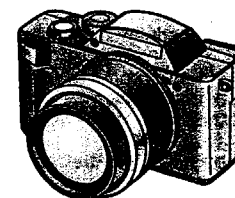


Panasonic



LUMIX

Digital Camera Operating Instructions

Model No. **DMC-FZ1B**



Before use, please read these
instructions completely.



LEICA
DC VARIO-ELMARIT

shop@ **Panasonic**

(For UK Customers Only)

Web Site: <http://www.panasonic-europe.com>

VQT0B13

Safety

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.

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.

- 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.

Safety

Operating Instructions

- Windows is a trademark or registered trademark of Microsoft Corporation U.S.A.
- SD Logo is a trademark.
- Leica is a registered trademark of Leica microsystems IR GmbH and Dicomar is a registered trademark of Leica Camera AG.
- All other company and product names in the operating instructions are trademarks of their respective corporations.

Files recorded on a MultiMediaCard or SD Memory Card

It may not be possible to play back the files on this Movie Camera recorded on and created by other equipment or vice versa. For this reason, check the compatibility of the equipment in advance.

Pages for reference

Pages for reference are indicated by dashes either side of a number, for example: (P00)

Use only the recommended accessories.

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

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.

Safety

Digital Camera

The rating plate is on the underside of the Digital Camera.



AC Adaptor

- The rating plate is on the underside of the AC Adaptor.
- As this equipment gets hot during use, operate it in well ventilated place; do not install this equipment in a confined space such as a bookcase or similar unit.

Caution for AC mains lead

For your safety, please read the following text carefully.

This appliance is supplied with a moulded three-pin mains plug for your safety and convenience. A 5-ampere fuse is fitted in this plug.

Should the fuse need to be replaced, please ensure that the replacement fuse has a rating of 5-amperes and it is approved by ASTA or BSI to BS1362. Check for the ASTA mark  or the BSI mark  on the body of the fuse.

If the plug contains a removable fuse cover you must ensure that it is refitted when the fuse is replaced. If you lose the fuse cover, the plug must not be used until a replacement cover is obtained. A replacement fuse cover can be purchased from your local Panasonic Dealer.

IF THE FITTED MOULDED PLUG IS UNSUITABLE FOR THE SOCKET OUTLET IN YOUR HOME THEN THE FUSE SHOULD BE REMOVED AND THE PLUG CUT OFF AND DISPOSED OF SAFELY.

THERE IS A DANGER OF SEVERE ELECTRICAL SHOCK IF THE CUT OFF PLUG IS INSERTED INTO ANY 13-AMPERE SOCKET.

If a new plug is to be fitted, please observe the wiring code as shown below. If in any doubt, please consult a qualified electrician.

IMPORTANT


The wires in this mains lead are coloured in accordance with the following code:

Blue: Neutral
Brown: Live

As the colours of the wires in the mains lead of this appliance may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

The wire which is coloured BLUE must be connected to the terminal in the plug which is marked with the letter N or coloured BLACK.

The wire which is coloured BROWN must be connected to the terminal in the plug which is marked with the letter L or coloured RED.

Under no circumstances should either of these wires be connected to the earth terminal of the three-pin plug, marked with the letter E or the Earth Symbol .

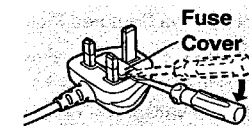
Before Use

Remove the Connector Cover as follows.

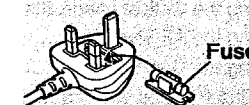


How to replace the Fuse

- 1 Remove the Fuse Cover with a screwdriver.



- 2 Replace the fuse and attach the Fuse Cover.



Contents

Safety

Information for Your Safety	2
-----------------------------------	---

Preparation

Standard Accessories	6
Names of the Components	8
LCD Monitor Display/Viewfinder	
Display	10
Quick Guide	12
Charging the Battery	13
Inserting the Battery	14
Connecting to an Electrical Outlet	16
Inserting the Card	17
Turning Power on/off	19
Adjusting the Viewfinder	
(Diopter Adjustment)	20
Attaching the Lens Hood	21
Attaching the Strap	23
Attaching the Lens Cap	24
Using the LCD Monitor/Viewfinder	25
The Shutter Button	
(Pressing halfway/Pressing fully)	26
The Mode Dial	27
Operating the Menu	28
Setting the Date/Time (Clock Set)	29

Recording images (basic)

Taking Pictures	30
Taking Pictures in Simple Mode	32
Checking the Captured Picture	
(Review)	33
Recording Motion Images	34
Using the Optical Zoom	35
Using the Digital Zoom	36
Taking Pictures with	
the Built-in Flash	37
Using the Optical Image Stabilizer	39
Using the AF Trigger	40
Using the Continuous AF	41
Taking Pictures with the Self-timer	42

Recording images (advanced)

Taking Pictures with Audio	43
Changing the Picture Size	44
Changing the Quality	
(Data Compression Ratio)	45
Taking Pictures with Macro Mode	46
Taking Pictures with	
the Portrait Mode	47
Taking Pictures with	
the Sports Mode	48
Taking Pictures with	
the Panning Mode	49
Taking Pictures with	
the Night Portrait Mode	50
Taking Pictures with the Spot Mode	51
Compensating the Exposure	52
Taking Pictures with	
Auto (AE) Bracket	53
Using the AF/AE Lock	54
Using the Color Effect	55
Picture Adjustment	
(Natural/Standard/Vivid)	56
Setting the White Balance	57
Setting ISO Sensitivity	59
Taking Pictures with Burst Mode	60
Using the MC Protector/ND Filter	61

Playback

Playing Back Still Pictures	62
Playing Back Still Pictures	
with Audio	63
9 Images Multi Playback	64
Using the Playback Zoom	65
Playing Back Motion Images	66

Editing

Deleting Images	67
Writing the Print Information	
in the Card (DPOF Setting)	69
Protecting Images on the Card	72

Technical use

Playing Back with Slide Show	
(Automatic Playback)	73
Adding Audio to Recorded Pictures	
(Audio Dubbing)	75
Resizing Recorded Pictures	76
Trimming Recorded Pictures	77
Formatting the Card	78
Adjusting the LCD Monitor/Viewfinder	
Brightness	79
Using the Auto Review	80
Setting up the Operational Sound	81
Setting up the Power Save Mode	82
Resetting the File Number	83
Initializing the settings	84
Playing Back Images with	
a TV Monitor	85
Connecting to a PC	86
USB DIRECT-PRINT	87
USB DIRECT-PRINT	
(Single Picture)	88
USB DIRECT-PRINT (DPOF)	89
After Use	90

Others

The Menu Items	91
Cautions for Use	93
Warning Indications	97
Troubleshooting	98
Specifications	99

Preparation**Standard Accessories**

Before using your camera, check the contents.

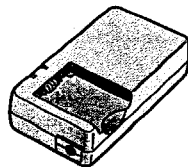
- | | |
|---|-----------------------------|
| 1 SD Memory Card (8MB)
RP-SD008B
(In the text, it is indicated as "Card") | 6 A/V Cable
K1V204C10001 |
|---|-----------------------------|



- | | |
|--|-----------------------------------|
| 2 Battery Pack
CGA-S002E
(In the text, it is indicated as "Battery") | 7 USB Connection Cable
VEK0A22 |
|--|-----------------------------------|



- | | |
|---|---------------------|
| 3 Battery Charger/AC Adaptor
DE-928B
(In the text, it is indicated as "AC Adaptor") | 8 CD-ROM
VFF0184 |
|---|---------------------|



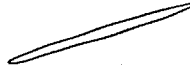
- | | |
|----------------------------|--------------------|
| 4 AC Cable
K2CT3DA00003 | 9 Strap
VFC3916 |
|----------------------------|--------------------|



- | | |
|----------------------------|------------------------|
| 5 DC Cable
K2GH2DB00003 | 10 Lens Cap
VYK0M30 |
|----------------------------|------------------------|



- | | |
|-------------------------------|-------------------------|
| 11 Lens Cap String
VFC3917 | 12 Lens Hood
VGK2826 |
|-------------------------------|-------------------------|



- | | |
|---------------------------------|--|
| 13 Lens Hood Adaptor
VYQ2583 | |
|---------------------------------|--|



**For United Kingdom and
Republic of Ireland**

Panasonic

www.panasonic.co.uk (for UK
customers only)

- Order accessory and consumable items for your product with ease and confidence by telephoning our Customer Care Centre Mon-Friday 9:00am-5:30pm. (Excluding public holidays.)
- Or go on line through our Internet Accessory ordering application.
- Most major credit and debit cards accepted.
- All enquiries transactions and distribution facilities are provided directly by Panasonic UK Ltd.
- It couldn't be simpler!

