CONSUMER LIMITED WARRANTY

Model Specific Section

<u>Your Product Model
Number & Description:</u>

VE-CG40U Digital still camera
(Be sure to have this information available when you need service for your Product.)

<u>Warranty Period for this Product:</u>   One (1) year parts and ninety (90) days labor from date of purchase.

<u>Additional Item(s) Excluded
from Warranty Coverage (if any):</u>   Disk Media supplied with this Product is warranted for replacement only and limited to ninety (90) days from date of purchase. Non-rechargeable batteries are excluded from warranty coverage.

<u>Where to Obtain Service:</u>   From a Sharp Authorized Servicer located in the United States. To find the location of the nearest Sharp Authorized Servicer, call Sharp toll free at 1-800-BE-SHARP.

<u>What to do to Obtain Service:</u>   Ship prepaid or carry in your Product to a Sharp Authorized Servicer. Be sure to have **Proof of Purchase** available. If you ship the Product, be sure it is insured and packaged securely.

TO OBTAIN SUPPLY, ACCESSORY OR PRODUCT INFORMATION, GO TO OUR WEBSITE AT **www.sharpusa.com** OR CALL **1-800-BE-SHARP**

SHARP®

SHARP ELECTRONICS CORPORATION
Sharp Plaza, Mahwah, New Jersey 07430-2135

SHARP CORPORATION
Osaka, Japan

Printed in Japan
TINSEA013WJZZ
02P09-J-G

SHARP®

DIGITAL STILL CAMERA

**MODEL
VE-CG40U**

■ **OPERATION MANUAL** ■

Operation References

Preparation

Basic Operations

Useful Features

Advanced Features

Appendix
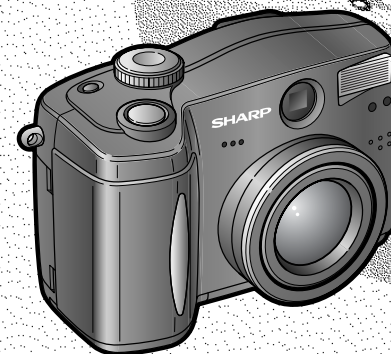
Important
For assistance in reporting the theft or loss of this product, record on the line below the model number and serial number which are located on the bottom of the unit. Please retain this information.

Model No.: _____

Serial No.: _____

Thank you for purchasing this digital still camera from SHARP.
The digital still camera will enhance your home digital picture enjoyment and allow you to capture those special moments. Please read this operation manual to familiarize yourself with the features of this digital still camera, so that you will get the most out of it. The capturing techniques section will help you fully enjoy the many features this digital still camera offers, and expand your digital imaging world.

Important Information for Consumers in the U.S.

CAUTION

If the AC adapter is misplaced or needs to be replaced, obtain the same type of adapter from a SHARP service center or your local dealer.

COPYRIGHT WARNING

It is the intent of SHARP that this unit be used in full compliance with the copyright laws of the United States and that prior permission be obtained from copyright owners whenever necessary.

NOTE

The LCD panel of this digital still camera is a very high technology product with more than 134,000 thin-film transistors*, giving you fine picture detail. Occasionally, a pixel may appear on the screen as a fixed point of blue, green, red, or black. Please note that this does not affect the performance of your digital still camera.

*Specifications are subject to change without notice.

Trademarks
- Microsoft and Windows are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.
- DPOF is a trademark of CANON INC., Eastman Kodak Company, Fuji Photo Film Co., Ltd. and Matsushita Electric Industrial Co., Ltd.
- All other brand or product names are registered trademarks or trademarks of their respective holders.

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WARNING—FCC Regulations state that any unauthorized changes or modifications to this equipment not expressly approved by the manufacturer could void the user's authority to operate this equipment.

INFORMATION

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.

DECLARATION OF CONFORMITY
Sharp Digital Still Camera, Model VE-CG40U
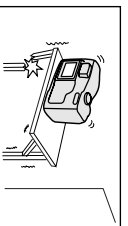
This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

RESPONSIBLE PARTY:
SHARP ELECTRONICS CORPORATION
Sharp Plaza, Mahwah, New Jersey 07430
Phone: 1-800-BE-SHARP
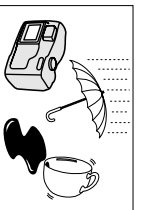
IMPORTANT SAFEGUARDS

1. Read Instructions—All the safety and operating instructions should be read before the product is operated.

2. Retain Instructions—The safety and operating instructions should be retained for future reference.

3. Heed Warnings—All warnings on the product and in the operating instructions should be adhered to.

4. Follow Instructions—All operating and use instructions should be followed.

5. Cleaning—Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.

6. Attachments—Do not use attachments not recommended by the product manufacturer as they may cause hazards.

7. Water and Moisture—Do not use this product near water—for example, near a bath tub, wash bowl, kitchen sink, or laundry tub; in a wet basement; or near a swimming pool; and the like.

8. Accessories—Do not place this product on an unstable cart, stand, tripod, bracket, or table. The product may fall, causing serious injury to a child or adult, and serious damage to the product. Use only with a cart, stand, tripod, bracket, or table recommended by the manufacturer, or sold with the product. Any mounting of the product should follow the manufacturer's instructions, and should use a mounting accessory recommended by the manufacturer.

9. A product and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the product and cart combination to overturn.

10. Ventilation—Slots and openings in the cabinet are provided for ventilation and to ensure reliable operation of the product and to protect it from overheating, and these openings must not be blocked or covered. The openings should never be blocked by placing the product on a bed, sofa, rug, or other similar surface. This product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to.

11. Power Sources—This product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your home, consult your product dealer or local power company. For products intended to operate from battery power, or other sources, refer to the operating instructions.

12. Grounding or Polarization—This product may be equipped with a polarized alternating-current line plug (a plug having one blade wider than the other). This plug will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug.

13. Power-Cord Protection—Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the product.

14. Lightning—For added protection for this product during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the product due to lightning and power-line surges.
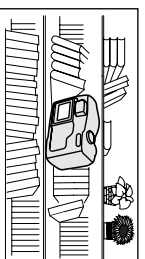
15. Power Lines—An outside antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits, or where it can fall into such power lines or circuits. When installing an outside antenna system, extreme care should be taken to keep from touching such power lines or circuits as contact with them might be fatal.

16. Overloading—Do not overload wall outlets, extension cords, or integral convenience receptacles as this can result in a risk of fire or electric shock.

17. Object and Liquid Entry—Never push objects of any kind into this product

through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Never spill liquid of any kind on the product.

18. Servicing—Do not attempt to service this product yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

19. Damage Requiring Service—Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:

    a. When the power-supply cord or plug is damaged,

    b. If liquid has been spilled, or objects have fallen into the product,

    c. If the product has been exposed to rain or water,

    d. If the product does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to its normal operation,

    e. If the product has been dropped or damaged in any way, and

    f. When the product exhibits a distinct change in performance—this indicates a need for service.

20. Replacement Parts—When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, or other hazards.

21. Safety Check—Upon completion of any service or repairs to this product, ask the service technician to perform safety checks to determine that the product is in proper operating condition.

22. Wall or Ceiling Mounting—The product should be mounted to a wall or ceiling only as recommended by the manufacturer.

23. Heat—The product should be situated away from heat sources such as radiators, heat registers, stoves, or other products (including amplifiers) that produce heat.

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Note:
• Before requesting service, please read "Troubleshooting" carefully (see pages 62 and 63).

