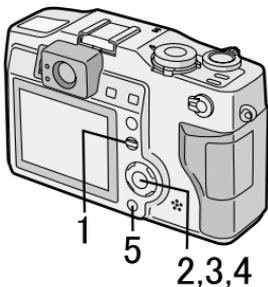
It is possible to delete up to 50 images all at once.

- 1 Press the [MENU] button.
- 2 Press ▲/▼ to select [DELETE] and then press ▶.
- 3 Press ▲/▼ to select [MULTI] and then press ▶.
- 4 Press ◀/▶ to select the images to be deleted and then press ▲ to confirm this setting.
 - The selected images are displayed with [🗑️]. Pressing ▼, the setting is cancelled.
- 5 Press the [REVIEW/SET] button.
 - The selected multi images are deleted all at once.
- 6 Press the [MENU] button twice.
 - The menu will disappear.

Deleting Images (Continued)

[Delete all images]

Once deleted, images cannot be recovered.



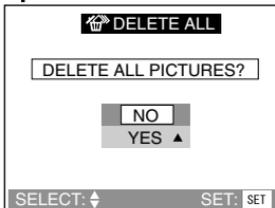
- 1 Press the [MENU] button.
- 2 Press ▲/▼ to select [DELETE] and then press ►.
- 3 Press ▲/▼ to select [ALL] and then press ►.
- 4 When this message is displayed "DELETE ALL PICTURES?", press ▲/▼ to select [YES].
- 5 Press the [REVIEW/SET] button.

2,3

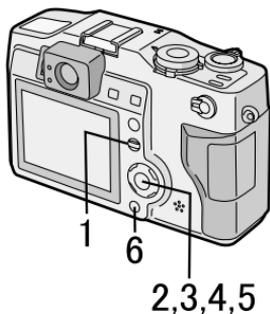


- All images are deleted.

4



Writing the Print Information in the Card (DPOF Setting)



It is possible to write information (DPOF data) on the card about the images that you want to print and the number of sheets.

DPOF is an abbreviation of Digital Print Order Format. With the DPOF corresponding system, you can add print information to the images on the memory card.

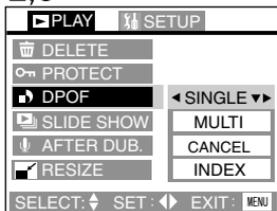
[Preparation]

- Set the operational mode dial to playback [].

[Single copy setting]

- 1 Press the [MENU] button.
- 2 Press $\blacktriangle/\blacktriangledown$ to select [DPOF] and then press \blacktriangleright .
- 3 Select [SINGLE] and then press \blacktriangleright .
- 4 Press $\blacktriangleleft/\blacktriangleright$ to select 1 image.
- 5 Press the [REVIEW/SET] button.
 - If the DPOF has already been set and only the number of sheets is changed, skip step 5.
- 6 Press $\blacktriangle/\blacktriangledown$ to select the number of sheets.
 - The number of sheets can be set from 1 to 99.
- 7 Press the [MENU] button twice.
 - The menu will disappear.

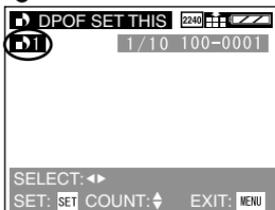
2,3



4



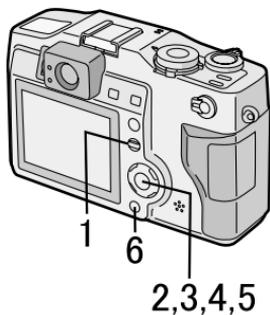
6



[To cancel]

Operate the steps 1-5, 7 of the [Single copy setting].

Writing the Print Information in the Card (DPOF Setting) (Continued)



[Multi copy setting/to cancel]

It is possible to set up to 50 images all at once.

- 1 Press the [MENU] button.
- 2 Press ▲/▼ to select [DPOF] and then press ►.
- 3 Press ▲/▼ to select [MULTI] and then press ►.
- 4 Press ◀/▶ to select the image.
- 5 Press ▲/▼ to select the number of sheets to be printed.

- The number of sheets can be set from 1 to 99.

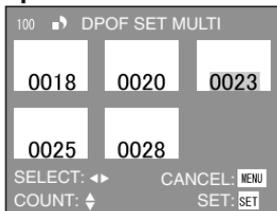
- 6 Repeat steps 4 and 5, and at the end press the [REVIEW/SET] button.

- The DPOF setting of multi images is set at once.

2,3

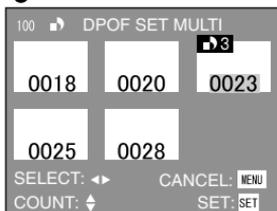


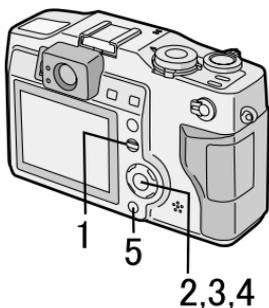
4



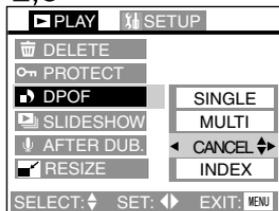
- If the file is not based on the DCF standard, the DPOF setting cannot be set.
- When setting DPOF by this camera for images that have been set to slide show by other equipments, the slide show settings are overwritten by DPOF slide show (P73).
- Images that is set by DPOF with the supplied software [SD Viewer for DSC] recorded on the CD-ROM cannot be played back in DPOF slide show with this camera. Set DPOF by this camera.

5

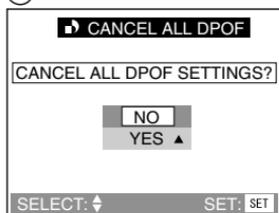




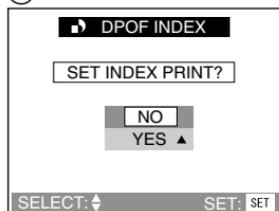
2,3



(A)



(B)



[To cancel all settings] (A)

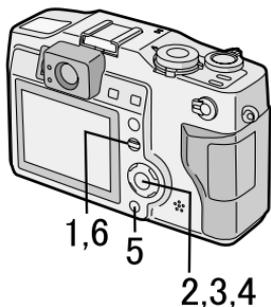
- 1 Press the [MENU] button.
- 2 Press ▲/▼ to select [DPOF] and then press ►.
- 3 Press ▲/▼ to select [CANCEL] and then press ►.
- 4 When this message is displayed "CANCEL ALL DPOF SETTINGS?", press ▲/▼ to select [YES].
- 5 Press the [REVIEW/SET] button.
 - All DPOF settings are cancelled.

[Index setting/to cancel] (B)

- 1 Press the [MENU] button.
- 2 Press ▲/▼ to select [DPOF] and then press ►.
- 3 Press ▲/▼ to select [INDEX] and then press ►.
- 4 When this message is displayed "SET INDEX PRINT?", press ▲/▼ to select [YES].
 - When the index is already set, press ▲/▼ to select [SET] or [CANCEL].
- 5 Press the [REVIEW/SET] button.
 - All images are set/cancelled.

Protecting Images on the Card

It is possible to protect the important images recorded on the card from accidental erasure.