Customer Care Centre

For UK customers: 08705 357357
For Republic of Ireland customers: 01
289 8333

Technical Support

For UK customers: 0870 1 505610

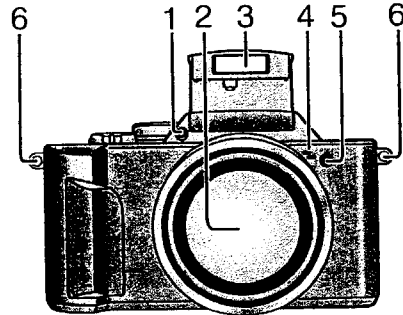
**This Technical Support Hot Line
number is for Panasonic PC software
related products only.**

**For Republic of Ireland, please use
the Customer Care Centre number
listed above for all enquiries.**

**For all other product related
enquiries, please use the Customer
Care Centre numbers listed above.**

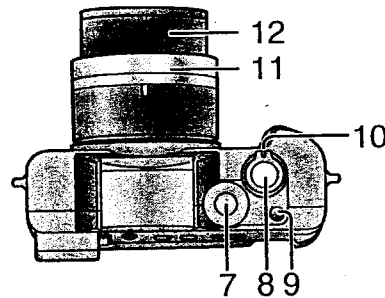
Preparation

Names of the Components



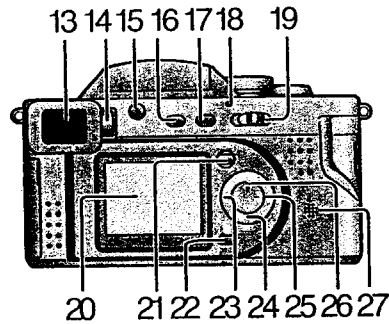
[Front View]

- 1 Flash Sensor (P38)
- 2 Lens
- 3 Flash
- 4 Microphone (P43, P75)
- 5 Self-timer Indicator (P42)
- 6 Strap Eyelet (P23)



[Up View]

- 7 Mode Dial (P27)
- 8 Shutter Button (P26)
- 9 Single/Burst Mode Button (P60)
- 10 Zoom Lever (P35, P36)
- 11 Lens Ring (P21, P61)
- 12 Lens Barrel

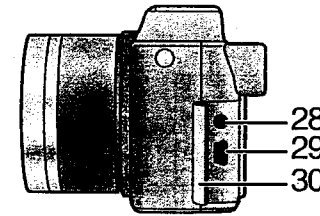


[Back View]

- 13 Viewfinder (P20, P25)
- 14 Diopter Adjustment Dial (P20)
- 15 Flash Open Button (P37)
- 16 DISPLAY Button (P25)
- 17 FOCUS Button (P40)
- 18 Power Indicator (P19)
- 19 Power Switch (P19)
- 20 LCD Monitor (P10)
- 21 MENU Button (P28)
- 22 Delete Button (P33, P67)
- 23 ◀/Self-timer Button (P42)
- 24 ▼/REVIEW/SET Button (P33)
- 25 ▶/Flash Mode Button (P37)
- 26 ▲/Exposure Compensation (P52)/Auto Bracket Button (P53)
- 27 Speaker (P63)

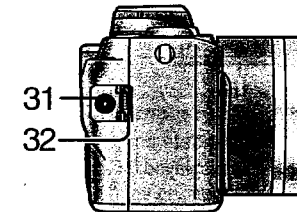
[Left View]

- 28 A/V OUT Socket (P85)
- 29 USB Socket (5pin) (P86)
- 30 Terminal Door



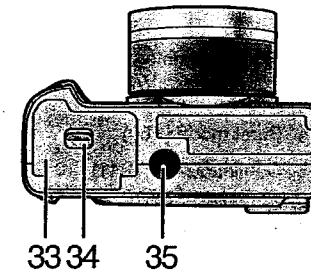
[Right View]

- 31 DC IN Socket (P16)
- 32 DC IN Terminal Door (P16)



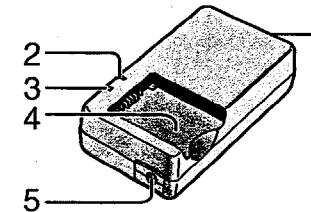
[Bottom View]

- 33 Memory Card/Battery Door (P14, P17)
- 34 Memory Card/Battery Door Open Lever (P14, P17)
- 35 Tripod Receptacle

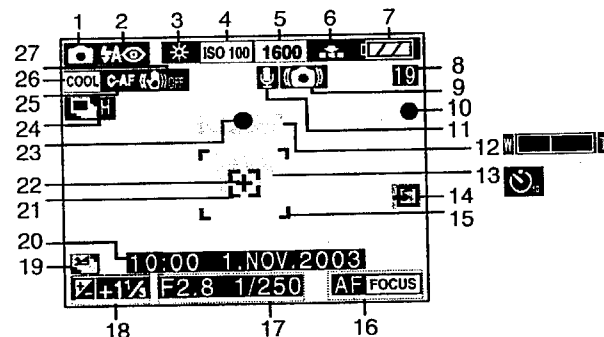


[Battery Charger/AC Adaptor]

- 1 AC Input Terminal
- 2 [POWER] Indicator
- 3 [CHARGE] Indicator
- 4 Battery Attachment Part
- 5 DC Output Terminal

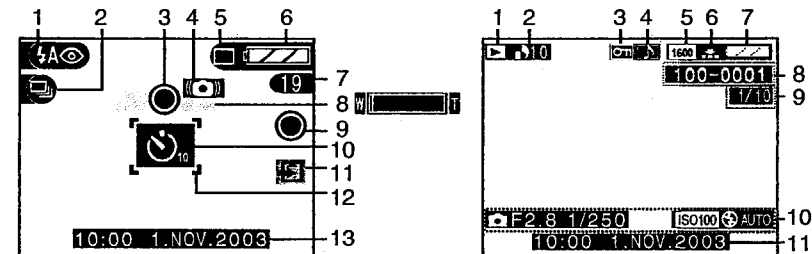


LCD Monitor Display/Viewfinder Display



[In recording]

- 1 REC mode
- 2 Flash mode (P37)
- 3 White balance (P57)
- 4 ISO sensitivity (P59)
- 5 Picture size (P44)
- 6 Quality (data compression ratio) (P45)
- 7 Battery indicator (P15)
(When using AC adaptor this is not displayed)
- 8 Frame/Time remain
In motion image mode: XXXs
- 9 Shutter Jiggle alert (P31)
- 10 Recording indication
- 11 Audio REC (P43)
- 12 Zoom (P35, P36)
(digital zoom ON: [ZOOM])
- 13 Self-timer mode (P42)
- 14 Card access indication (P18)
- 15 AF area (P30)
- 16 AF Trigger (P40)
- 17 Aperture indication/Shutter speed indication (P30)
- 18 Exposure Compensation (P52)
- 19 Auto Bracket (P53)
- 20 Current date and time (P29)
• It is displayed for about 5 seconds after turning on the power or setting the clock.
- 21 []: Spot AF area (P51)
- 22 +: Spot metering target (P51)
- 23 Focus indication (P30)
- 24 Burst mode (P60)
- 25 Continuous AF (P41)
- 26 Color Effect mode (P55)
- 27 Optical Image Stabilizer (OFF) (P39)



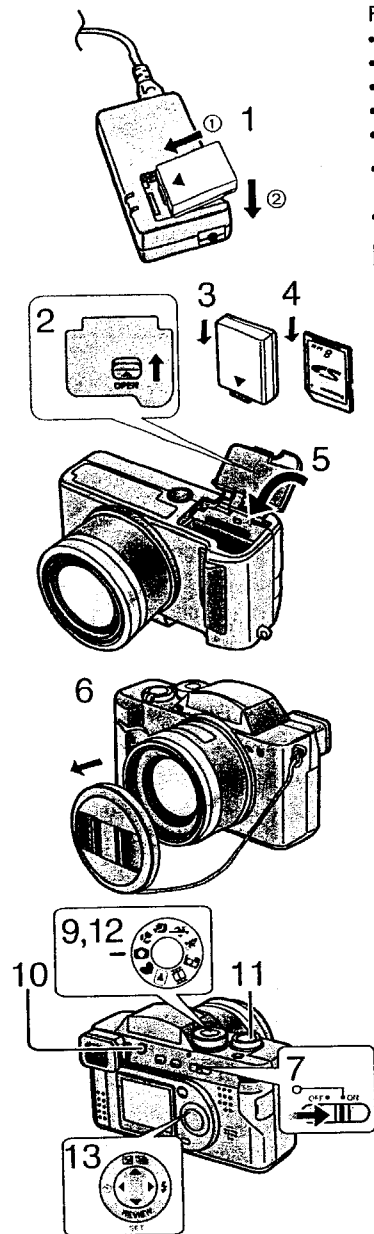
[In recording in Simple mode]

- 1 Flash mode (P37)
- 2 Burst mode (P60)
- 3 Focus indication (P32)
- 4 Shutter Jiggle alert (P31)
- 5 Picture mode (P32)
- 6 Battery indicator (P15)
- 7 Frame remain
- 8 Zoom (P35)
- 9 Recording indication
- 10 Self-timer mode (P42)
- 11 Card access indication (P18)
- 12 AF area (P30)
- 13 Current date and time (P29)
• It is displayed for about 5 seconds after turning on the power or setting the clock.

[In playback]

- 1 Playback mode
- 2 DPOF (P69)
[] (White):
DPOF setting for printing
[] (Green):
DPOF setting for Slide Show
[] (Green with DPOF number):
DPOF setting for printing and Slide Show
- 3 Protected image (P72)
- 4 Image with audio (P63)
- 5 Picture size (P44)
- 6 Quality (data compression ratio) (P45)
[]: In motion image mode
In simple mode:
[]: ENLARGE
[]: 4x6/10x15cm
[]: INTERNET
- 7 Battery indicator (P15)
- 8 Folder/File number
- 9 Page/Total images
- 10 REC data
It will be displayed when the [DISPLAY] button is pressed.
- 11 Recorded date and time

Quick Guide



Prepare following items.