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Appendix

Advanced Features

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Supplied Accessories

AC adapter UADP-A013WJZZ*	AA Alkaline Battery ×4	SD Memory Card (16 MB)	Audio/video cable QCNWGA016WJZZ
USB cable QCNWGA018WJPZ	CD-ROM CDSKAA008WJ01	Wrist Strap UBNDTA003WJZZ	Lens cap GCOVAA115WJSA

* The part number for the AC adapter supplied with this digital still camera is valid only in the U.S. and Latin America. If this digital still camera was purchased outside of these areas, the part number may be different. Please refer to the part number printed on the label of the supplied AC adapter.

Precautions

- **Before recording an important scene, please perform the operation test, then check if the scene was captured properly.**

- **When the digital still camera is not in use, remember to remove the card, turn off the power, and disconnect the digital still camera from the power source.**

- **Do not aim the lens at the sun.**
  Do not allow direct sunlight to strike the digital still camera lens or LCD monitor screen, whether or not recording is in progress, as it may damage the CCD sensor or LCD screen surface. Be particularly careful when recording outside.

- **Avoid magnetic sources.**
  Using the digital still camera near strong fluorescent lights, motors, televisions, or other magnetic sources may adversely affect recorded images.

- **Using the digital still camera near a broadcasting station or other powerful transmission source may cause buzzing or image deterioration.**

- **Avoid shocks and dropping.**
  Do not drop or otherwise subject the digital still camera to hard shocks or strong vibrations. Bumping or striking the unit during recording will generate noise in the recorded image.
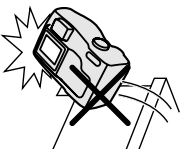
- **This digital still camera is equipped with a moving lens. Do not hit or press it hard.**

- **Avoid placing the digital still camera in close proximity to lighting equipment.**
  The heat from incandescent lights may deform the digital still camera, or cause it to malfunction.
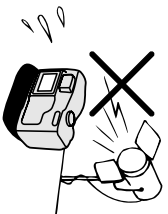
- **Always respect prohibitions or restrictions on the use of electronic equipment on commercial flights or in other sensitive areas.**

- **Be aware of the temperature and humidity.**
  You can use your digital still camera at 32°F to 104°F (0°C to +40°C), and at 30% to 80% relative humidity. Do not store the unit in an unventilated car in the summer, in direct sunlight, or near strong heat sources; this can result in severe damage to the unit casing and circuitry.

- **Avoid situations where water, sand, dust or other foreign matter could get on or inside the digital still camera, and do not use or leave your digital still camera in areas with excessive smoke, steam or moisture.**
  Such environments can cause malfunctions or cause mildew to form on the lenses. Be sure to keep the unit in a well-ventilated location.

- **Some small, portable tripods may be difficult to attach and may not be sturdy enough to support your digital still camera. Be sure to use only a strong, stable tripod.**
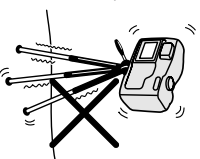
- **When using your digital still camera in a cold environment, the LCD monitor screen often appears less bright immediately after the power is turned on. This is not a malfunction. To prevent the digital still camera from becoming too cold, wrap it in a thick cloth, blanket, etc.**

Quick Start

Inserting the AA batteries (p. 7)

↓
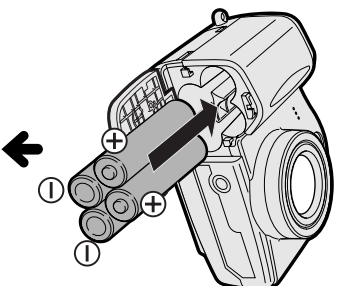
Inserting the supplied SD Memory Card (p. 9)

Write protect switch

Clipped corner

←
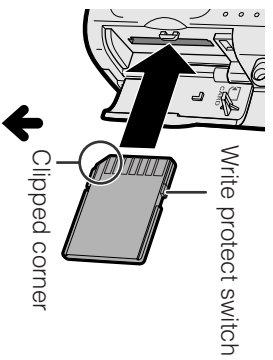
Capturing

Still Image (p. 13)
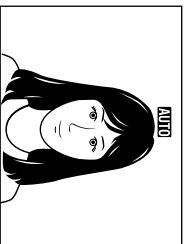
Movie (p. 14)

←
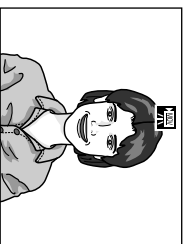
Previewing

Still Image (p. 17)

Movie (p. 18)

x
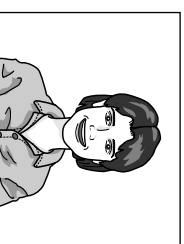
Operation References

Part Names

For details on the use of each part, refer to the page number indicated in parentheses.

Front view

- Power button **(p. 21)**
- Wrist strap loop **(p. 12)**
- Shutter button **(pp. 13, 14)**
- Mode Dial **(p. 21)**
- Microphone
- Zoom lens
- SHARP
- Flash
- Self timer indicator **(p. 25)**
- Flash sensor

Bottom view

- Battery compartment door release **(p. 7)**
- Tripod socket
- UNLOCK ◀ ▶ LOCK
- AA/ALKALINE
- AA/Ni-MH

1
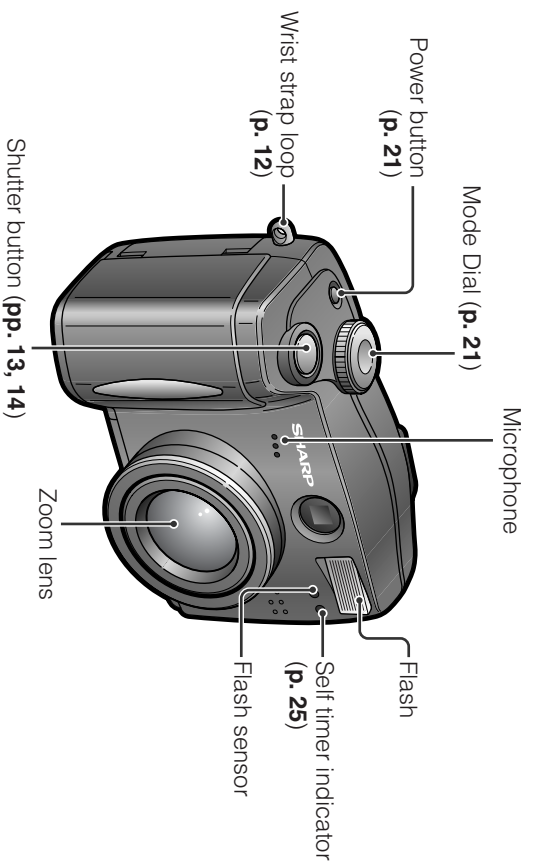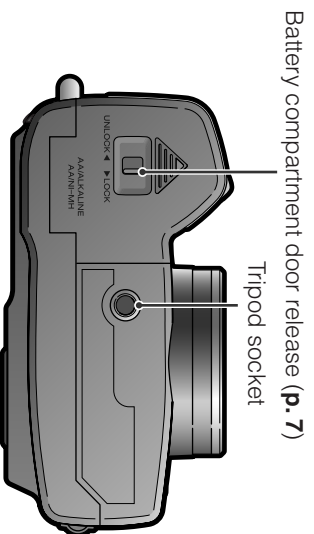
Operation References

Rear view

Viewfinder

LCD screen

Operation button (**p. 21**)

MENU button (**p. 21**)

Macro (✿) (**p. 16**)/
Thumbnail (▦) (**p. 18**)
button

Flash (⚡) (**p. 16**)/
Delete (🗑) (**p. 19**)
button

Speaker

SET/DISPLAY button (**p. 21**)

Data transfer (⤳) button (**p. 57**)

Power Zoom buttons (W: wide
angle, T: telephoto) (**p. 15**)