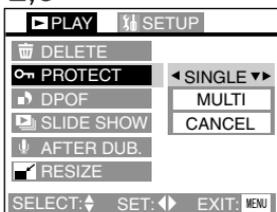
[Preparation]

- Set the operational mode dial to playback [▶].

[Single setting/to cancel]

- 1 Press the [MENU] button.
- 2 Press ▲/▼ to select [PROTECT] and then press ▶.
- 3 Select [SINGLE] and then press ▶.
- 4 Press ◀/▶ to select 1 image.
- 5 Press the [REVIEW/SET] button.
- 6 Press the [MENU] button twice.
 - The menu will disappear.

2,3

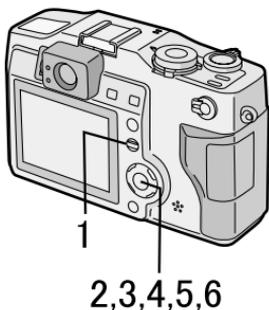


[Multi setting/to cancel, To cancel all settings]

- 1 The method is the same as in "Writing the Print Information in the Card (DPOF Setting)". (P69-P71)

- Even if an image is protected, it will be erased in case of formatting.
- When trying to delete a protected file, these messages are displayed "THIS PICTURE IS PROTECTED" or "SOME PICTURES CAN'T BE DELETED". If you want to delete this file, cancel the protect setting.
- The protect setting is effective only in this camera.

Playing Back with Slide Show (Automatic Playback)



All pictures selected in the card can be played back one-by-one automatically.

[Preparation]

- Set the operational mode dial to playback [▶].

- 1 Press the [MENU] button.
- 2 Press ▲/▼ to select [SLIDE SHOW] and then press ▶.
- 3 Press ▲/▼ to select [ALL]/[DPOF] and then press ▶.

- ALL: for playing back all pictures
- DPOF: for playing back the DPOF set pictures

- 4 Press ▲/▼/◀/▶ to set [DURATION] and [AUDIO].
- DURATION: it can be set among 1, 2, 3 and 5 seconds.
 - AUDIO: it can be set to [ON] or [OFF]. By setting it to [ON], it is possible to play back the still pictures with audio in slide show.

- 5 Press ▲/▼ to select [SLIDE SHOW].

- 6 Press ▶.
- The slide show starts.
 - By pressing the [MENU] button, it stops.

- In motion image playback, slide show is not available.
- When editing with the supplied software [SD Viewer for DSC] recorded on the CD-ROM, you can play back in SD slide show with this camera. Read P91.
- When setting DPOF by this camera for images that have been set to slide show by other equipments, the slide show settings are overwritten by DPOF slide show.
- Images that are set DPOF with the supplied software [SD Viewer for DSC] recorded on the CD-ROM cannot be played back in DPOF slide show with this camera. Set DPOF by this camera.

2,3



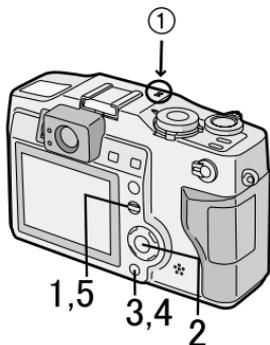
4



6



Adding Audio to Recorded Pictures (Audio Dubbing)



It is possible to add a 10-second narration to a recorded picture.

[Preparations]

- Set the operational mode dial to playback [▶].
- Select the picture to which you want to add audio.

2



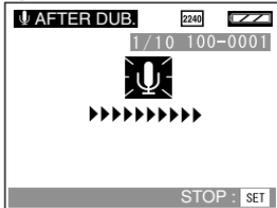
- 1 Press the [MENU] button.
- 2 Press ▲/▼ to select [AFTER DUB.] and then press ▶.

3



- 3 By pressing the [REVIEW/SET] button, audio recording starts. (① Microphone)
 - When audio has been already recorded, after the audio dubbing the original audio is overwritten.
 - When audio has been already recorded, this message is displayed "OVERWRITE AUDIO DATA?". Then pressing ▲/▼ to select [YES] and after pressing the [REVIEW/SET] button, the audio recording starts.

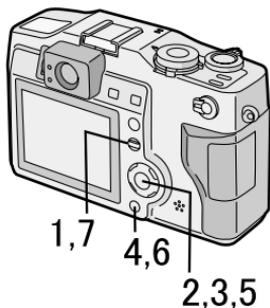
4



- 4 By pressing the [REVIEW/SET] button, the audio recording stops. Even if you do not press the [REVIEW/SET] button, after about 10 seconds the audio recording stops automatically.
- 5 Press the [MENU] button twice.
 - The menu will disappear.

- The audio dubbing cannot be used with pictures that the quality is set to TIFF [TIFF].
- The audio dubbing cannot be used with motion images.

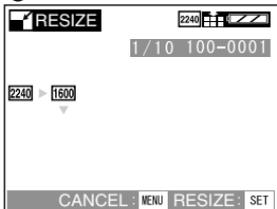
Resize the Recorded Pictures



2



3



It is possible to reduce the recorded picture size. We recommend that you use this setting in particular if you want to reduce the volume of the picture data in order to use it as an attachment on e-mail or in a web site.

[Preparations]

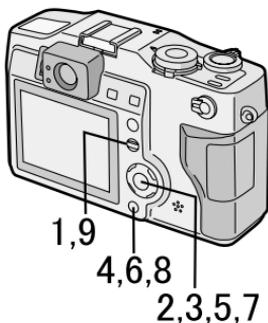
- Set the operational mode dial to playback [▶].
- Play back the picture for which you want to change the size. (However, for pictures with a size lower than [640 × 480] or with an aspect ratio that is not 4:3, it is not possible to resize)

- 1 Press the [MENU] button.
- 2 Press ▲/▼ to select [RESIZE] and then press ▶.
- 3 Press ▲/▼ to select the size.
 - **1600** : 1600 × 1200
 - **1120** : 1120 × 840
 - **640** : 640 × 480
- 4 Press the [REVIEW/SET] button to set the size.
- 5 When this message is displayed "DELETE ORIGINAL PICTURE?", press ▲/▼ to select [YES] or [NO].
- 6 Press the [REVIEW/SET] button.
- 7 Press the [MENU] button.
 - The menu will disappear.

- It may not be possible to resize the pictures recorded with other equipments.
- Motion images or TIFF pictures cannot be resized or pictures cannot be enlarged.

Trimming the Recorded Pictures

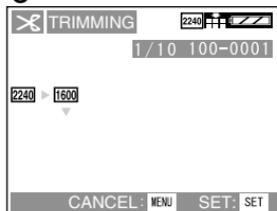
It is possible to cut off the unnecessary parts of the picture (trimming), and enlarge the remainder.



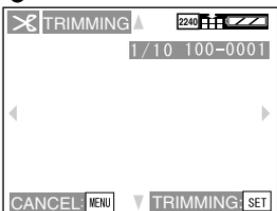
2



3



5



[Preparations]

- Set the operational mode dial to playback [▶].
- Select the picture you want to trim.