- Camera
- Battery
- Card
- AC adaptor
- AC cable

- Check that the power switch is set to [OFF] and the lens is stored.
- Close the flash. (P38)

[Preparation]

- 1 **Charge the battery.** (① → ②) (P13)
 - Charging takes in about 90 minutes.
- 2 **Slide the lever in the direction of the arrow to open the Memory Card/Battery door.**
- 3 **Insert the battery into the camera.** (P14)
- 4 **Insert the Card into the camera.** (P17)
- 5 **Close the Memory Card/Battery door.**

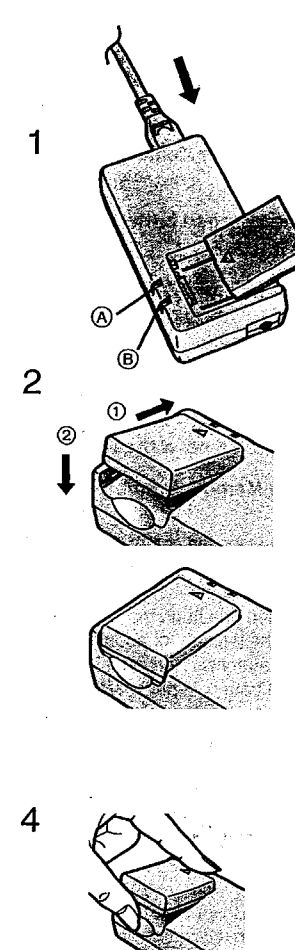
[Recording]

- 6 **Remove the lens cap.**
- 7 **Set the power switch to [ON].** (P19)
- 8 **Set date/time.** (P29)
- 9 **Set the mode dial to Normal Picture mode [P].** (P27)
- 10 **(When you want to take a picture with the flash)**
Press the flash open button to open the Flash. (P37)
- 11 **Take a picture.** (P26)

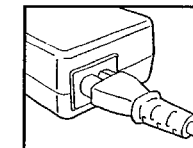
[Playback]

- 12 **Set the mode dial to playback [R].** (P62)
- 13 **Press ◀/▶ to select the picture you want to view:**

Charging the Battery

1 **Connect the AC cable.**

- The AC cable does not fit entirely into the AC input terminal. A gap will remain as shown below.



- The [POWER] indicator (A) lights.

2 **Attach the battery to the AC adaptor.** (① → ②)

- The [CHARGE] indicator (B) lights and charging starts.

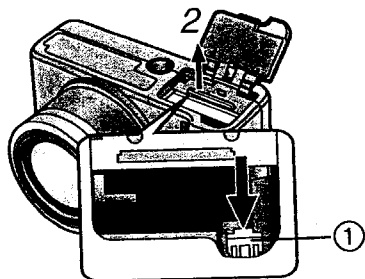
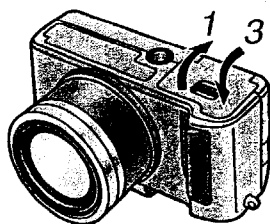
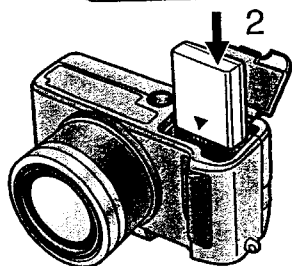
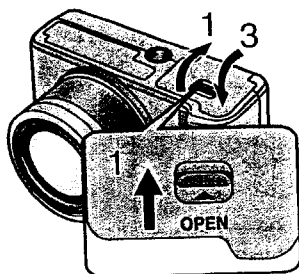
3 **When the [CHARGE] indicator (B) turns off, charging is finished.**

- Charging takes about 90 minutes.

4 **Remove the battery from the AC adaptor.**

- The battery cannot be charged when the DC cable is connected to the AC adaptor.
- After use, be sure to disconnect the AC cable.
- The battery becomes warm after use/charge or during the charge. The camera also becomes warm during use. However, it is not malfunction.
- The battery/AC adaptor supplied with this camera is exclusively designed for this camera. Do not use with any other equipment.

Inserting the Battery



[Preparation]

- Check that the power switch is set to [OFF] and the lens is stored.
- Close the flash. (P38)

- 1 Slide the lever to the direction of the arrow to open the Memory Card/battery door.
- 2 Insert the charged battery all the way in, until it is locked.
- 3 Close the Memory Card/battery door.

[Removing the battery]

- 1 Open the Memory Card/battery door.
- 2 Slide the lock ① to the direction of the arrow to remove the battery.
- 3 Close the Memory Card/battery door.

- If you will not be using the camera for a long time, remove the battery.
- When the fully charged battery is inserted to the camera more than one hour, the clock setting is memorized by the camera for about 24 hours even after the battery is removed. (The time may be shorter if the battery is not charged sufficiently)
- When the clock setting is cancelled, please set the date/time again. (P29)
- When the card is being read, do not open the Memory Card/battery door.
- The battery supplied with this camera is exclusively designed for this camera. Do not use with any other equipment.

■ Battery indicator

The remaining battery power is displayed on the LCD monitor/Viewfinder. (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
- : Recharge or replace the battery

■ Charging time and available recording time (Recording condition)

- Temperature: 25°C/Humidity: 60%
- shooting once every 30 seconds, flash every other shot
- measured using supplied 8MB SD Memory Card

	Charging time	Continuous recording/playback time (recordable number)
Supplied battery	Approx. 90 min.	Recording with LCD monitor Approx. 100 min. (equal to 200 still pictures)
		Recording with Viewfinder Approx. 120 min. (equal to 240 still pictures)
		Playback with LCD monitor Approx. 120 min.

The times shown in the table are approximate times. The times may vary depending on the condition.

■ Charging environment and charging error

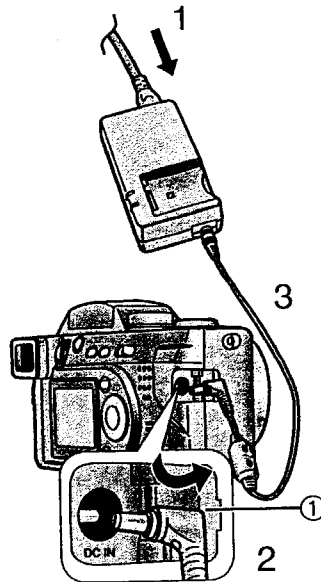
- Charge the battery in a place with a temperature of 10°C - 35°C. (The battery should also be the same temperature)
- When charging starts, the [CHARGE] indicator lights. If, after charging starts, the [CHARGE] indicator blinks at about 1 second cycles, this indicates a charging error. In this case, 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. If the problem persists, consult the dealer or your nearest servcentre.

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 battery discharge.

[Preparation]

- Check that the power switch is set to [OFF] and the lens is stored.



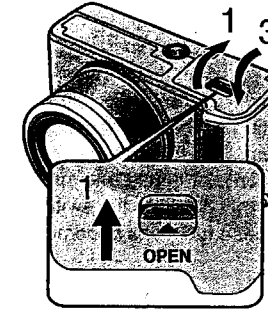
- 1 Connect the AC cable.
- 2 Open the DC IN terminal door ①.
- 3 Connect the DC cable (supplied) to the camera.

- The camera becomes warm during use. However, it is not malfunction.
- Disconnect the AC adaptor and DC cable when you do not use.
- The battery cannot be charged in the camera with the AC adaptor connected.
- Use the supplied DC cable.

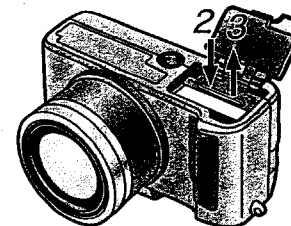
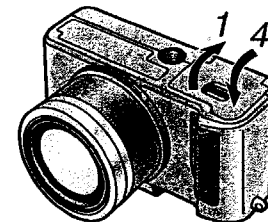
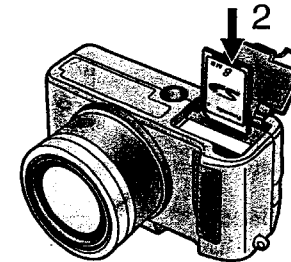
Inserting the Card

[Preparation]

- Check that the power switch is set to [OFF] and the lens is stored.
- Close the flash.



- 1 Slide the lever to the direction of the arrow to open the Memory Card/battery door.
- 2 Insert the card all the way in until it clicks.
 - Check the direction of the card.
 - Do not touch the connection terminals on the back side of the card.
- 3 Close the Memory Card/battery door.



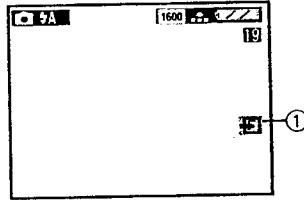
[Removing the card]

- 1 Open the Memory Card/battery door.
- 2 Press the card to release.
- 3 Pull the card out.
- 4 Close the Memory Card/battery door.

- 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 that you use a Panasonic branded SD Memory Card. (Use only the genuine card)
- If the card is not fully inserted, the card may be damaged.

■ Access to the card

When the card is being accessed, the card access indication ① lights.



When the card access indication ① lights, do not remove the battery, or pull out the card.

Do not disconnect the DC cable when using the AC adaptor.

The card and the card contents may be destroyed and the camera may not operate normally.

There is a risk that the data on the card may be damaged or erased due to the electrical noise, static electricity or the defects of camera/card, please back up your data to your PC using USB connection. (P86)

■ 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 write 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-SD128BJ (128MB)
- RP-SD064B (64MB)
- RP-SD032B (32MB)
- RP-SD016B (16MB)
- RP-SD008B (8MB)



MultiMediaCard

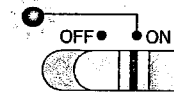
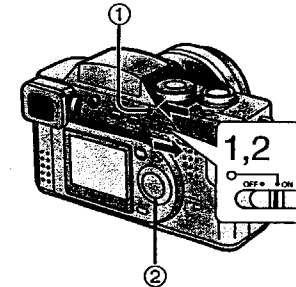
- VW-MMC16 (16MB)
- VW-MMC8 (8MB)



- After recording motion images using the MultiMediaCard, the card access indication may appear for a while, but this is not a malfunction.