Card slot cover (**p. 9**)

Status indicator (**p. 13**)

Diopter control (**p. 11**)

Jack cover (**pp. 8, 20, 57**)

A/V OUT jack (**p. 20**)

USB terminal (**p. 57**)

DC IN jack (**p. 8**)
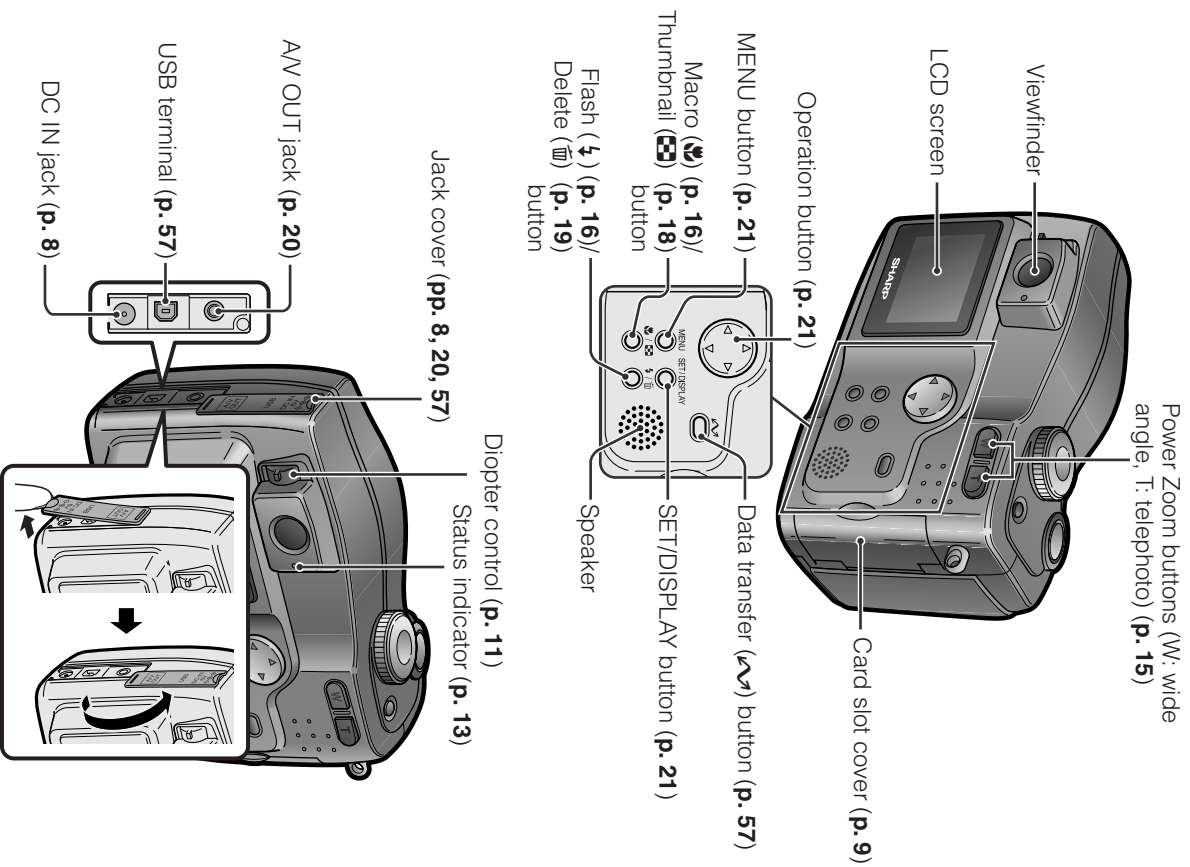
On-screen Display Index

For details on the use of each function, refer to the page number indicated.

In AUTO, P, A, S, M, SC, or 🎥 mode

- ISO AUTO — p.49
- ⚡ AUTO — p.16
- — p.21
- 0010 [2448] — p.23
- Fine — p.23
- ±0.0EV — p.6
- 1/500 F5.6
- — p.48

In ▶ mode (Full-display)

- [2448]
- Fine
- ±0.0EV
- 1/500
- F5.6
- 100-0010 — p.36

In ▶ mode (Thumbnail)

- 100-0010 — p.53

Menu screens

CAPTURE 1
- IMAGE SIZE — p.23
- IMAGE QUALITY — p.23
- SHOOTING MODE — p.24
- QUICK SHOT — p.28
- FRAME GUIDE — p.29
- DIGITAL ZOOM — p.30
- RETURN

CAPTURE 2
- QUICK VIEW — p.31
- WHITE BALANCE — p.48
- SENSITIVITY — p.49
- GAMMA — p.50
- METERING — p.47
- VOICE REC. — p.32
- RETURN

SETTING 1
- DEFAULT — p.52
- FORMAT — p.52
- AUTO POWER OFF — p.53
- FILE NUMBER — p.53
- RETURN

SETTING 2
- PC CONNECT — p.59
- LANGUAGE — p.56
- VIDEO OUT — p.20
- UNDO LAST IMAGE — p.54
- SPEAKER — p.54
- BEEP — p.55
- RETURN

DATE/TIME
- DISPLAY — p.51
- 12H/24H — p.11
- STYLE — p.51
- SETTING — p.10
- RETURN

PREVIEW
- PROTECT — p.33
- IMAGE EFFECT — p.34
- SLIDE SHOW — p.35
- PRINT ORDER — p.36
- DELETE ALL — p.38
- DUBBING — p.39
- RETURN

MOVIE
- WHITE BALANCE — p.48
- FRAME GUIDE — p.29
- RETURN

Note: The menus and screen shots shown in this manual are for explanation purposes only and may vary slightly from actual operating conditions.

Warning Indicators

If a warning indicator appears on the screen, follow the specified instructions.

Warning indicators	Description of warning
NO CARD	The card is not inserted or is inserted improperly. Check that it is properly inserted (see **page 9**).
NO IMAGES	The card has no images recorded in the format the camera can recognize.
CARD IS FULL	The capacity of the card is full and cannot store any more images. Delete unnecessary images (see **page 19**) or replace the card with a new one (see **page 9**).
CARD SLOT COVER IS OPEN	The card slot cover is open. Close the cover.
LENS ERROR TURN POWER OFF/ON AGAIN	If you power on the camera in any of the capture modes and the lens barrel is obstructed (e.g. by a hand, flat surface, lens cap), it may freeze after making contact three times. In such case, turn the power off, remove the obstruction then power on again.
MAX. IMAGE NO.	You cannot record any image with a file number bigger than 999-9999. Format the card or replace it with a new one.
CARD IS SET TO READ ONLY	The card is write-protected (see **pages 9, 60**).
PROCESSING WAS STOPPED	The camera failed to process the data. Make sure the operation procedure is correct.
CANNOT READ THE IMAGE DATA	The selected image cannot be read by this camera.
BATTERY IS TOO LOW TO TRANSFER THE DATA	Replace the batteries with new AA alkaline batteries or fully charged Ni-MH rechargeable batteries (commercially available) (see **page 7**).
PRINT SETTING IS UP TO 999 IMAGES	You cannot set the print order to more than 999 images.
DISCONNECTED	Improper connection. Check the USB connection and make sure the card is firmly inserted in its slot (see **page 9, 57**).