1 Press the [MENU] button.

2 Press ▲/▼ to select [TRIMMING] and then press ▶.

3 Press ▲/▼ to select the size.

- **1600** : 1600 × 1200
- **1120** : 1120 × 840
- **640** : 640 × 480

4 Press the [REVIEW/SET] button.

5 Press ▲/▼/◀/▶ to shift pictures.

6 Press the [REVIEW/SET] button to set.

7 When this message is displayed "DELETE ORIGINAL PICTURE?", press ▲/▼ to select [YES] or [NO].

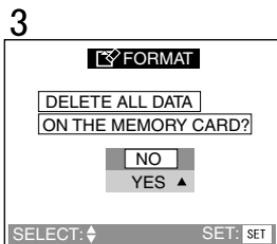
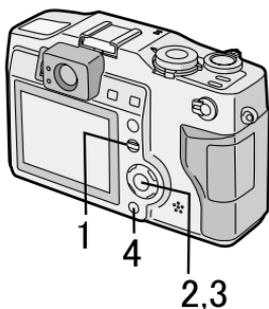
8 Press the [REVIEW/SET] button.

9 Press the [MENU] button.
• The menu will disappear.

Trimming the Recorded Pictures (Continued)

- You cannot operate trimming on pictures recorded with other equipments.
- Motion images or TIFF pictures cannot be trimmed and enlarged.
- Trimming is not possible for pictures with audio or pictures with a size of [640 × 480] pixels.

Formatting the Card



Usually, it is not necessary to format the card (initializing). Format the card when this message is displayed “MEMORY CARD ERROR”.

[Preparation]

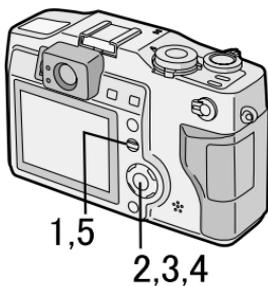
- Set the operational mode dial to playback [▶].

- 1 Press the [MENU] button.
- 2 Press ▲/▼ to select [FORMAT] and then press ▶.
- 3 When this message is displayed “DELETE ALL DATA ON THE MEMORY CARD?”, press ▲/▼ to select [YES].
- 4 Press the [REVIEW/SET] button.

- The card is formatted.
- After formatting, recorded images and any other data cannot be recovered.

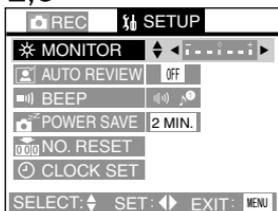
- During formatting, do not turn the power off.
- When the card is formatted by PC or other equipments, format the card on the camera again.
- If the card cannot be formatted, consult the dealer.

Adjusting the LCD Monitor Brightness



- 1 Press the [MENU] button.
 - 2 Press ► to open the setup menu.
 - 3 Press ▲/▼ to select [MONITOR].
 - 4 Press ◀/▶ to adjust the brightness.
 - 5 Press the [MENU] button.
- The menu will disappear.

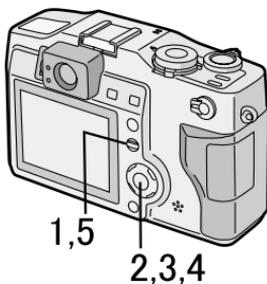
2,3



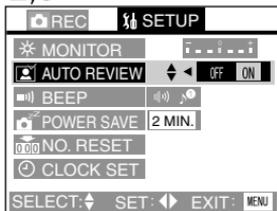
- When turning the power off, the LCD monitor brightness is returned.

Using the Auto Review

Recording with the auto review set to [ON], the recorded picture is automatically displayed on the LCD monitor for about 2 seconds.



2,3



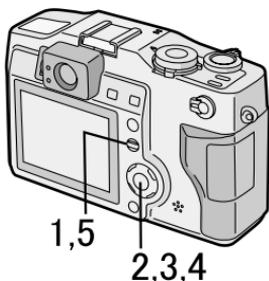
[Preparation]

Set the operational mode dial to REC mode (single mode [□] or burst mode [□]).

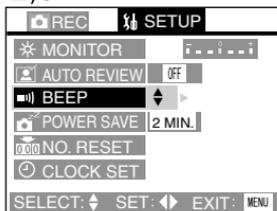
- 1 Press the [MENU] button.
 - 2 Press ► to open the setup menu.
 - 3 Press ▲/▼ to select [AUTO REVIEW].
 - 4 Press ◀/▶ to select [ON].
 - 5 Press the [MENU] button.
- The menu will disappear.

- In burst mode [□], auto bracket or focus bracket, only the first recorded picture is displayed.
- Although setting the auto review to [ON], it is not available in motion image mode [□].
- When recording in burst mode [□], auto bracket, focus bracket, TIFF or still picture with audio modes, the auto review is set to [ON].

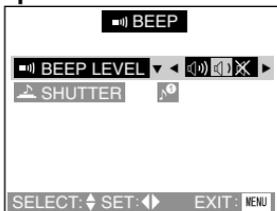
Setting up the Operational Sound



2,3



4



It is possible to set the electronic shutter sound when the shutter button is pressed all the way and set the sound volume when the shutter button is pressed halfway and when the menu operations are done.

■ When the operational mode dial is set to REC mode (single mode [] or burst mode [])

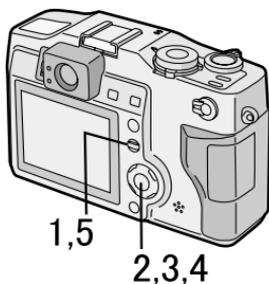
- 1 Press the [MENU] button.
- 2 Press ► to open the setup menu.
- 3 Press ▲/▼ to select [BEEP] and then press ►.
- 4 Pressing ▲/▼/◀/▶, set [BEEP LEVEL] and [SHUTTER].
- 5 Press the [MENU] button twice.
 - The menu will disappear.

■ When the operational mode dial is set to playback []

- 1 Press the [MENU] button.
- 2 Press ► to open the setup menu.
- 3 Press ▲/▼ to select [BEEP].
- 4 Press ◀/▶ to adjust the operational sound volume.
- 5 Press the [MENU] button.
 - The menu will disappear.

Setting up the Power Save Mode

When setting this mode, the camera, if it is not operated for certain amount time, it is automatically turned off.



2,3



- 1 Press the [MENU] button.
- 2 Press ► to open the setup menu.
- 3 Press ▲/▼ to select [POWER SAVE].
- 4 Press ◀/▶ to choose the setting time.

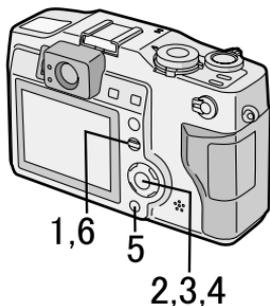
- You can choose among [2 MIN.], [5 MIN.] and [10 MIN.].
- If selecting [OFF], the power is not turned off automatically.

- 5 Press the [MENU] button.

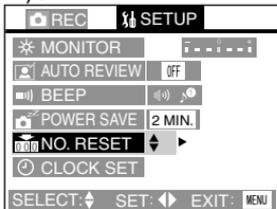
- The menu will disappear.

- If you want to cancel the power save mode, turn the power switch to [ON] again after turning it to [OFF], or press the shutter button.
- When using the AC adaptor, the power save mode is not available.
- In power save mode, or if the battery charge is low and you have to charge it, turn the camera off and connect the AC adaptor to the camera DC IN socket. If connecting the AC adaptor when the power switch is set to [ON], the camera may not function correctly.