Turning Power on/off

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



■ Power indicator

Lighting:

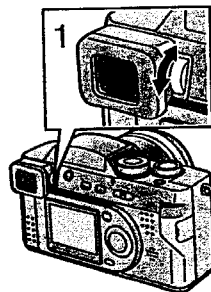
- When turning the power switch to [ON]

Blinking:

- When the Memory Card/battery door is opened
- When the card is not inserted
- When no space is left in the card
- When the card is protected during recording
- When you start recording with the lens cap attached
- When the remaining battery power is low (blink slowly)

- When turning on the power in the recording mode, do not put any obstacle in front of the lens.
- Please be sure to remove the lens cap before you switch on the camera in recording mode. If not, the message "REMOVE LENS CAP AND PRESS SET BUTTON" appears on the LCD monitor/Viewfinder. Please remove the lens cap and press ▼/[REVIEW/SET] button ②.
- Do not put pressure on the lens when the lens barrel is extended. Confirm that the lens has retracted before wiping the lens.

Adjusting the Viewfinder (Diopter Adjustment)

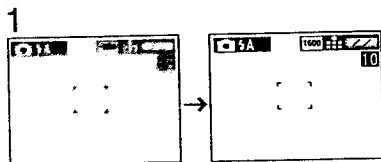


This camera's Viewfinder offers a diopter adjustment. It allows the user to make adjustments related to each user's individual vision characteristics. Please adjust this feature before using the camera.

[Preparation]

- Press [DISPLAY] button to make the Viewfinder display.

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

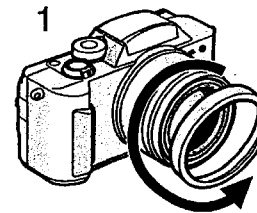


Attaching the Lens Hood

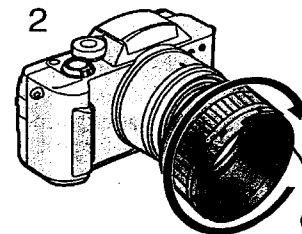
In a bright sunny condition, attach the lens hood to minimize flare and reflection on pictures.

[Preparation]

- Check that the power switch is set to [OFF] and the lens barrel is retracted.
- Close the flash. (P38)



- 1 Remove the lens ring.

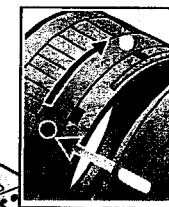


- 2 Attach the lens hood adaptor ① (supplied).

- The mark ○, ● will be the opposite side of the camera.

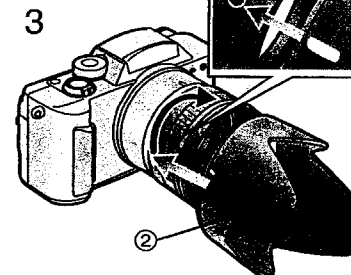
- 3 Attach the lens hood ② (supplied).

- Adjust the mark of the lens hood to the mark ○ of the lens hood adaptor. Then, rotate the lens hood to the mark ● and fix it.
- Be careful not to rotate the lens hood adaptor.

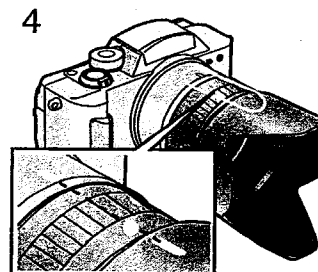


- 4 Rotate the lens hood and the lens hood adaptor until the mark of the lens hood is fitted to the mark of the camera.

- If the marks are not fitted, edges of the screen may become dark. (vignetting effect)



- When taking pictures with flash, flash light is interrupted by the lens hood and the bottom of the screen becomes dark. (vignetting effect) We recommend to remove the lens hood/lens hood adaptor.

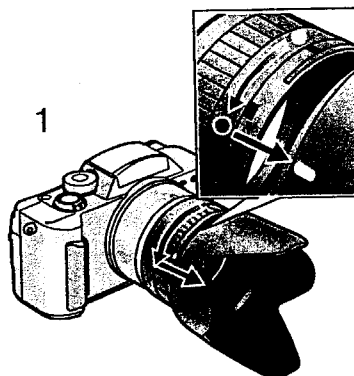


- Even when the lens hood is attached, you can attach the lens cap without the string.

■ Temporarily storing the lens hood
You can store the lens hood in the camera temporarily. Please do not take a picture with the lens hood stored.

[Preparation]

- Check that the power switch is set to [OFF] and the lens barrel is stored.
- Close the flash. (P38)

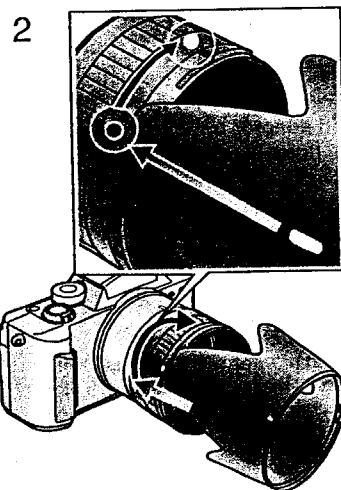


1 Remove the lens hood.

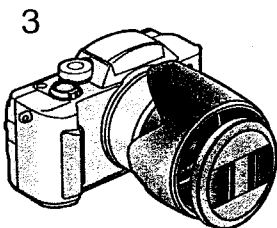
2 Reverse the lens hood and attach it.

- Attach the lens hood adjusting the mark ○ of the lens hood adaptor to the mark of the lens hood, and rotate the lens hood to the right.

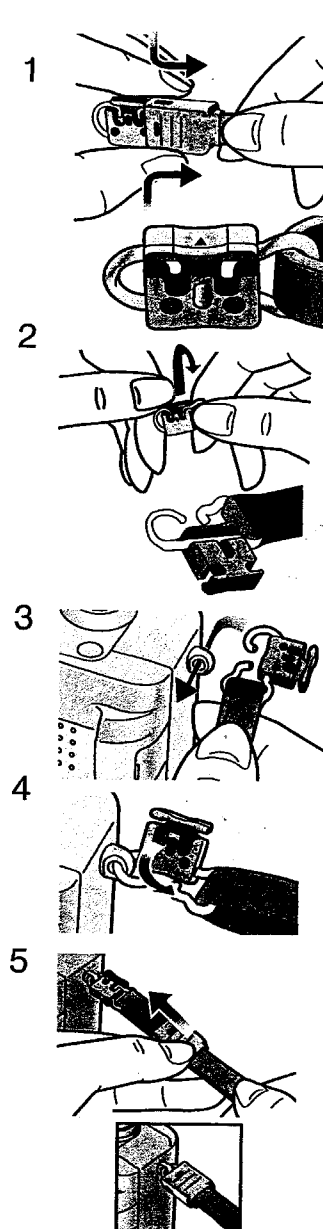
3 Attach the lens cap.



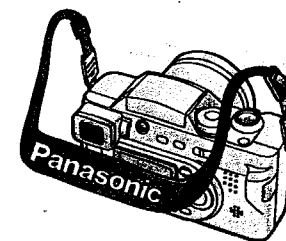
- When taking pictures with flash, flash light is interrupted by the lens hood and the bottom of the screen becomes dark. (vignetting effect) We recommend you to remove the lens hood/ lens hood adaptor.
- Even when the lens hood is attached, you can attach the lens cap without the string.



Attaching the Strap

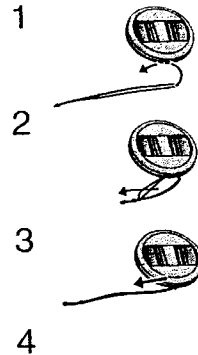


- 1 Press both sides of the cover to put the metal fitting out of the cover.
- 2 Rotate the plastic part of the metal fitting to the direction of the arrow.
 - Please attach the plastic part to the metal fitting again if it detached.
- 3 Let the metal fitting pass through the eyelet of the camera.
- 4 Rotate the plastic part of the metal fitting to the opposite direction until it is locked.
- 5 Move the cover to the direction of the arrow, and attach it firmly.
 - Be sure to move the cover entirely until it is attached firmly.
- 6 Attach the strap to the other side of the camera in the same way.

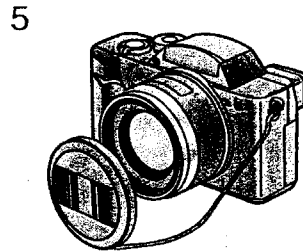
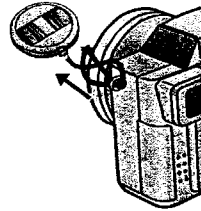


Attaching the Lens Cap

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



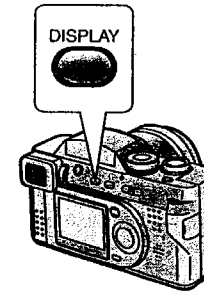
- 1 Let the top of the string pass through the lens cap.
- 2 Let the opposite side of the string pass through the circular part of the string.
- 3 Pull to the direction of the arrow.
- 4 Let the top of the lens cap string pass through the strap eyelet as shown in the picture.
- 5 Attach the lens cap.