4

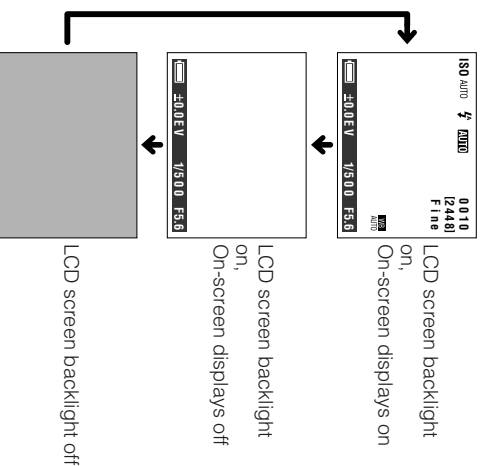| Warning indicators	Description of warning
IS CARD SET TO WRITE PROTECT?	You cannot transfer data using the transfer button if the card is write-protected. Set the switch to the unlocked position and try transferring again (see **page 9, 57**).
IS CARD MEMORY FULL?	You cannot transfer data to a computer if the card is full. Delete a few unneeded images and try transferring again.
CARD ACCESS ERROR	The images in the card are corrupted or recorded in a format which is not compatible with this camera. Format the card for use with this camera (see **page 52**).*
FORMAT THE CARD	The memory card has not been formatted for use with this camera. If the card contains important data, transfer it to another storage device before formatting (see **page 52**).*

* Formatting a card erases all stored images, including delete-protected images. Be sure to backup important data on your computer or other media before formatting the card.

Turning the On-screen Display and Backlight On/Off

Use the DISPLAY button to turn on/off the on-screen displays, or to turn off the LCD screen backlight. Each time you press this button, the screen changes as shown below.
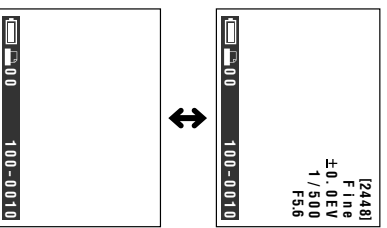
In AUTO, P, A, S, M, SC. or '◨ mode

```
ISO AUTO  ⚡ AUTO        0 0 1 0
                        [2 4 4 8]
                         F i n e

±0.0EV   1/500   F5.6   SPD
                        AUTO
```

LCD screen backlight on, On-screen displays on

```
              0 0 1 0
              [2 4 4 8]
              F i n e

±0.0EV   1/500   F5.6
```

LCD screen backlight on, On-screen displays off

LCD screen backlight off

Note:
• The examples shown are the screens for **AUTO** mode.

In ▷ mode

```
              [2448]
               F i n e
              ±0.0EV
               1/500
               F5.6

      0 0         1 0 0 - 0 0 1 0
```
↔
```


      0 0         1 0 0 - 0 0 1 0
```
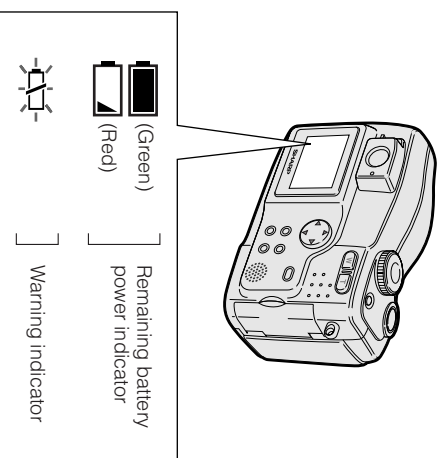
Note:
• You cannot turn the LCD screen backlight off in ▷ mode.

6

Remaining Battery Power Display

This camera can display the remaining battery power indicator during operation. If the battery power becomes very low, replace the batteries with new ones (see page 7).

☀   (Green)
☐ ▨ (Red)

Warning indicator

Remaining battery power indicator

Notes:
• When the battery runs down completely, the status indicator blinks red and the power shuts down.
• Use the remaining battery power indicator only as an approximate value.
• The indicator may change to a higher or lower level if the power is turned off and then on again.
• In cold environments, the red indicator may appear sooner.
• Use of the zoom functions when the warning indicator is displayed may cause the camera to suddenly lose power.
• When the battery power becomes very low, some menu items may not be selectable or some functions may not work properly.
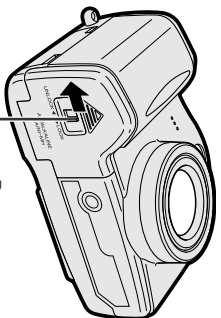
Preparation

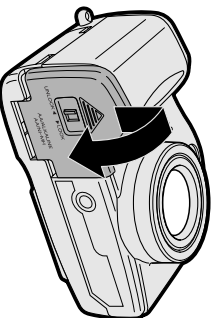## Inserting and Removing the AA Batteries

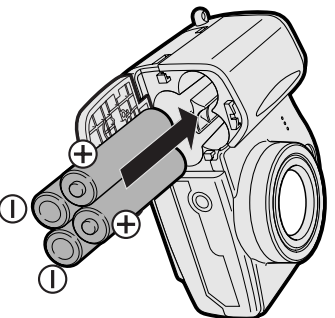Before operation, you need to insert the supplied AA (R6 or UM/SUM-3) alkaline batteries.

Inserting

1 Make sure that the power is off.

2 Slide the battery compartment door release to UNLOCK.

Battery compartment door release

3 Slide the door, then open it in the direction of arrow.

4 Insert the AA batteries as shown below.

5 Close the door, then slide the battery compartment door release to LOCK.

Removing

Perform steps 1 to 3 in "Inserting", then remove the batteries.

Notes:

- **BEFORE REMOVING THE BATTERIES, ALWAYS STOP OPERATIONS AND TURN THE POWER OFF.** Removing the batteries during operation may destroy the card, rendering it unreadable and unwritable.
- Remove the batteries from the camera if you will not use the camera for a long period of time.
- Make sure that the battery compartment door release is set to LOCK during operation. If it is not, the batteries may fall out or camera operation may fail because of poor contact pressure.
- Do not use old and new batteries together or batteries of different brand together.
- When the batteries are depleted, replace them with new AA (R6 or UM/SUM-3) alkaline batteries or fully charged Ni-MH rechargeable batteries (commercially available).

Battery performance

The table below shows the approximate number of recordable images when using different types of batteries.

Battery type	Approximate number of images
AA Alkaline (supplied)	100
Rechargeable Ni-MH (1600 mAh)	200

Notes:

- **Images taken per usage, based on standard testing.**
- **Using the zoom (see page 15) and other functions or turning the power on and off frequently will increase power consumption. This may result in a decrease in the actual recording number compared to the numbers listed above.**
- The number of images you can record with commercially available batteries may differ from the supplied AA alkaline batteries in the table above.

8

## Powering the Camera from an AC Outlet

You can power the camera from a power outlet by using the supplied AC adapter.

Note:
• The supplied AC adapter is specially designed for use with this camera, and should not be used as a power supply for other equipment.

1 Make sure that the power is off.

2 Open the jack cover (see page 2).

3 Insert the DC plug into the DC IN jack (①), then plug the AC adapter into a power outlet (②).

To AC outlet

②

DC IN jack

DC plug

①

Jack cover
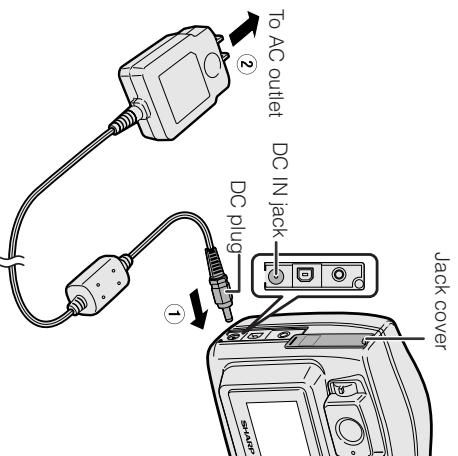
4 Press the Power button until the camera turns on.