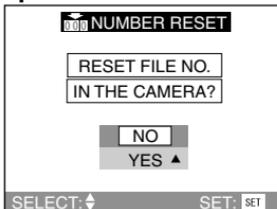
Resetting the File Number



2,3



4



As the file numbers are recorded sequentially by the camera side, when you use some cards, it could happen that the file numbers on your cards are not in order. Use this function when you insert a new card and you want to start recording from the file number 0001, or when you want to set the file numbers of the recorded cards in consecutive numbers.

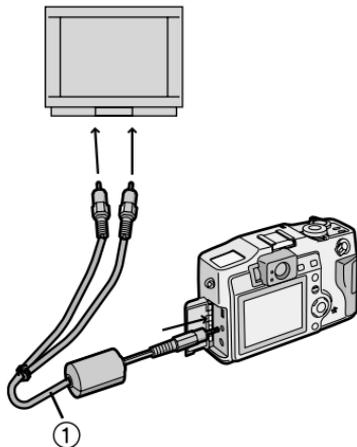
[Preparation]

Set the operational mode dial to REC mode (single mode [□] or burst mode [□]).

- 1 Press the [MENU] button.
- 2 Press ► to open the setup menu.
- 3 Press ▲/▼ to select [NO. RESET] and then press ►.
- 4 When this message is displayed "RESET FILE NO. IN THE CAMERA?", press ▲/▼ to select [YES].
- 5 Press the [REVIEW/SET] button to set.
- 6 Press the [MENU] button.
 - The menu will disappear.

Playing Back Images with TV Monitor

By connecting the camera to a television via the supplied A/V cable ①, it is possible to view and play back the recorded images.



Yellow: to the video in socket
White: to the audio in socket

[Preparation]

- Turn the camera and the television off.

- 1 Connect the A/V cable to the A/V OUT socket of the camera.
- 2 Connect the A/V cable to the video in and the audio in sockets of the TV.
- 3 Turn the television on and select external input.
- 4 Turn the camera on and then set the operational mode dial to playback [▶].

- The image is displayed on the television.

■ Viewing images in other countries

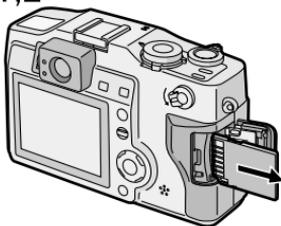
When setting [VIDEO OUT] on the menu, you can view images on the TV in other countries (regions) which is used NTSC or PAL system.

- Do not use any other cables except the supplied one.
- Read the TV operating instructions too.

After Use

After using the camera and after following steps, it is recommended to place it in the optional soft case, in order to preserve it.

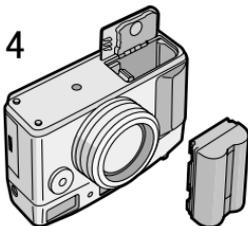
1,2



- 1 Turn the power switch to [OFF]. (P19)
- 2 Eject the card. (P17)
- 3 Remove the monitor hood. (P21)
- 4 Remove the battery. (P14)

- The date back-up disappears after about 5 hours.

4



- 5 Attach the lens cap. (P20)

Connecting to PC

[Preparation]

Only if using Windows® 98 or Windows® 98 Second Edition, start the supplied CD from PC and install the USB driver.

- 1 Connect the camera to PC via the supplied USB cable.
- 2 After inserting the memory card into the camera, set the operational mode dial to playback [▶] and turn the power switch to [ON].

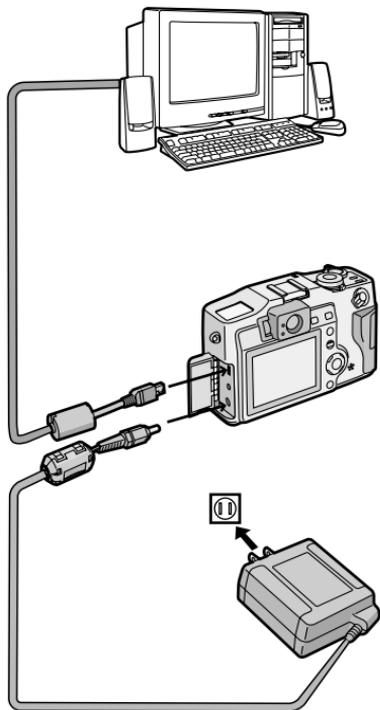
[Windows]

The drive is shown on the [My computer] folder.

- If it is the first time you are connecting the camera to PC, the required driver is installed automatically in order to let the camera be recognized by the Windows plug and play, then it is shown on the [My computer] folder.

[Macintosh]

The drive is shown on the screen.

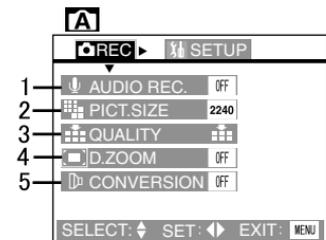


- When connecting to PC it is recommended to use the AC adaptor for the power source.
- For further information, read the supplied operating instructions for USB connection kit.

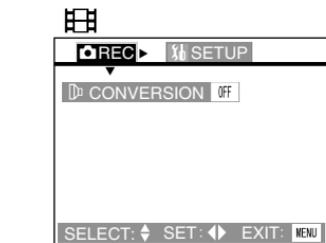
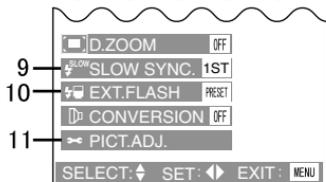
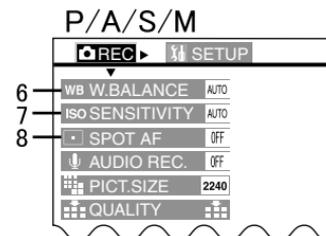
The Menu Items

REC mode menu

- For items without number, refer to those with the same name.

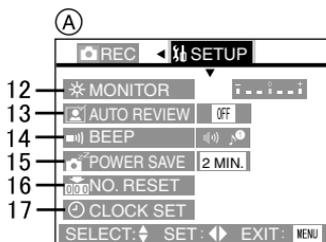


- 1 AUDIO REC. (P36)
- 2 PICT. SIZE (P37)
- 3 QUALITY (P38)
- 4 D. ZOOM (P32)
- 5 CONVERSION (P58)
- 6 W.BALANCE (P50)
- 7 SENSITIVITY (P52)
- 8 SPOT AF (P53)
- 9 SLOW SYNC. (P54)
- 10 EXT. FLASH (P60)
- 11 PICT. ADJ. (P49)



REC mode setup menu (A)

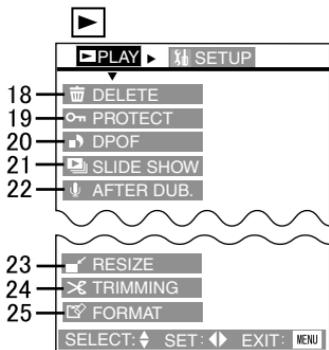
- 12 MONITOR (P78)
- 13 AUTO REVIEW (P79)
- 14 BEEP (P80)
- 15 POWER SAVE (P81)
- 16 NO. RESET (P82)
- 17 CLOCK SET (P27)



The Menu Items (Continued)

Playback mode menu

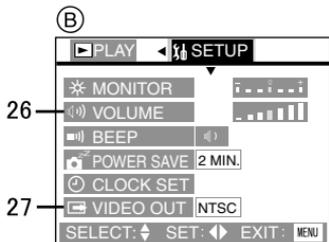
- For items without number, refer to those with the same name.