- Remove the lens cap before turning the camera on.
- Even when the lens hood is attached, you can attach the lens cap without the string.

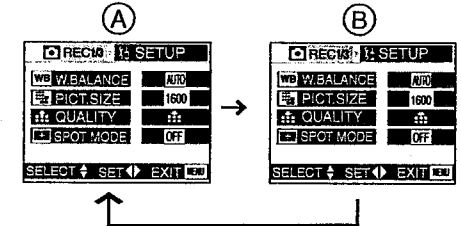
Using the LCD Monitor/Viewfinder

Every time you press the [DISPLAY] button, the display of the LCD monitor/Viewfinder changes as shown below.

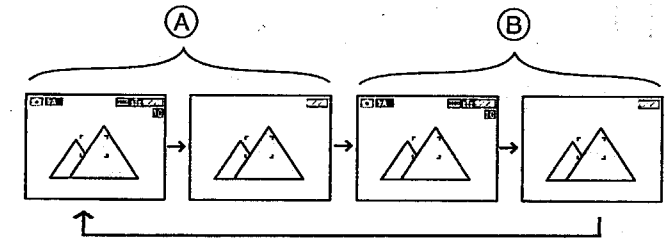


[Menu display] [In multi/zoom playback]

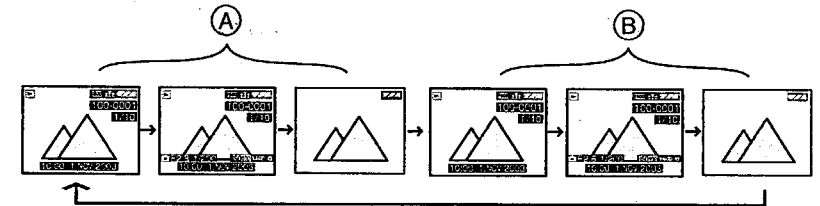
- (A) LCD monitor
 (B) Viewfinder



[In recording]

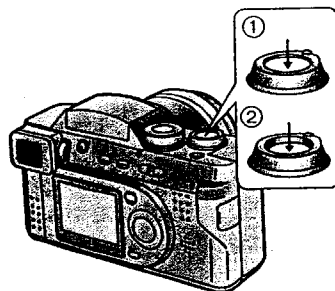


[In playback]



- When the LCD monitor is displayed, the Viewfinder turns off. (vice versa)

The Shutter Button (Pressing halfway/Pressing fully)



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

Pressing halfway ①

- Focus and exposure are locked.

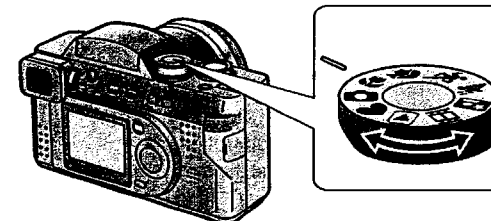
Pressing fully ②

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

- You can adjust volume of the operational sound in the menu. (P81)
- If you press the shutter button fully in a single stroke, the captured picture may appear shaken or unfocused. (The camera may be moved during capturing)

The Mode Dial

You can choose a desired mode by the mode dial.



▶: Playback (P62)

Playback recorded images.

♥: Simple mode (P32)

You can take pictures easily because the necessary setting menus are minimized. This mode is for beginners.

□: Normal Picture (P30)

The shutter speed and the aperture value are automatically adjusted.

Ⓜ: Macro mode (P46)

When you take pictures from a distance closer than 120 cm (Tele), set the camera in macro mode. This allows you to get closer to the subject up to 5 cm (Wide).

👤: Portrait mode (P47)

Portrait mode lets you achieve the depth of focus effect easily when you take portrait photos. The subject looks sharp and outstanding with an unfocused background.

🏃: Sports mode (P48)

When you take pictures of outdoor sports, this mode let you capture the still action photo easily.

🌃: Night portrait mode (P50)

When you take pictures of, for example, your friends in front of beautiful night illumination scenery, this mode let you get the appropriate exposure for your subject as well as the background, using flash and slow shutter.

🏎: Panning mode (P49)

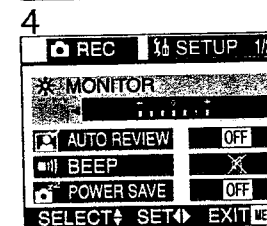
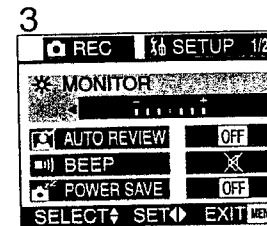
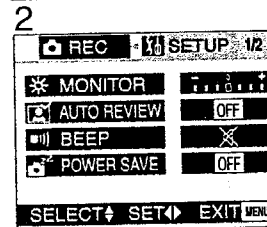
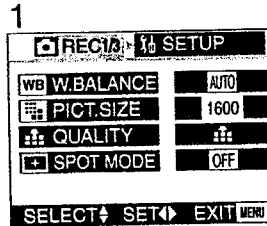
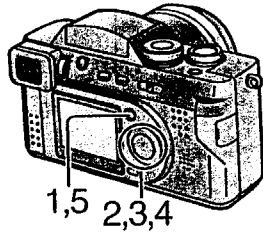
Panning is a technique of moving the camera tracking a subject in motion.

Using a slower shutter speed when tracking a subject, you can sharply photograph a subject in motion while blurring the background.

🎞: Motion images (P34)

Recording motion images.

Operating the Menu



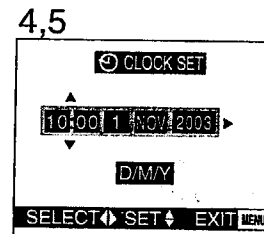
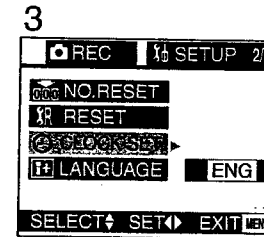
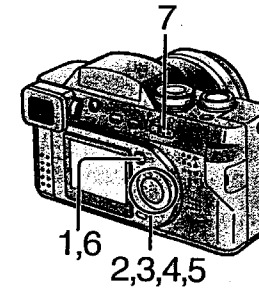
By operating the menu, you can set the settings of REC or playback mode. You can also set the date and time, the operational sound and various other settings. Follow these instructions.

[Preparation]

- Set the mode dial to the recording mode (except for [V]) or the playback mode.

- Press the [MENU] button.
 - If you set the mode dial to the recording mode, the REC menu is displayed; if you set it to the playback mode, the playback menu is displayed.
- Press ►.
- Press ▲/▼ to choose the item.
- Press ◀/▶ to set the item.
- Press the [MENU] button.
 - The menu will disappear.

Setting the Date/Time (Clock Set)



If the message [PLEASE SET THE DATE/TIME] appears, set the date and time. You can go to the setup menu by pressing the [MENU] button during the message is displayed.

You can set the year from 2002 to 2099. The 24-hour system is used.

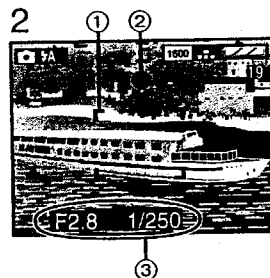
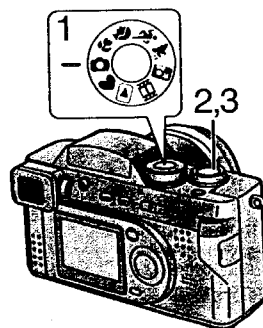
- Press the [MENU] button.
- Press ► to make the setup menu appear.
 - In simple mode, skip this step.
- Press ▲/▼ to select [CLOCK SET], and then press ►.
- Press ▲/▼/◀/▶ to set date and time, and then press ►.
- Press ▲/▼ to select [M/D/Y], [D/M/Y] or [Y/M/D].
- Press the [MENU] button twice.
 - The menu will disappear.
- Check if the date/time setting is displayed correctly, after turning the camera [OFF] and [ON].

- When the fully charged battery is inserted to the camera more than one hour, the clock setting is memorized by the camera for about 24 hours even after the battery is removed. (The time may be shorter if the battery is not charged sufficiently.)

When the clock setting is cancelled, please set the date and time again.

Recording images (basic)

Taking Pictures



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

[Preparation]

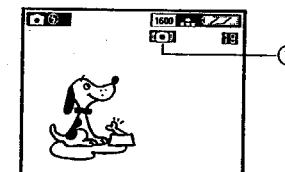
- Insert the card. (P17)
- Set the power switch to [ON]. (P19)

- 1 **Set the mode dial to normal picture mode [●].**
- 2 **After centering the subject in the AF area ① on the LCD monitor/Viewfinder, press the shutter button halfway.**
 - When the focus is adjusted, the focus indication [●] ② appears.
 - When the focus indication flashes, the focus is not adjusted. Press the shutter button halfway to adjust the focus again.
 - The shutter speed and the aperture value ③ are automatically adjusted and displayed on the LCD monitor/Viewfinder.
 - When the subject is out of the AF area, use the AF/AE lock. (P54)
- 3 **Press the shutter button fully to take the picture.**
 - After taking a picture, when the auto review (P80) is set to [ON], the picture is displayed on the LCD monitor/Viewfinder for about 1 or 3 seconds.