Notes:
• **BEFORE REMOVING THE DC PLUG, ALWAYS STOP OPERATIONS AND TURN THE POWER OFF.** Removing the DC plug during operation may destroy the card, rendering it unreadable and unwritable.
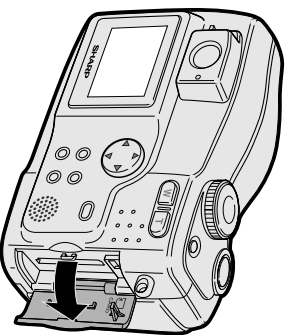• Remove the DC plug from the camera if you will not use the camera for a long period of time.
• The AC adapter attaches directly, so use close to an outlet and be careful that it does not detach.

Inserting and Removing a Card

You can use an SD Memory Card for storing images.

Inserting

1 Make sure that the power is off.

2 Open the card slot cover in the direction of arrow.

3 Make sure the SD Memory Card's write-protect switch is in the unlocked position. Then insert the card into the slot as shown below, and push it fully.

Clipped corner

Write protect switch

4 Close the card slot cover.

Removing

Perform steps 1 and 2 in "Inserting", then push the card and release your finger slowly (①). Then pull the card straight out (②) as shown below.
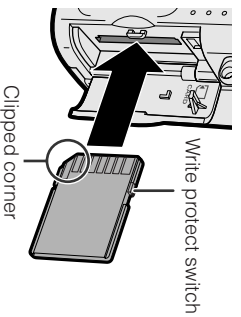
① ②
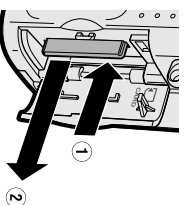
Notes:

• The supplied card is preformatted for immediate use.

• See page 60 for more information on the cards intended for use with this camera.

• **Do not remove the card from the camera while recording data on the card (☐ indicator blinks during recording).** This may delete the recorded image or damage the card.
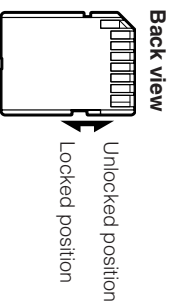
About the write protect switch

SD Memory Cards have a write protect switch. When the switch is set to the locked position, you cannot record/delete data or format the card. Set it to the unlocked position to record/delete data or format the card.

Back view
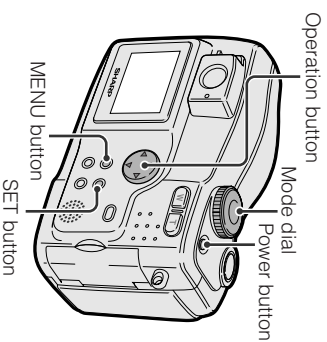
Unlocked position

Locked position

Preparation

9

Preparation

Setting the Date and Time

Available in ▶, **AUTO, P, A, S, M, SC. or** 🎬 **mode**

Example: Setting the date to June 2, 2003 and the time to 1:30 pm.

Operation button

MENU button

SET button

Mode dial

Power button

SET/DISPLAY

DATE/TIME
▣1 DISPLAY
▣2 12H/24H
☑1 STYLE
☑2 SETTING
🕐 JAN. 1. 2002
↩ 12:00AM
RETURN

1 Press the Power button until the camera turns on.

2 Press the MENU button until the menu screen appears.

3 Press the SET button.
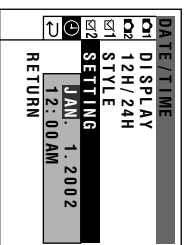
Note:
• Setting procedure will vary depending on the settings of "STYLE" and "12H/24H" in the DATE/TIME screen. The example below shows a "MMM.DD.YYYY" style with a 12H time setting (see page 51).

4 Press △ or ▽ to select "JUN" (month), then press the SET button.

SETTING
JUN. 1. 2002
12:00AM

5 Press △ or ▽ to select "2" (day), then press the SET button.

SETTING
JUN. 2. 2002
12:00AM

6 Press △ or ▽ to select "2003" (year), then press the SET button.

SETTING
JUN. 2. 2003
12:00AM
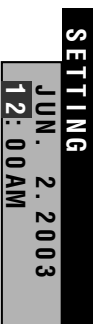
7 Press △ or ▽ to select "1" (hour), then press the SET button.

SETTING
JUN. 2. 2003
1:00PM
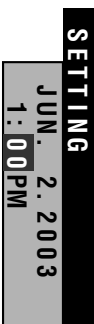
8 Press △ or ▽ to select "30" (minute), then press the SET button.

• The internal clock starts up once the second hand begins to blink.

SETTING
JUN. 2. 2003
1:30:00PM

Note:
• If you capture an image without setting the date and time, under bars will display in the preview screen instead of the date and time values.

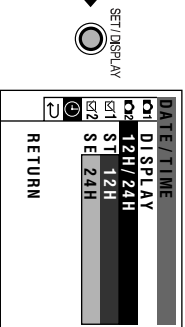## Changing to the 24-hour Time Mode

1 After performing step 8 above, press ▽ or △ to select "12H/24H", then press the SET button.

SET/DISPLAY

2 Press ▽ or △ to select "24H", then press the SET button.

```
DATE/TIME
      DISPLAY
      12H/24H
ST    12H
SET   24H
RETURN
```

12H / 24H
12H
24H

3 Press the MENU button to turn off the menu screen.
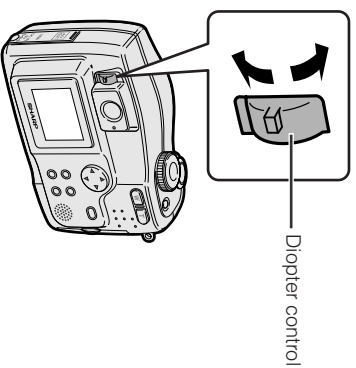
Notes:
- To cancel the clock setting procedure, press the MENU button at any step.
- If the date and time have been set, the CAPTURE 1 screen (   ) appears in step 2. Select "SETTING" in the DATE/TIME screen (   ) using the Operation button and the SET button.

Adjusting the Diopter

Adjust the diopter according to your eyesight when the picture in the viewfinder is not clear.

1 Press the Power button until the camera turns on.

2 While looking through the viewfinder, turn the Diopter Control until the subject is seen clearly.
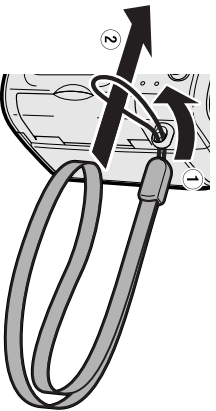

Diopter control
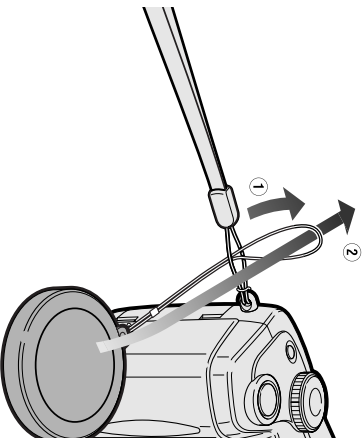
Preparation

Using the Wrist Strap

Attach the wrist strap to the wrist strap loop as shown below.

Notes:
- Make sure the wrist strap attaches firmly to the wrist strap loop.
- Do not swing the camera by the strap.

Using the Lens Cap

Attach the strap of the lens cap to the wrist strap as shown below.