- 18 DELETE (P67)
- 19 PROTECT (P72)
- 20 DPOF (P69)
- 21 SLIDE SHOW (P73)
- 22 AFTER DUB. (P74)
- 23 RESIZE (P75)
- 24 TRIMMING (P76)
- 25 FORMAT (P77)

Playback mode setup menu **(B)**

- 26 VOLUME (P63)
- 27 VIDEO OUT (P83)



Cautions for Use

■ Cautions for Use

Keep the digital camera away from magnetized equipment (such as a microwave oven, TV, video game equipment, etc.).

- If you use the digital camera on or near a TV, images and sounds may be disturbed due to electromagnetic wave radiation.
- Do not use the digital camera near a cell phone because doing so may cause noise to adversely affect the images and sounds.
- By strong magnetic fields created by speakers or large motors, recorded data may be damaged, or images may be distorted.
- Electromagnetic wave radiation generated by a microprocessor may adversely affect the digital camera, causing the disturbance of images and sounds.
- If the digital camera is affected by magnetically charged equipment and does not function properly, turn the camera off and detach the battery or AC adaptor and then connect the battery or AC adaptor again. Thereafter, turn the camera on.

Do not use the digital camera near radio transmitters or high-voltage lines.

- If you record near radio transmitters or high-voltage lines, recorded images or sounds may be adversely affected.

Do not spray insecticides or volatile chemicals onto the digital camera.

- If the digital camera is sprayed with such chemicals, the camera body

may be deformed and the surface finish may peel off.

- Do not keep rubber or plastic products in contact with the digital camera for a long period of time.

When you use the digital camera on a beach or similar place, do not let sand or fine dust get into the camera.

- Sand or dust may damage the digital camera or card. (Care should be taken when inserting and removing the card)

When you use your digital camera in a rainy or snowy day or on a beach, make sure that no water enters inside the digital camera.

- Water may cause the digital camera or card to malfunction. (Irreparable failure may occur)
- If sea water splashes onto the digital camera, wet a soft cloth with tap water, wring it well, and use it to wipe the camera body carefully. Then, wipe it again thoroughly with a soft dry cloth.

Do not use the digital camera for surveillance purpose or other business use.

- If you use the digital camera for a long period of time, the internal temperature increases and, consequently, this may cause malfunction.
- The digital camera is not intended for business use.

Do not use benzine, thinner or alcohol for cleaning the digital camera.

- The camera body may be deformed and the surface finish may peel off.

- Before cleaning the camera, detach the battery or pull out the AC adaptor from the electrical outlet.
- Wipe the digital camera with a soft dry cloth. To remove stubborn stains, wipe with a cloth that is soaked in a detergent diluted with water and afterward finish wiping with a dry cloth.
- For storing or transporting the digital camera, place it in a bag or case lined with soft pads so as to prevent the coating on the camera body from being worn.

After use, be sure to take the card out, and detach the battery or pull out the AC adaptor from the electrical outlet.

- If the battery is left on the digital camera for a long time, the voltage drops excessively, and the battery will not function even after it is recharged.

■ Optimal Use of the Battery

The battery is a rechargeable lithium ion battery. Its ability to generate power is based upon the chemical reaction that takes place inside it. This reaction is susceptible to the surrounding temperature and humidity, and, if the temperature is too high or too low, the operating time of the battery becomes shorter.

Be sure to detach the battery after use.

Be sure to detach the battery from the digital camera. (If it is left attached to the digital camera, a minute amount of current is consumed even when the digital camera power is off) If the battery is left attached to the digital camera for a long time, discharge

takes place. The battery may become unusable after it is charged.

Dispose of an unusable battery.

- The battery has a limited life.
- Do not throw the battery into fire because it may cause an explosion.

Always keep the terminals of the battery clean.

Prevent the terminals from getting clogged with dirt, dust, or other substances.

If you drop the battery accidentally, check to see if the battery body and terminals are deformed. Attaching a deformed battery to the digital camera may damage the camera.

■ Condensation

When condensation has taken place:

Set the power switch to [OFF] and leave the digital camera in this condition for about 1 hour. When the camera becomes close to the ambient temperature, the fog disappears naturally.

■ Cautions for Storage

Before storing the digital camera, take the card out and detach the battery.

Store all the components in a dry place with a relatively stable temperature.

(Recommended temperature: 15 to 25 °C, Recommended humidity:40 to 60 %)

Digital camera

- Wrap it with a soft cloth to prevent dust from getting into the camera.
- Do not leave the camera in places that expose it to high temperature.

Battery

- Extremely high or low temperatures will shorten the life of the battery.
- If the battery is kept in smoky or dusty places, the terminal may rust and cause malfunctions.
- **Do not allow the battery terminals to come in contact with metal objects (such as necklaces, hairpins, etc.). This can result in a short circuit or heat generation and, if you touch the battery in this condition, you may be badly burned.**
- Store the battery in a completely discharged state. To store the battery for a long period of time, we recommend you charge it once every year and store it again after you completely use up the charged capacity.

Card

- When the card is being read, do not remove the card, turn off the power, or subject it to vibration or impact.
- Do not leave the card in places where there is high temperature or direct sunlight, or where electromagnetic waves or static electricity are easily generated.
- Do not bend or drop the card. The card or the recorded content may be damaged.
- After use, be sure to remove the card from the digital camera.
- Do not touch the terminals on the back of the card with your fingers. Do not allow dirt, dust or water to enter it.

LCD Monitor/Viewfinder/ Lens Ring

LCD monitor

- In a place with drastic temperature changes, condensation may form

on the LCD monitor. Wipe it with soft dry cloth.

- If the digital camera is extremely cold when you turn the power on, the image on the LCD monitor is slightly darker than usual at first. However, as the internal temperature increases, it goes back to the normal brightness.

.....
Extremely high precision technology is employed to produce the LCD monitor screen featuring a total of approximately 110,000 pixels. The result is more than 99.99% effective pixels with a mere 0.01% of the pixels inactive or always lit. However, this is not a malfunction and does not affect the recorded picture.
.....

Viewfinder

- Do not direct the viewfinder or lens to the sun. Internal components may be seriously damaged.

Lens ring

- Do not attach other conversion lenses on the lens ring; there is no mount to be used for the attachment.
- When you want to attach the tele conversion lens (DMW-LT52; optional) or wide conversion lens (DMW-LW52; optional), first of all, turn the lens ring counterclockwise. If the MC protector (DMW-LMC52; optional) is used, the lens ring can be mounted on the filter.
- If you push the zoom lever toward W during recording with the filter or conversion lens attached to the digital camera, 4 corners of the image may become dark (vignetting). For details, refer to the operating instructions of your accessories.

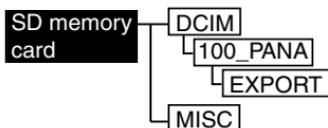
- Be sure to keep the lens ring attached to the digital camera so as to shut out unnecessary light.