- If you press the shutter button fully at once, the shutter jiggle may occur or the focus may not be adjusted properly.
- Even when the focus indication is displayed and the focus is properly adjusted, it will be cancelled if you release the shutter button. Press the button halfway again.
- When power saving time is set, if you do not operate the camera for a while, it is automatically turned off at the set time. To operate the camera again, press the shutter button or turn the power switch first to [OFF] and then to [ON]. (P82)
- The brightness of the LCD monitor/Viewfinder may differ 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/Viewfinder, but the recorded pictures are bright.
- If the exposure is not properly set, the color of the aperture value and the shutter speed on the LCD monitor/Viewfinder becomes red.
- In the following cases, the focus may not be adjusted properly.
 - 1 Recording a scene including subjects both near and far
 - 2 Recording a scene over the dirty glass
 - 3 Recording surrounding a shining scene
 - 4 Recording in a dark place
 - 5 Recording moving subject
 - 6 Recording a subject with a little contrast
 - 7 Recording with the shutter jiggle
- We recommend that you set the clock setting again before taking pictures.
- When the brightness of the LCD monitor/Viewfinder changes such as zooming or panning, you may hear a click sound from the lens or the image on the LCD monitor/Viewfinder may change suddenly; this is not a malfunction. The sound is caused by the camera automatically adjusting the aperture value.

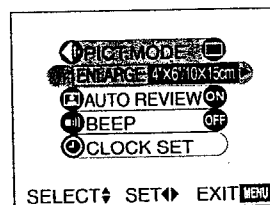
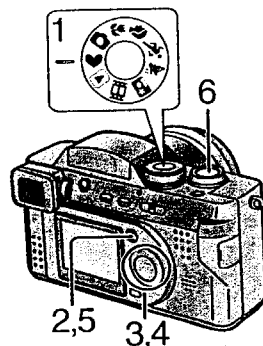
About the shutter jiggle

- Be careful to prevent the shutter jiggle when you press the shutter button.
- When the shutter jiggle is easy to happen, the shutter jiggle alert ① appears.
- We recommend you to use a tripod when the shutter jiggle alert appears.



Taking Pictures in Simple Mode

- Offering simplified menu for ease of use.
- The picture size is easy to select.
- The icons on the display are shown larger.
- We recommend you to use this mode when you ask someone to take a picture.



- The burst mode is available only with the low speed. (P60)
- If the distance between the camera and the object is beyond the recordable range (Tele: 120 cm, Wide: 5 cm), the focus may not be adjusted properly even the focus indication ① is lighting.
- The settings (except for the clock setting) of the simple mode will not be applied to the other recording modes.

- 1 Set the mode dial to Simple mode [P].
- 2 Press the [MENU] button.
- 3 Press ▲/▼ to select [PICT. MODE].
 - [AUTO REVIEW] (P80)
 - [BEEP] (P81)
 - [CLOCK SET] (P29)
- 4 Press ◀/▶ to select [ENLARGE], [4"×6"/10×15cm], [INTERNET].

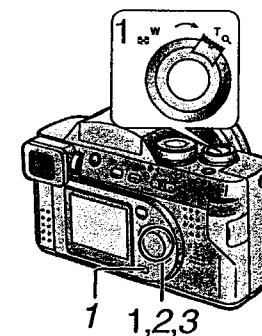
ENLARGE	1600×1200	Fine
4"×6"/10×15cm	1280×960	Fine
INTERNET	640×480	Standard

- [INTERNET] is for setting image size to send via e-mail or mobile phone using SD Memory Card.

- 5 Press the [MENU] button.
- 6 Take a picture.

- The recording method is the same as in "Taking Pictures". (P30)

Checking the Captured Picture (Review)



After taking a picture, when auto review (P80) is set to [1SEC.]/[3SEC.], the captured picture is displayed on the LCD monitor/Viewfinder for about 1 or 3 seconds, but you can also check the picture by following the methods shown below.

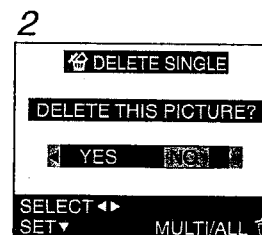
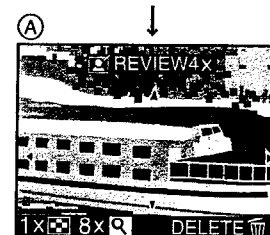
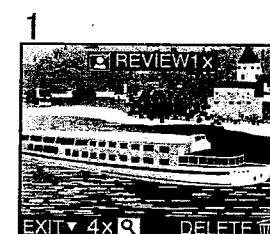
- 1 After taking a picture, press the ▼/[REVIEW/SET] button.

- The last captured picture is displayed for about 5 seconds. If you rotate the zoom lever towards [Q], the captured picture is zoomed 4 times (A) and 8 times if you rotate it once again. You can also change the position with ▲/▼/◀/▶.
- You can check the previous or following picture with ◀/▶.

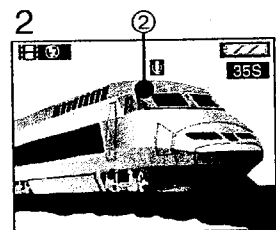
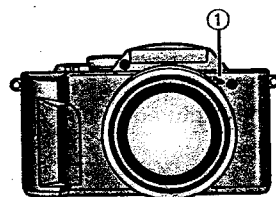
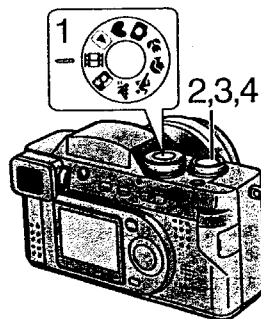
- 1 Erasing the captured picture during the review

- 1 Press the [W] button.
- 2 When the message [DELETE THIS PICTURE?] is displayed, press ◀/▶ to select [YES].
- 3 Press the ▼/[REVIEW/SET] button.
 - The picture is erased.
 - Once erased, pictures cannot be recovered.

- In motion image mode [H], review cannot be used.



Recording Motion Images

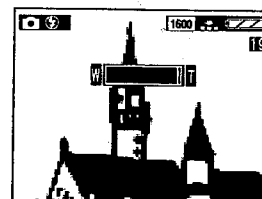
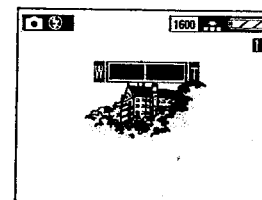
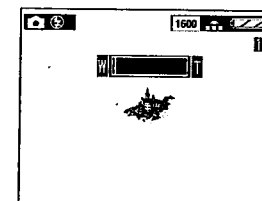
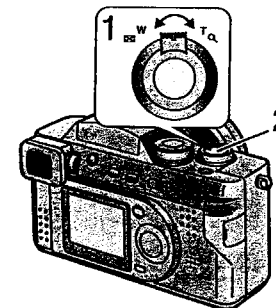


With this camera you can also record motion images. (If using the supplied 8MB SD Memory Card, it is possible to record for about 35 seconds)

- 1 **Set the mode dial to motion image mode [REDACTED].**
- 2 **Center the subject on the LCD monitor/Viewfinder and press the shutter button halfway.**
 - When the focus is adjusted, the focus indication ② [●] appears.
- 3 **By pressing the shutter button fully, the recording starts.**
 - The audio REC starts simultaneously. (① Microphone)
- 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.

- The picture size is fixed to 320×240 pixels.
- The remaining time displayed on the LCD monitor/Viewfinder is an approximation.
- You cannot record motion images without audio.
- If using the MultiMediaCard, after recording motion images, the card access indication may appear for a while, but this is not a malfunction.
- After recording starts, the auto focus/zoom/white balance/aperture value are locked (with the first frame).
- Recording could suddenly stop when recording motion images with some kinds of the card.
- When the motion image recorded with this camera is played back on other equipments, the quality of pictures and sounds may be deteriorated or pictures may not be able to be played back.
- In motion image mode [REDACTED], review cannot be used.

Using the Optical Zoom



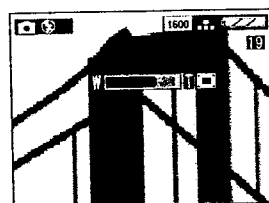
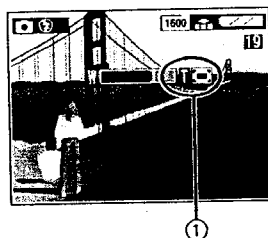
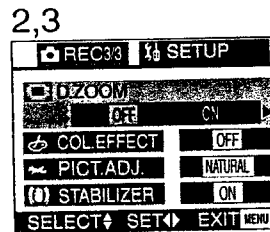
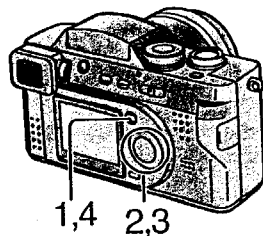
With this function, you can make people and subjects closer, and landscapes can be captured in wide angle, with the 12 times optical zoom.

[Preparation]

- Set the mode dial except for [REDACTED]. (P27)

- 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 a picture.**
 - The recording method is the same as in "Taking Pictures". (P30)
 - The focus is adjusted at a distance of more than 120 cm (Tele)/30 cm (Wide). For details on simple mode/macro mode, read P32/P46.
 - The picture may be slightly distorted according to the lens. The distortion will increase as you make subjects wider and closer.

Using the Digital Zoom



It is possible to further magnify a subject already magnified 12 times with the optical zoom by 3 more times, with the digital zoom, thereby reaching a maximum of 36 times. (In the burst mode/auto bracket, the digital zoom magnify 2 more times, reaching a maximum of 24 times.)