Always attach the lens cap when not using the camera.
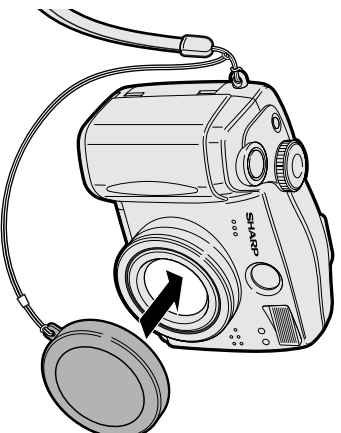
Note:
- Remove the lens cap before you power on the camera. The camera may freeze if the lens cap remains attached. In such case, press the Power button to power off, remove the lens cap and press the Power button again to power on.

Capturing a Still Image in Auto Mode

In Auto Mode, the camera automatically sets the best aperture, shutter speed, exposure value and white balance. Light metering is set to Center mode.
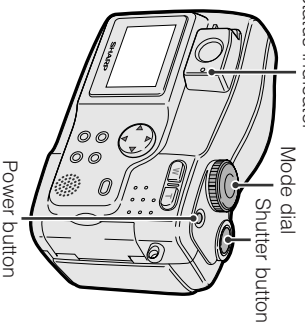
• Before you start, perform the procedures described on pages 7 to 12 to prepare your camera for capturing images.
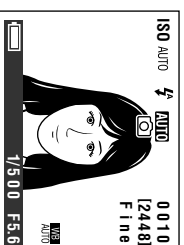
Status indicator

Mode dial

Shutter button

Power button

1 Insert a card into the camera (see page 9).

2 Remove the lens cap.

3 Set the Mode Dial to "**AUTO**".

4 Press the Power button until the camera turns on.

AUTO — POWER

5 Press the Shutter button half-way down to focus on the subject.

• The camera automatically focuses on the subject. While focusing, you will see the status indicator blinks green and ▢ blinks white in the display. When the camera locks into focus, they stop blinking and light up.

ISO AUTO AUTO ▢
1/500 F5.6
0010
[2448]
Fine

6 Press the Shutter button fully to capture the image.

• The status indicator blinks while data is being recorded on the card, and stops blinking when recording completes.

• When the QUICK VIEW menu item is set to "ON", the captured image displays on the LCD screen for a few seconds.

1/500 F5.6
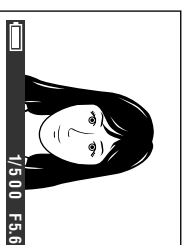
• To capture another image, release the Shutter button and make sure the status indicator lights up, then perform steps 5 and 6.

Notes:
• Do not turn the power off while the status indicator is blinking in step 6.
• Remove the lens cap before powering on the camera.

13

Basic Operations

Capturing a Motion Image

You can take a moving picture up to 30 seconds in the same way as you do with a video camera and record that image on the card.

Status indicator

Mode dial

Shutter button

Power button

1 Insert a card into the camera (see page 9).

2 Remove the lens cap.

3 Set the Mode Dial to "🎬".

4 Press the Power button until the camera turns on.

POWER

5 Press the Shutter button fully to begin capturing.

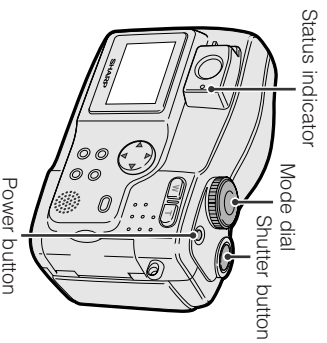### To pause capturing

Press the Shutter button fully again.

Notes:

- You cannot use the zoom, digital zoom and the flash for capturing motion images.
- If the card becomes full during motion image capture, the camera automatically stops recording.
- The camera captures the motion image in 320×240 pixels.
- See page 18 for how to playback a motion image.
- The following settings are not available in movie image mode.
  - Self timer
  - Exposure value setting
  - Gamma setting

Zooming

Available in AUTO, P, A, S, M, SC, or '🏔 mode

Zooming allows you to move visually closer to or farther from a subject without physically changing your position. When using the optical zoom, you can enlarge the subject up to 3x.

Zooming in (when you want to center attention on the subject)

Zooming out (when you want to include the surroundings)
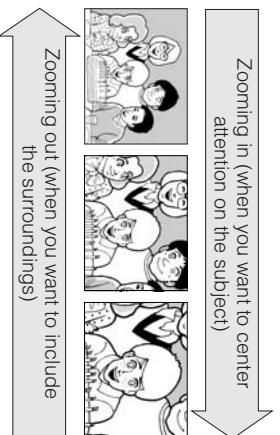
Zooming in
Press the Power Zoom "T" (telephoto) button to get a close-up view (①).

Zooming out
Press the Power Zoom "W" (wide angle) button to get a wide field of view (②).

- The zoom range indicator shows you the current zoom setting.

Power zoom buttons

Zoom range indicator

W ─── T ZOOM 3
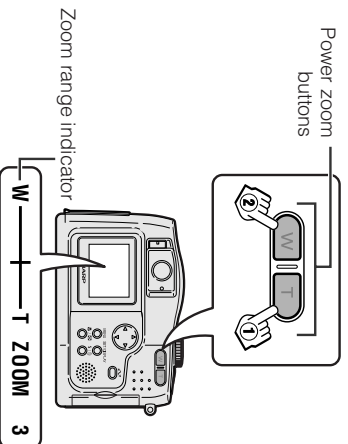
Note:
- See page 30 for how to use the digital zoom.

Auto Focus

Available in AUTO, P, A, S, M, SC, or '🏔 mode

The camera is designed to automatically focus on most types of subjects. The camera automatically focuses on the subject in the center of the frame.

Notes:
- If no subject is in the center of the frame, the focus area will expand and the subject nearest the center will be focused on.
- If there is no subject to focus on, the camera will automatically zoom out until a focusable subject comes into the frame.
- **Auto Focus may not work in the situations described below. If 📷 lights up red, the camera cannot auto-focus. Try focusing again in a different angle or composition.**
  - Subject is too dark.
  - Lack of contrast, e.g. snow scene.
  - Fast-moving subject.
  - Background is too bright.
  - Subject has horizontal stripes.
  - Subject is shot through a dirty or wet window.
  - Light reflects off the subject.
  - Two subjects at different distances overlap in the same frame.
  - Subject has fine, repeated patterns.
  - Subjects at different distances appear in the center of the frame at the same time.
 - Fast-speed shutter being used under fluorescent lighting.

**Basic Operations
Capturing**

Using the Flash

Available in AUTO, P, A, S, M or SC. mode

You can use the flash to record good-quality still images even in dark locations.

" ⚡ " button

### Types

⚡ : Automatic flash mode, based on light condition

⊚: Automatic flash mode with red-eye reduction

⚡ : Flash on mode

⚡⊚: Flash on mode with red-eye reduction

⚡: Flash off mode
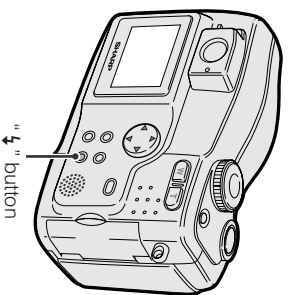
1 Turn on the camera in the desired mode.

2 Press the ⚡ button until the desired flash mode displays.
- Each time you press the ⚡ button, the flash mode icon changes as shown below .

3 Capture the still image (see page 13).
- The flash works depending on the setting.
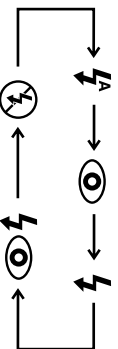
Notes:
- ⚡ and ⊚ are not available in Manual Exposure Control mode (M), Aperture Priority mode (A) and Shutter Speed Priority mode (S).
- ⚡ and ⚡⊚ are not available in Auto mode (AUTO).
- Flash is automatically set to off when using Continuous, Auto Bracket and Auto Gamma modes.
- The flash sensor on the front of the body measures the light level to emit. Do not obstruct it with your finger when holding camera.