■ SD Slide Show

If setting the SD slide show with the [SD Viewer for DSC] which is in the supplied CD-ROM, when playing back, the message “START SD SLIDE SHOW?” is displayed. Press ▲/▼ to select [YES] and press the REVIEW/SET button to start the SD slide show.

■ Folder Composition

When the memory card where data are recorded is inserted into a PC, the folders shown below will be displayed.



- In the 100_PANA folder it is possible to record up to 999 images.
- In the MISC folder it is possible to record the files that have been set with DPOF settings.

Warning Indication

[NO MEMORY CARD]
Insert the memory card.

[THIS MEMORY CARD IS PROTECTED]
Cancel the memory card lock.

[MEMORY CARD DOOR OPEN]
Close the memory card door.

[NO VALID IMAGE TO PLAY]
Carry out playback after recording or after inserting the memory card where there is the recorded image.

[MEMORY CARD FULL]
Insert a new memory card or delete the useless data.

[REMOVE LENS CAP AND PRESS SET BUTTON]
Remove the lens cap and then press the [REVIEW/SET] button.

[MEMORY CARD ERROR]
Failed access to memory card.
Insert the card again.

[READ ERROR]
Data reading error.
Play it back again.

[WRITE ERROR]
Data writing error.
Take out the card, or turn the camera [ON] again after once turning it [OFF].
Or the card may be destroyed.

[THIS PICTURE IS PROTECTED]
After cancelling the protect setting, you can delete or overwrite the image.

[THIS PICTURE CAN'T BE DELETED] / [SOME PICTURES CAN'T BE DELETED]
After cancelling the protect setting, you can delete the image.

[NUMBER OF PRINT IS OVER]
You have exceeded the number of images that can be set at once, with multi deleting, protect and DPOF settings.

[CAN'T BE SET ON THIS PICTURE] / [CAN'T BE SET ON SOME PICTURES]
If the image is not based on the DCF standard, it is not possible to set the DPOF.

[MEMORY CARD ERROR
FORMAT THIS CARD?]
The format of this card cannot be recognized by the camera. Format this again with the camera.

Troubleshooting

1: The power does not turn on.

- 1-1: Are the battery and the AC adaptor correctly connected?
Check the connection.
- 1-2: Is the battery sufficiently charged? Use a battery that has been sufficiently charged.

2: As the power is turned on, it turns off immediately.

- 2-1: Is the battery charge insufficient to operate the camera? Charge the battery or replace it with charged one.
- 2-2: Has condensation occurred?
Carrying the digital camera from a cold place to a warm place could cause condensation form inside the camera. Wait until condensation disappears.

3: The image cannot be recorded.

- 3-1: Is the memory card inside?
- 3-2: The operational mode dial is not set to REC mode.
- 3-3: There is no memory capacity left on the card. Before recording, delete some images.

4: The image is not displayed on the LCD monitor.

- 4: Is the LCD monitor set to off?

5: The LCD monitor is too bright or dark.

- 5: Adjust the brightness of the LCD monitor.

6: The display or images on the LCD monitor are not focused.

- 6: Set the focus mode correctly.

7: The flash does not fire.

- 7: The flash mode is set to forced OFF. Change the flash mode.

8: The image cannot playback.

- 8-1: Is the memory card inside?
- 8-2: There is no image in the memory card.
- 8-3: The operational mode dial is not set to playback [].

9: The image is not displayed on the television.

- 9-1: Is the camera correctly connected with the TV? Check it.
- 9-2: Set the TV to video input mode.

10: When connecting to PC, images cannot be transferred.

- 10: Is the camera correctly connected with PC? Check it.

Specifications

Digital Camera

information for your safety

Power Source:	DC 9 V
Power Consumption:	4.3 W (When recording with LCD Monitor to on) 2.7 W (When recording with LCD Monitor to off) 3.3 W (When playing back)
Effective number of pixels	3.9 M
Image sensor	1/1.76 inch CCD, Total pixel number 4,010,000 Complementary color filter
Lens	Optical $\times 3$ zoom, $f=7-21$ mm (35 mm film camera equivalent: 33-100 mm)/F2.0-2.5
Digital zoom	Max $\times 2$ (variable)
Focus	AF Sensor, Contrast sensor combined use Auto/Macro/Manual (Assist indication) Normal/Spot AF change
Recording range	Auto: 30 cm - ∞ , Macro: 6 cm (Wide)/ 20 cm (Tele) - 50 cm
Shutter system	Electronic shutter + Mechanical shutter
Burst recording	4 frames/second, Max 8 frames (standard)/ 4 frames (fine)
Motion image recording	320 \times 240 (with audio)
ISO sensitivity	AUTO/100/200/400
Shutter speed	AUTO mode/Program AE (ISO AUTO mode): 1/8 - 1/1,000 Program AE (ISO set)/Aperture-priority AE: 1 - 1/1,000 Shutter-priority AE/Manual exposure: 8 - 1/1,000 Motion image mode: 1/30 - 1/1,000
White balance	AUTO/Daylight/Cloudy/Halogen/Fluorescent/ Flash/White set
Exposure (AE)	Program AE (P), Aperture-priority AE (A), Shutter-priority AE (S), Manual exposure (M) Exposure compensation (0.25 EV Step, -2 - +2 EV)
Metering mode	Multi/Center weighted/Spot
LCD monitor	2.5 inch low-temperature polycrystalline TFT LCD (200,000 pixels)
Optical finder	Real-image zoom finder (with diopter adjustment) (-2.8 - 0.8 diopter, field of view ratio 82 %)

Flash**Built-in flash**

recording range: (Wide) approx. 10 cm - 4.5 m

(Tele) approx. 20 cm - 3.5 m

AUTO, AUTO/Red-eye reduction, Forced ON, Forced ON/Red-eye reduction, Slow sync./Red-eye reduction, Forced OFF, 2nd curtain/1st curtain, Slow synchro change, Flash adjustment, External flash (hot shoe) PRESET/MANUAL Selection

Microphone

Monaural

Speaker

Monaural

Recording media

SD Memory Card/MultiMediaCard

Recording size

2240 × 1680, 1600 × 1200, 1120 × 840,
640 × 480, 320 × 240 (Motion image mode)

Quality

TIFF/Fine/Standard

Recording file format

Still Picture

JPEG (Design rule for Camera File system)/TIFF
(RGB), DPOF corresponding

Still picture with audio

JPEG (Design rule for Camera File system)
+ 640 × 480 QuickTime Motion JPEG (still picture
with audio)

Motion image

QuickTime Motion JPEG (motion image with audio)

Interface

Digital

USB

Analog video/audio

NTSC/PAL Composite/Audio line output (monaural)

Terminal

USB

5 pin Mini USB

Analog video/audio

Φ 2.5 mm jack

DC IN

EIAJ type 3 jack

Dimensions (W × H × D)

5.01 × 3.23 × 2.50 inch / 127.5 × 82 × 63.4 mm
(excluding the projection part)

Weight

12.7 oz / 360 g (excluding memory card and battery)
15.87 oz / 450 g (with memory card and battery)

AC adaptor (Panasonic DE-877B) information for your safety

Input	USA&CANADA	120 V, ~ 60 Hz, 0.3 A
	Foreign	110 V-240 V, ~ 50/60 Hz, 0.3 A
Output		9.0 V --- 1.0 A

**Battery pack (lithium-ion)
(Panasonic CGR-S602A)**

information for your safety

Voltage/capacity	7.2 V, 1400 mAh
------------------	-----------------

Digital Camera Accessory System

Accessory#	Figure	Description
CGR-S602A/1B		Lithium Ion Battery
DMW-FL28		External Flash
DMW-LA1		Conversion Lens Adaptor
DMW-LW52		Wide Conversion Lens
DMW-LT52		Tele Conversion Lens
DMW-LC52		Close-up Lens
DMW-LMC52		MC Protector
RP-SDH512 RP-SDH256 RP-SDH128 RP-SD064 RP-SD032 RP-SD016 RP-SD008		512 MB SD Memory Card 256 MB SD Memory Card 128 MB SD Memory Card 64 MB SD Memory Card 32 MB SD Memory Card 16 MB SD Memory Card 8 MB SD Memory Card
BN-SDCAPU/1B		SD USB Reader/Writer (compatible with MultiMediaCard)
BN-SDABPU/1B		SD PC Card Adaptor (compatible with MultiMediaCard)

*Please refer to page P16, concerning the battery charging time and available recording time.