[Preparation]

- Set the mode dial except for [P] [M] [A]. (P27)

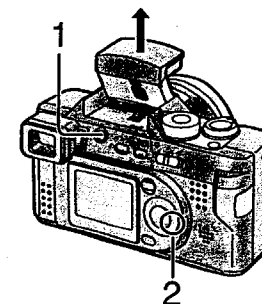
- Press the [MENU] button.
- Press ▲/▼ to select [D. ZOOM].
- Press ► to set to [ON].
- Press the [MENU] button.

- The menu will disappear.

- The zoom adjustment and recording method are the same as in "Using the Optical Zoom". (P35)
- When the digital zoom is set to [ON], the digital zoom indication ① appears.
- When entering the digital zoom range, the zoom bar will pause.

- When using the digital zoom the picture quality becomes deteriorated.
- In the digital zoom range, the stabilizer function may be difficult to be effective.
- We recommend to use a tripod in the digital zoom range.

Taking Pictures with the Built-in Flash



[Preparation]

- Set the mode dial except for [P] [M] [A]. (P27)

- Press [FLASH OPEN] button to open the Flash.

- Press [FLASH].

- Every time you press [FLASH], 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 [FLASH]. Refer to the table on the left.)



	FLASH	FLASH	FLASH	FLASH	FLASH
FLASH	—	—	—	—	—
FLASH	—	—	—	—	—
FLASH	—	—	—	—	—
FLASH	—	—	—	—	—
FLASH	—	—	—	—	—
FLASH	—	—	—	—	—
FLASH	—	—	—	—	—
FLASH	—	—	—	—	—
FLASH	—	—	—	—	—

FLASH : AUTO

The flash fires automatically according to the lighting condition.

FLASH : AUTO/Red-eye reduction

The flash fires automatically according to the recording situation.

It reduces the red-eye phenomenon (when a subject's eyes appear red in flash light).

Use it when you take pictures of people or animals in dark places.

FLASH : Forced ON

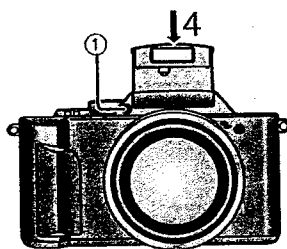
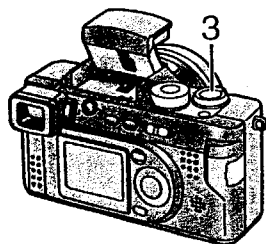
The flash fires in every capturing.

Use this setting when your subject is backlit or under fluorescent light.

FLASH : Slow sync./Red-eye reduction

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

We recommend you to use a tripod.



③: Forced OFF

When you do not open the flash, this mode is set. Even in dark places, the flash does not fire.

Set it when you take pictures in places where using flash is not allowed.

3 Take a picture.

- The recording method is the same as in "Taking Pictures". (P30)

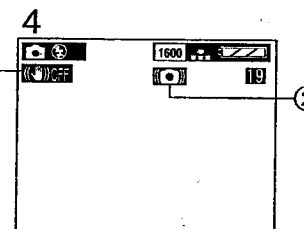
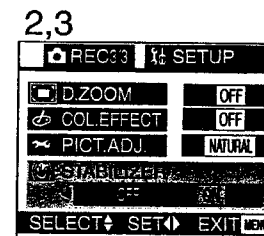
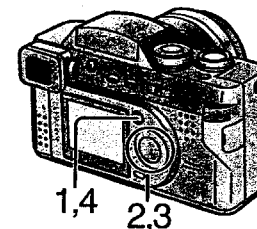
To close the flash

4 Press to the direction of the arrow until it clicks.

- Be sure to close the flash when you do not use it.

- Do not look closely at the flash light when it fires.
- The available flash range is about 30 cm - 2.1 m. (when setting to ISO100)
- When the shutter jiggle alert is displayed, we recommend to use the flash.
- Do not cover the flash sensor ① with your fingers or other items. Otherwise, brightness cannot be perceived.
- In motion image mode [H] or when the flash is closed, setting is fixed to the Forced OFF [③].
- When you set to burst mode or auto bracket, only 1 picture is taken for every flash firing.
- In night portrait mode [P], setting is fixed to Slow sync./Red-eye reduction [S+].
- When you take the picture using the flash with the lens hood attached, the flash light may be interrupted by the hood.
- The flash indication becomes red when pressing the shutter button halfway.
- During the flash is charged, the flash indication blinks red, and you cannot take a picture even when you press the shutter button fully.
- When using the flash, do not let subjects near the flash. The shape or color of subjects may be changed because of the heat and light of the flash.
- Be sure to open the flash entirely when using the flash.
- When taking a picture with the flash, the white balance will be automatically adjusted (except for manual white balance setting), but the white balance may not be properly adjusted when the flash light is insufficient.
- When taking a picture with the flash after setting the white balance manually, the white balance may not be properly adjusted. We recommend to set the white balance to [AUTO] when using the flash. (P57)

Using the Optical Image Stabilizer



When using this function at the scene the shutter jiggle is easy to happen, you can minimize the shutter jiggle.

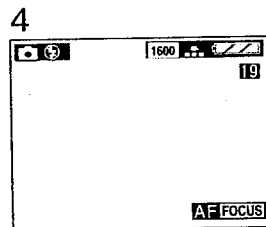
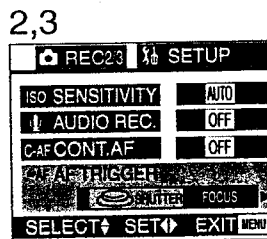
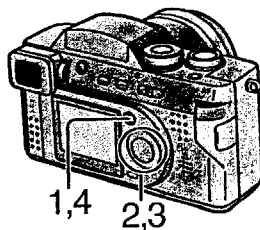
[Preparation]

- Set the mode dial except for [P] or [M]. (P27)

- Press the [MENU] button.
- Press ▲/▼ to select [STABILIZER].
- Press ◀/▶ to select [ON]/[OFF].
- Press the [MENU] button.
 - The menu will disappear.
 - Only when selecting [OFF], the indication [OFF] ① will appear.

- When too much jiggle happens or taking a picture chasing the moving subject, it may not be stabilized.
- The stabilizer function may be difficult to be effective in the digital zoom zone.
- When taking pictures with low shutter speed such as night portrait, the stabilizer function may be difficult to be effective.
- When the zoom lever is close to T and the shutter speed is slower than 1/125, the shutter jiggle alert ② appears.
- We recommend to use a tripod when the shutter jiggle alert appears.
- In simple mode [V], the stabilizer function is fixed to [ON].

Using the AF Trigger



There are 2 ways to set the auto focus; pressing the shutter button halfway or pressing the [FOCUS] button. Using the [FOCUS] button is effective to prefocus the camera.

[Preparation]

- Set the mode dial except for []/[]. (P27)

- 1 Press the [MENU] button.
- 2 Press ▲/▼ to select [AF TRIGGER].
- 3 Press ◀/▶ to select [SHUTTER] or [FOCUS].

- [SHUTTER] Shutter button:
You can set the auto focus by pressing the shutter button halfway.
- [FOCUS] [FOCUS] button:
You can set the auto focus by pressing the [FOCUS] button.

- 4 Press the [MENU] button.
 - The menu will disappear.
 - Only when the [FOCUS] button is selected, the [AF FOCUS] indication ① is displayed on the LCD monitor/Viewfinder.

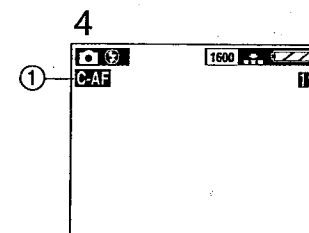
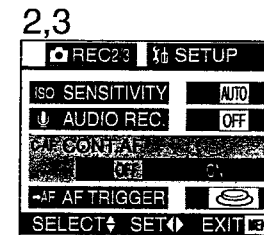
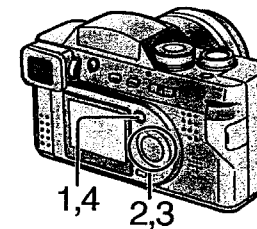
Using the [FOCUS] button to prefocus the camera

The prefocus technique is effective when you try to take a picture of a subject which is moving so fast that the focus is difficult to be adjusted automatically. (For example, taking pictures with the panning mode) (P49)

- 1 Set [AF TRIGGER] to [FOCUS].
- 2 Center the subject in the AF area (P30), and press the [FOCUS] button.
 - AF trigger will not operate until you press the [FOCUS] button again, even if you press the shutter button halfway.

- When setting [CONT.AF] to [ON], [AF TRIGGER] is fixed to [SHUTTER].
- In simple mode [], [AF TRIGGER] is fixed to [SHUTTER].

Using the Continuous AF



Using this function, you can adjust the focus soon even if the subject changes because the auto focus works continuously.

[Preparation]

- Set the mode dial except for []/[]. (P27)

- 1 Press the [MENU] button.
- 2 Press ▲/▼ to select [CONT.AF].
- 3 Press ▶ to select [ON].
- 4 Press the [MENU] button.
 - The menu will disappear.
 - The indication [C-AF] ① will appear.

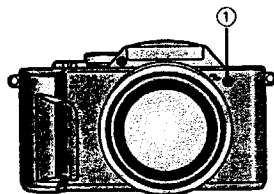
- When setting [CONT.AF] to [ON], [AF TRIGGER] is fixed to [SHUTTER].
- In simple mode [], [CONT.AF] is fixed to [ON].
- The battery consumes early.
- It may take time to adjust the focus after zooming (Wide → Tele) or changing the subject suddenly.
- Press the shutter button halfway again to adjust the focus when the focus is difficult to be adjusted.