Using Macro Shot

Available in AUTO, P, A, S, M, SC. or 🎬 mode

This camera lets you shoot close-ups to focus on subjects from about 3.5 to 28 inches (9 to 70 cm) away with the Power zoon "W" button set to widest angle, and 8 to 28 inches (20 to 70 cm) away with the Power zoon "W" button set to other than the widest angle. Excellent for photographing insects and flowers.

" 🌷 " button
Power zoom "W" button
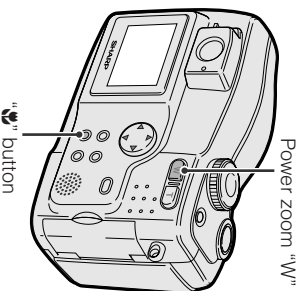
1 Turn on the camera in the desired mode.

2 Press the Power Zoom "W" button to set to widest angle, then press the 🌷 button.

3 Move the camera closer to the subject until you obtain the desired angle of view, then capture the image.

Notes:
- When you capture a macro shot, make sure that the subject receives sufficient illumination.
- In Scene Select mode (SC.), this function will only work if you select "BLACK&WHITE" from the "SCENE MENU".
- Use a tripod to avoid camera shaking.
- Macro Shot is not available when Quick Shot is on.

16

Previewing Images

The LCD monitor screen functions as a handy preview monitor. Nothing needs to be connected, allowing instant on-screen preview.

Operation button

DISPLAY button

Mode dial

Power button

Previewing still images

1 Set the Mode Dial to "▶".

2 Press the Power button until the camera turns on.
- The last image recorded on the card displays in full screen.

POWER

[2448]
Fine
±0.0EV
1/500
F2.5

100-0005

3 Press ◁ or ▷ to select the image.
- When holding down the button, you can search through the images on the card. The search can be very fast, so it is recommended that you use the on-screen indicators.

Notes:
- Depending on the amount of data for the recorded image, the picture quality icon displayed during playback may not match the picture quality setting used during recording.
- Images bigger than 2448×1632 pixels, e.g. images recorded on other equipment, display as thumbnails, not full screen.
- Images and capture details recorded with a different camera may not display properly or not display at all.
- Do not preview images on any card that has a defective image (with noise and distortion) created on other equipment. If you mistakenly preview the images on such a card, turn the power off, remove, and never use it with this camera again.

17

Basic Operations
Previewing

Previewing motion images
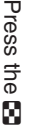
1 Set the Mode Dial to "▶".

2 Press the Power button until the camera turns on.

POWER

3 Press ◁ or ▷ to select the motion image.

- The movie icon appears when the selection frame is over the motion image file.

Movie icon

[▶] 100-0005

4 Press △ to start previewing.

- The movie previews in full screen.

[▶] 100-0005

Preview Options

You can use the options below when you preview a motion image.

- To pause the preview, press △. Press △ again to return to normal preview.
- To search the scene in the previewing file, press ◁ or ▷. Press △ to return to normal preview.
- To stop the preview, press ▽.

Using the thumbnail preview

1 Press the ▦ button.

[▭] 100-0001

2 Press ◁, ▷, ▽ or △ to select the desired image.
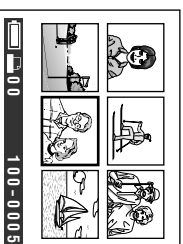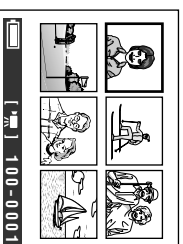
- When holding down the button, the selection frame moves faster.
- Press the ▦ button again to return to full-screen preview.

100-0005

18

Deleting One Stored Image

Available in ▶ mode

You can delete unwanted images to free up card memory.

"🗑" button

Operation button
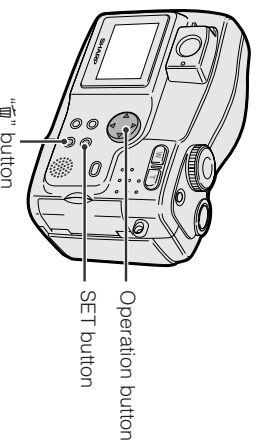
SET button

1 Set the Mode Dial to "▶", then power on the camera.

- The images recorded on the card are displayed in full screen format.

▶ — POWER

2 Press △ or ▷ on the Operation button to select the image to be deleted.

3 Press the 🗑 button.

4 Press ▽ or △ to select "YES", then press the SET button to delete the image.

4 / 🗑

SET / DISPLAY

▽

DELETE?

NO
YES

100-0010
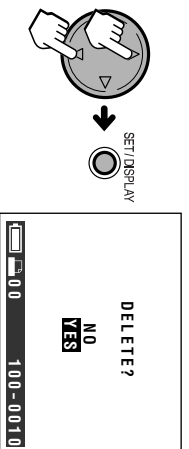
- To cancel deletion, press ▽ or △ to select "NO", then press the SET button. The menu screen appears.
- If you want to delete another image, repeat steps 2 to 4.

Notes:
- To delete all images, see page 38.
- Do not turn the power off while deleting an image.
- Protected images cannot be deleted. Cancel the protection setting to delete the image (see page 33).
- You can restore the most recent image deleted (see page 54).

Zooming a Preview Image

Available in ▶ mode

This function allows you to magnify the preview image up to 4 times its original size.

1 Preview the image (see page 17 or 18).

2 Press the Power Zoom "T" button to magnify the image.

W
T

- Each time you press the button, magnification changes as shown below.

3 Press ◁, ▷, ▽ or △ to shift the display area of the image.

1× ↕ 2× ↕ 4×
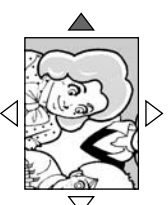
To return to original size

Press the Power Zoom "W" button until the image returns to its original size.

W
T

Note:
- You cannot zoom in images that were recorded with a different camera.

Basic Operations

Previewing on a TV screen

Available in ▶ mode

You can connect the camera to a TV to enjoy preview with several people.

Preparation

1 Make sure each device to be connected is powered off.

2 Open the jack cover on the camera (see page 2).

3 Connect the camera to your TV (or VCR) with the supplied A/V cable, as shown below.

A/V cable (supplied)

S-VIDEO

VIDEO

AV-IN

(MONO)L-AUDIO-R

⌐ : The arrow shows the signal flow.
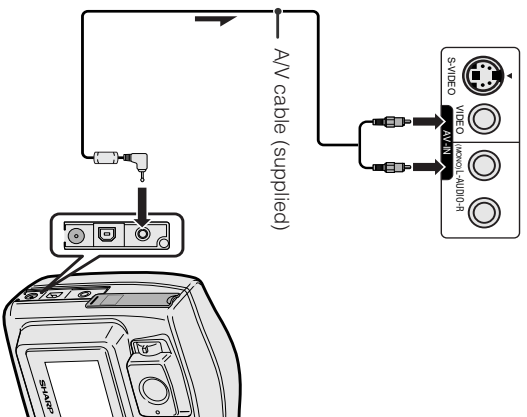
4 Turn on the TV and set it to the "AV" or "VIDEO" channel. (See the operation manual of your TV.)

• When connecting to a TV via a VCR, turn on the VCR and set it to the "AV" or "LINE" input channel. Operate the TV as you normally do to view the signal from the VCR. (See the operation manuals of your TV and VCR.)