*NOTE: Accessories and/or model numbers may vary by country. Please consult your local dealer.

Digital Camera Accessory Order Form

(For USA Customers)

Please photocopy this form when placing an order.

1. Digital Camera Model # _____

2. Items Ordered

Accessory #	Description	Price Each	Quantity	Total Price
Subtotal				
Your State & Local Sales Tax				
Shipping & Handling				6.95
Total Enclosed				

3. Method of payment (check one)

- Check of Money Order enclosed (NO C.O.D.SHIPMENTS)
- VISA Credit Card # _____
- MasterCard Expiration Date _____
- Discover Customer Signature _____

Make Check or Money Order to: PANASONIC ACCESSORIES

(Please do not send cash)

4. Shipping information (UPS delivery requires complete street address)

Ship To:

Mr.

Mrs.

Ms.

First _____ Last _____

Phone#:

Day () _____

Street Address _____

Night () _____

City _____ State _____ Zip _____

TO OBTAIN ANY OF OUR DIGITAL CAMERA ACCESSORIES YOU CAN DO ANY OF THE FOLLOWING:

VISIT YOUR LOCAL PANASONIC DEALER

OR

CALL PANASONIC'S ACCESSORY ORDER LINE AT 1-800-332-5368

[6 AM-5 PM M-F, 6 AM-10:30 AM SAT, PACIFIC TIME]

OR

MAIL THIS ORDER TO: PANASONIC SERVICES COMPANY ACCESSORY ORDER OFFICE

20421 84th Avenue South Kent, WA. 98032

In CANADA, please contact your local Dealer for more information on Accessories.

Request for Service Notice

Please photocopy this form when making a request for service notice.

In the unlikely event this product needs service.

Request for Service Notice: (USA Only)

- Please include your **proof of purchase**.
(Failure to do so will delay your repair.)
 - To further speed your repair, please provide an explanation of what wrong with the unit and any symptom it is exhibiting.
-
-
-
-

Mail this completed form and your Proof of Purchase along with your unit to:

Panasonic Services Company
1705 N. Randall Road
Elgin, IL. 60123-7847
Attn: Digital Camera Repair

Please write the displayed above Self Diagnostic number here.

Limited Warranty

(For USA Customers)

PANASONIC CONSUMER
ELECTRONICS COMPANY,
DIVISION OF MATSUSHITA
ELECTRIC CORPORATION OF
AMERICA, One Panasonic Way
Secaucus, New Jersey 07094

PANASONIC SALES COMPANY,
DIVISION OF MATSUSHITA
ELECTRIC OF PUERTO RICO, INC.
Ave. 65 de Infanteria, Km. 9.5 San
Gabriel Industrial Park Carolina,
Puerto Rico 00985

Panasonic Digital Still Camera Limited Warranty

Limited Warranty Coverage

If your product does not work properly because of a defect in materials or workmanship, Panasonic Consumer Electronics Company or Panasonic Sales Company (collectively referred to as “the warrantor”) will, for the length of the period indicated on the chart below, which starts with the date of original purchase (“warranty period”), at its option either (a) repair your product with new or refurbished parts, or (b) replace it with a new or refurbished product. The decision to repair or replace will be made by the warrantor.

	<u>PARTS</u>	<u>LABOR</u>
ALL PARTS (EXCEPT CCD, RECHARGEABLE BATTERY PACK AND MEMORY CARD)	1 (ONE) YEAR	90 (NINETY) DAYS
CCD	6 (SIX) MONTHS	90 (NINETY) DAYS
RECHARGEABLE BATTERY PACK (IN EXCHANGE FOR DEFECTIVE BATTERY PACK)	90 (NINETY) DAYS	N/A
SD MEMORY CARD (IN EXCHANGE FOR DEFECTIVE SD CARD)	90 (NINETY) DAYS	N/A

During the “Labor” warranty period there will be no charge for labor. During the “Parts” warranty period, there will be no charge for parts. You must carry-in or mail-in your product during the warranty period. If non-rechargeable batteries are included, they are not warranted. This warranty only applies to products purchased and serviced in the United States or Puerto Rico. This warranty is extended only to the original purchaser of a new product which was not sold “as is”. A purchase receipt or other proof of the original purchase date is required for warranty service.

Carry-In or Mail-In Service

For Carry-In or Mail-In Service (as applicable) in the United States call 1-800-272-7033.

For assistance in Puerto Rico call Panasonic Sales Company (787)-750-4300 or fax (787)-768-2910.

This warranty ONLY COVERS failures due to defects in materials or workmanship, and DOES NOT COVER normal wear and tear or cosmetic damage. The warranty ALSO DOES NOT COVER damages which occurred in shipment, or failures which are caused by products not supplied by the warrantor, or failures which result from accidents, misuse, abuse, neglect, mishandling, misapplication, alteration, faulty installation, set-up adjustments, misadjustment of consumer controls, improper maintenance, power line surge, lightning damage, modification, or commercial use (such as in a hotel, office, restaurant, or other business), rental use of the product, service by anyone other than a Factory Servicenter or other Authorized Servicer, or damage that is attributable to acts of God.

THERE ARE NO EXPRESS WARRANTIES EXCEPT AS LISTED UNDER "LIMITED WARRANTY COVERAGE". THE WARRANTOR IS NOT LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OF THIS PRODUCT, OR ARISING OUT OF ANY BREACH OF THIS WARRANTY. (As examples, this excludes damages for lost time, travel to and from the servicer, or loss of images, data or other memory content. The items listed are not exclusive, but are for illustration only.) **ALL EXPRESS AND IMPLIED WARRANTIES, INCLUDING THE WARRANTY OF MERCHANTABILITY, ARE LIMITED TO THE PERIOD OF THE LIMITED WARRANTY.**

Some states do not allow the exclusion or limitation of incidental or consequential damages, or limitations on how long an implied warranty lasts, so the exclusions may not apply to you.

This warranty gives you specific legal rights and you may also have others rights which vary from state to state. If a problem with this product develops during or after the warranty period, you may contact your dealer or Servicenter. If the problem is not handled to your satisfaction, then write to the warrantor's Consumer Affairs Department at the addresses listed for the warrantor.

PARTS AND SERVICE WHICH ARE NOT COVERED BY THIS LIMITED WARRANTY ARE YOUR RESPONSIBILITY.