Taking Pictures with the Self-timer

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

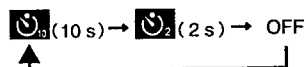
[Preparation]

- Set the mode dial except for []/[H]. (P27)



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.
- If you press the [MENU] button during the self-timer is set, the self-timer setting is cancelled.



- In simple mode [], you can only set to 10 seconds [].
- In burst mode, the self-timer setting applies to the first picture only.
- We recommend you to use a tripod when setting the self-timer.

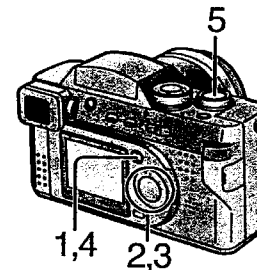
Recording images (advanced)

Taking Pictures with Audio

You can take a picture with audio for 5 seconds.

[Preparation]

- Set the mode dial except for []/[H]. (P27)



1 Press the [MENU] button.

2 Press ▲/▼ to select [AUDIO REC.].

3 Press ► to select [ON].

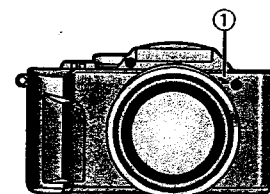
4 Press the [MENU] button.

- The menu will disappear.
- This icon [] ② will appear on the LCD monitor/Viewfinder.

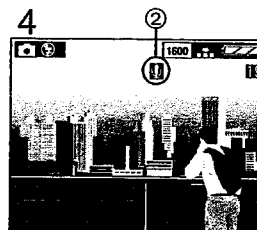
5 Press the shutter button fully and take a picture.

- 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.
- If you press the [MENU] button during the audio recording, it will be cancelled.

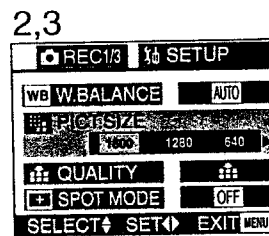
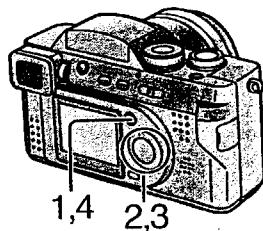
- When setting to auto bracket/burst mode, it is not possible to take a picture with audio. (P53, P60)



2,3



Changing the Picture Size



You can choose among 3 picture size settings.

[Preparation]

- Set the mode dial except for []/[]/[]. (P27)

- Press the [MENU] button.
- Press Δ/∇ to select [PICT. SIZE].
- Press \leftarrow/\rightarrow to select the picture size.

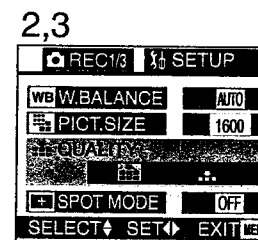
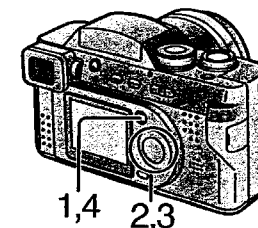
- 1600**: 1600 × 1200 pixels
- 1280**: 1280 × 960 pixels
- 640**: 640 × 480 pixels

- Press the [MENU] button.

- The menu will disappear.

- In motion image mode [], 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 larger picture size, the printed picture will be clearer, especially with larger sized prints.

Changing the Quality (Data Compression Ratio)



You can choose among 2 quality levels (Data Compression Ratio).

[Preparation]

- Set the mode dial except for []/[]/[]. (P27)

- Press the [MENU] button.
- Press Δ/∇ to select [QUALITY].
- Press \leftarrow/\rightarrow to select the quality (Data Compression Ratio).

- Fine** (Low compression)
It gives priority to picture quality to record high quality pictures.
- Standard** (Standard compression)
It gives priority to the number of recordable pictures and records standard quality pictures.

- Press the [MENU] button.

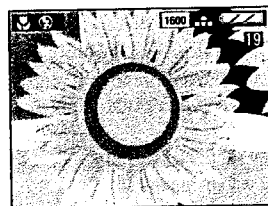
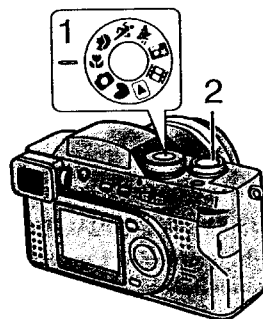
- The menu will disappear.

- Picture size/Quality and number of recordable pictures (8MB/64MB SD Memory Card)

Picture size	8MB (supplied)		64MB (optional)	
1600×1200	8	16	74	149
1280×960	10	20	96	184
640×480	34	68	298	553
In motion image mode	35 seconds		350 seconds	

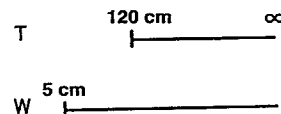
- The numbers shown in the table are approximate numbers. If you mix fine quality and standard quality, the number of recordable pictures changes.
- It may happen that pictures appear like a mosaic depending on the scene characteristics.
- Remaining frame which is displayed on the LCD monitor/Viewfinder may not correspond with recorded frames, however, this is not a malfunction.

Taking Pictures with Macro Mode

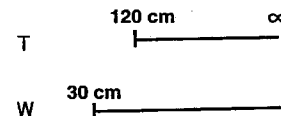


When you take pictures from a distance closer than 120 cm (Tele), set the camera in macro mode [M]. This allows you to get closer to the subject up to 5 cm (Wide).

- Macro mode [M]



- Normal recording



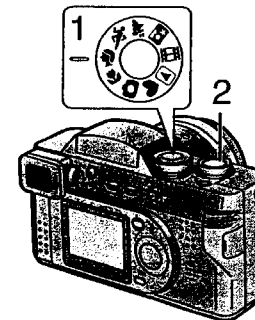
- 1 Set the mode dial to Macro mode [M].

- 2 Take a picture.

- The recording method is the same as in "Taking Pictures". (P30)

- Select the flash setting depending on the situation. (P37)
- The available flash range is about 30 cm - 2.1 m. (when setting to ISO100)
- When the shutter jiggle alert is displayed, we recommend to use the flash.
- When the camera lens is at a distance over the available range from the subject, focus may not be adjusted even if the focus indication appears.

Taking Pictures with the Portrait Mode



Portrait mode allows you to achieve the depth of focus effect easily when you take portrait photos. The subject looks sharp and outstanding against an unfocused background.

We recommend you to place the subject much closer and allow for proper distance between subject and background.

Please note that this mode is suitable for outdoor situations under sunlight.

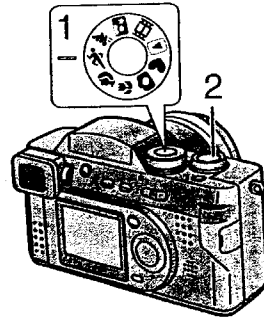
- 1 Set the mode dial to Portrait mode [P].

- 2 Take a picture.

- The recording method is the same as in "Taking Pictures". (P30)

- White balance is set to [AUTO] in the default position. You can change the setting. (P57)

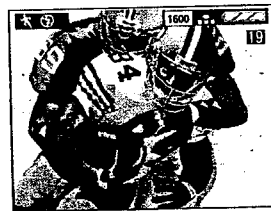
Taking Pictures with the Sports Mode



When you take photos of outdoor sports, this mode allows you to capture a still action photo easily. Please note that this mode is suitable to take photos of the subject from distances of more than 5 m and in daylight situations.

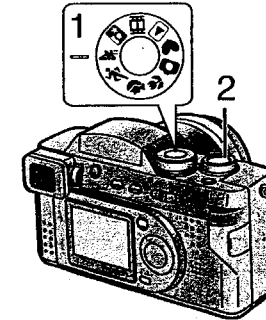
- 1 Set the mode dial to Sports mode [S].
- 2 Take a picture.

- The recording method is the same as in "Taking Pictures". (P30)

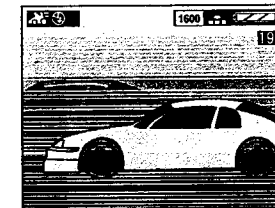


- White balance is set to [AUTO] in the default position. You can change the setting. (P57)

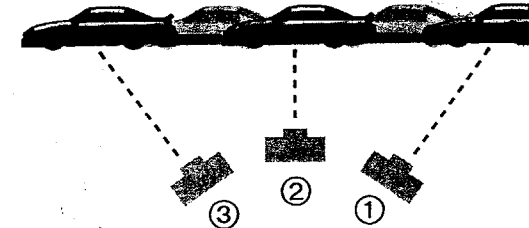
Taking Pictures with the Panning



Panning is a technique of motion tracking a subject in motion. Using a slower shutter speed, you can sharply photograph a subject in motion while blurring the background. In the very bright summer daylight, a slower shutter speed can not be set. To blur the background, please use a polarizing filter (DMW-LND55, optional) or ND filter (DMW-LND55, optional). Please try to use the prefocus function to reduce the time for focusing on a fast moving subject. (P40)



- 1 Set the mode dial to Panning mode [P].
- 2 Take a picture.



- ① Move the camera smoothly while tracking a subject in motion.
- ② Press the shutter button while moving the camera.
- ③ Keep moving the camera continuously.

It is difficult to adjust the focus when the subject has already come. Advance to the point where the subject is likely to come.

- Set the AF trigger to [FOCUS] and you can fix the focus even if you press the shutter button halfway. (P40)
- White balance is set to [AUTO] in the default position. You can change the setting. (P57)
- The stabilizer function is effective only when taking a picture horizontally from side to side.