Warranty

(For Canadian Customers)

Panasonic Canada Inc.

5770 Ambler Drive, Mississauga, Ontario L4W 2T3

PANASONIC PRODUCT – LIMITED WARRANTY

Panasonic Canada Inc. warrants this product to be free from defects in material and workmanship and agrees to remedy any such defect for a period as stated below from the date of original purchase.

Digital Camera	One (1) year, parts and labour
Digital Photo Printer	One (1) year, parts and labour
Digital Camera Accessories	Ninety (90) days, parts and labour

LIMITATIONS AND EXCLUSIONS

This warranty does not apply to products purchased outside Canada or to any product which has been improperly installed, subjected to usage for which the product was not designed, misused or abused, damaged during shipping, or which has been altered or repaired in any way that affects the reliability or detracts from the performance, nor does it cover any product which is used commercially. Dry cell batteries are also excluded from coverage under this warranty.

This warranty is extended to the original end user purchaser only. A purchase receipt or other proof of date of original purchase is required before warranty service is performed.

THIS EXPRESS, LIMITED WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, EXCLUDING ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

IN NO EVENT WILL PANASONIC CANADA INC. BE LIABLE FOR ANY SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES.

In certain instances, some jurisdictions do not allow the exclusion or limitation of incidental or consequential damages, or the exclusion of implied warranties, so the above limitations and exclusions may not be applicable.

WARRANTY SERVICE

For product operation and information assistance, please contact your Dealer or our Customer Care Centre at:

Telephone #: (905) 624-5505

Fax #: (905) 238-2360

Web: www.panasonic.ca

For product repairs, please contact one of the following:

- Your Dealer who will inform you of an authorized Servicentre nearest you.
- Our Customer Care Centre at (905) 624-5505 or www.panasonic.ca
- A Panasonic Factory Servicentre listed below:

Richmond, British Columbia

Panasonic Canada Inc.
12111 Riverside Way
Richmond, BC V6W 1K8
Tel: (604) 278-4211
Fax: (604) 278-5627

Calgary, Alberta

Panasonic Canada Inc.
6835-8th St. N. E.
Calgary, AB T2E 7H7
Tel: (403) 295-3955
Fax: (403) 274-5493

Mississauga, Ontario

Panasonic Canada Inc.
5770 Ambler Dr.
Mississauga, ON L4W 2T3
Tel: (905) 624-8447
Fax: (905) 238-2418

Lachine, Québec

Panasonic Canada Inc.
3075, rue Louis A. Amos
Lachine, QC H8T 1C4
Tel: (514) 633-8684
Fax: (514) 633-8020

CUSTOMER'S RECORD

Customer Name: _____ **Model Number:** _____

Serial Number: _____

Date of Purchase: _____

Dealer's Name: _____

Address: _____ **Phone Number:** _____

IF YOU SHIP THE PRODUCT TO A SERVICENTRE

Carefully pack and send prepaid, adequately insured and preferably in the original carton.

Include details of the defect claimed, and proof of date of original purchase.

Servicenter List

For Product Information, Operating Assistance, Literature Request, Dealer Locations, and all Customer Service inquiries please contact: 1-800-211-PANA (7262), Monday-Friday 9 am-9 pm; Saturday-Sunday 9 am-7 pm, EST. or send e-mail to : consumerproducts@panasonic.com

**Web Site: <http://www.panasonic.com>
You can purchase parts, accessories or locate your nearest servicenter by visiting our Web Site.**

Accessory Purchases:

**1-800-332-5368 (Customer Orders Only)
Panasonic Services Company 20421 84th Avenue South, Kent, WA 98032
(6 am to 5 pm Monday - Friday; 6 am to 10:30 am Saturday; PST)
(Visa, MasterCard, Discover Card, American Express, Check)**

Factory Servicenters Locations

CALIFORNIA

6550 Katella Avenue
Cypress, CA 90630

800 Dubuque Avenue
S. San Francisco,
CA 94080

3878 Ruffin Road
Suite A
San Diego, CA 92123

FLORIDA

3700 North 29th Avenue
Suite 102
Hollywood, FL 33020

GEORGIA

8655 Roswell Road
Suite 100
Atlanta, GA 30350

ILLINOIS

Elgin, IL 60123

MASSACHUSETTS

60 Glacier Drive
Suite G
Westwood, MA 02090

MINNESOTA

7850-12th Avenue South
Airport Business Center

OHIO

2236 Waycross Road
Civic Center Plaza
Forest Park, OH 45240

PENNSYLVANIA

2221 Cabot Blvd. West
Suite B
Langhorne, PA 19047

TEXAS

13615 Welch Road
Suite 101
Farmers Branch,
TX 75244

WASHINGTON

20425-84th Avenue
South
Kent, WA 98032

HAWAII

99-859 Iwaiwa Street
Aiea, Hawaii 96701
Phone (808) 488-1996
Fax (808) 486-4369

Service in Puerto Rico

**Matsushita Electric of Puerto Rico, Inc. Panasonic Sales Company/ Factory Servicenter:
Ave. 65 de Infanteria, Km. 9.5, San Gabriel Industrial Park, Carolina, Puerto Rico 00985
Phone (787)750-4300 Fax (787)768-2910**

As of Sep.2001

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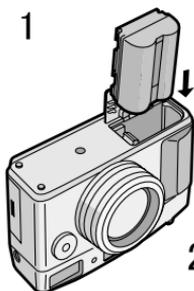
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Spanish Quick Use Guide/Guía española para el uso rápido

1

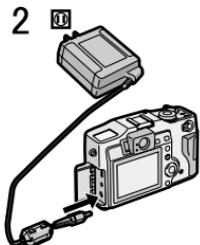


Prepare las siguientes piezas.

- Cámara
- Batería
- Tarjeta de memoria
- Adaptador AC

Verifique que el interruptor de alimentación esté en [OFF].

2



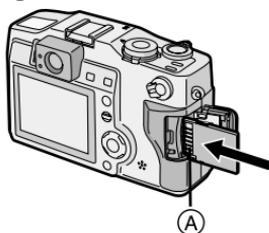
1 Inserte la batería en la cámara.

2 Para cargar la batería, conecte el adaptador AC a la cámara.

3 Introduzca la tarjeta de memoria en la cámara.

Ⓐ: Terminal de conexión detrás de la tarjeta.

3



4 Ponga el interruptor de alimentación a [ON].

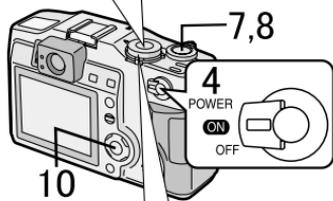
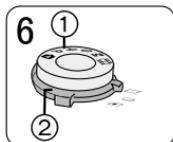
5 Defina la fecha/hora.

6 Ajuste el disco del modo operativo ② y el disco del modo de grabación ①.

- Ajuste el disco del modo operativo al modo único [□] o al modo ráfaga [⏏].

7 Pulse el botón del obturador a mitad para arreglar el enfoque.

8 Pulse el botón del obturador para sacar una imagen.



[Reproducción]

9 Ajuste el disco del modo operativo a la reproducción [▶].

10 Pulse ◀▶ para reproducir la imagen que quiere ver.



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