Previewing

1 Set the Mode Dial to "▶", then power on the camera.

2 Press the MENU button until the menu screen appears.

3 Press ▽ or △ to select "⚙ 2", then press the SET button.

4 Press ▽ or △ to select "VIDEO OUT", then press the SET button.
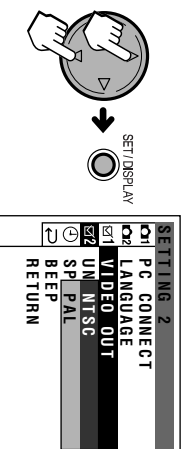
5 Press ▽ or △ to select the TV system in your location, then press the SET button.

SET/DISPLAY

SETTING 2
◻1 PC CONNECT
◻2 LANGUAGE
⚙1 VIDEO OUT
⚙2 UN NTSC
      SPI PAL
      BEEP
   ↵ RETURN

VIDEO OUT
NTSC
PAL

6 Press the MENU button to turn off the menu screen.

7 Begin preview (see page 17 or 18).

Note:
• Close the jack cover after use.

Useful Features

Using the Controls

Mode Dial

Turn the Mode Dial to set the camera to each mode below.

An icon for each mode appears here.

Movie mode (🎥): p. 14

Scene Select mode (**SC.**): p. 46

Manual mode (**M**): p. 45

Shutter Speed Priority mode (**S**): p. 43

Aperture Priority mode (**A**): p. 42
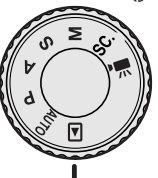
Program AE mode (**P**): p. 41

Auto mode (**AUTO**): p. 13

Preview mode (▶): pp. 17, 18

Power button

To turn the power off, press the Power button.

To turn the power on, press the Power button until the camera turns on.
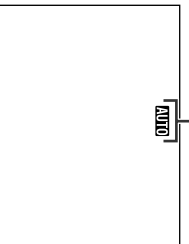
POWER

Note:
- If you power on the camera with the Mode Dial set halfway between two modes, the startup screen stays on and the status indicator blinks green. Set the dial so it securely snaps in to the desired position.

Note:
- Do not turn the power off when the status indicator blinks.

Operation button

Use the Operation button to select menu items and adjust menu settings.

MENU button

Use the MENU button to turn on/off the menu screen.

SET/DISPLAY button

When the menu screen displays, use this button to set the selected menu

SET/DISPLAY

MENU

Useful Features

Using the Menu Screen

Use the menu screens to adjust the various camera settings. Steps below show how to change the SENSITIVITY menu setting in Program AE mode.

Operation button

Menu button

SET button

Mode dial

Power button

1 Set the Mode Dial to the desired mode ("**P**").

Note:
• When you select the Scene select mode (**SC.**) for the desired mode in step 1, the SCENE MENU screen appears (see page 46). Select the desired setting before performing the next step.

2 Press the Power button until the camera turns on.

Note:
• See page 3 and the page for each function for the menu items you can select in each mode.

3 Press the MENU button until the menu screen appears.

MENU

POWER

P

```
CAPTURE 1
  IMAGE SIZE
  IMAGE QUALITY
  SHOOTING MODE
  QUICK SHOT
  FRAME GUIDE
  DIGITAL ZOOM
  RETURN
```

4 Press ▽ or △ on the operation button to select the desired menu screen (📷2), then press the SET button.
• You can press ▷, instead of the SET button.
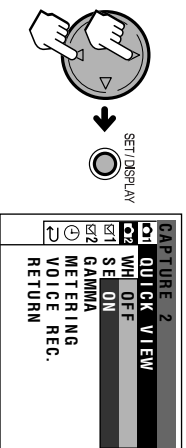
5 Press ▽ or △ to select the desired menu item (SENSITIVITY), then press the SET button.
• You can press ▷, instead of the SET button.
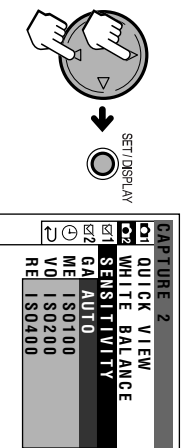
SET/DISPLAY

```
CAPTURE 2
  QUICK VIEW
  WHITE BALANCE
  SENSITIVITY
  METERING
  VOICE REC.
  RETURN
```

6 Press ▽ or △ to select the desired setting, then press the SET button.
• You can press ▷, instead of the SET button.

SET/DISPLAY

```
CAPTURE 2
  QUICK VIEW
  WHITE BALANCE
  SENSITIVITY
  METERING
  VOICE REC.
  RETURN

SENSITIVITY
  AUTO
  ISO100
  ISO200
  ISO400
```

• To adjust another menu item, press ▽ or △ to select "RETURN" and press the SET button, then perform steps 4 to 6.

To turn off the menu screen

Press the MENU button.

Note:
• Items that are not selectable are grayed out.

Selecting Image Size and Quality

You can capture images in different combinations of image size and quality. There are two quality and four size settings available. The number of images that can be stored will depend on this combination and the size of the memory card.

Available in AUTO, P, A, S, M or SC. mode

1 Turn on the camera in the desired mode.

2 Press the MENU button until the menu screen appears.

3 Press ▽ or △ to select "🗗", then press the SET button.

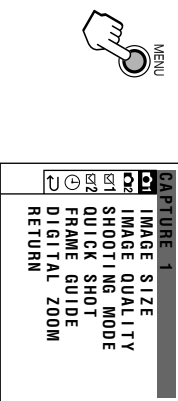**4** Press ▽ or △ to select "IMAGE SIZE", then press the SET button.

```
CAPTURE 1
🗗2  IMAGE SIZE
🗗1  IM 2448×1632
    SH 1824×1216
🕒2  QU 1200× 800
🕒   FR 720× 480
↩   DIGITAL ZOOM
    RETURN
```

SET/DISPLAY
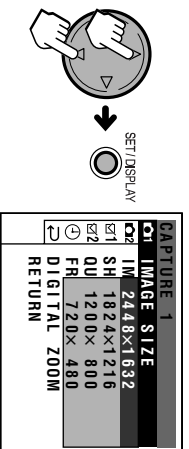
5 Press ▽ or △ to select the desired setting, then press the SET button.

```
IMAGE SIZE
2448×1632
1824×1216
1200× 800
720× 480
```

6 Press ▽ or △ to select "IMAGE QUALITY", then press the SET button.

```
CAPTURE 1
🗗2  IMAGE SIZE
🗗1  IMAGE QUALITY
    SH FINE
    QU STANDARD
🕒   FRAME GUIDE
↩   DIGITAL ZOOM
    RETURN
```

SET/DISPLAY

7 Press ▽ or △ to select the desired setting, then press the SET button.

```
IMAGE QUALITY
FINE
STANDARD
```

8 Press the MENU button to turn off the menu screen.

Note:
• The image size and quality are not selectable while capturing a motion image.

Approximate number of record-able images with the supplied card (16MB SD Memory Card)

Size	Quality	
	FINE	STANDARD
2448 × 1632	10	15
1824 × 1216	18	26
1200 × 800	36	50
720 × 480	80	106

Useful Features

Selecting the Shooting Mode

Available in AUT0, P, A, S, M or SC. mode

This camera has five different modes for capturing images.

Types

SINGLE: Normal mode to capture a single still image

CONTINUOUS: Captures three consecutive still images

SELF TIMER: Captures a still image with time-lag of 10 seconds

BRACKET: Captures three still images at different exposure settings

γ BRACKET: Captures three still images at different gamma settings

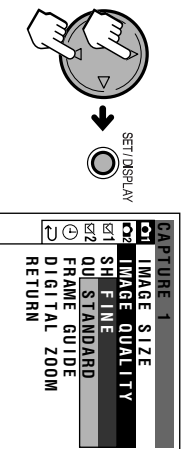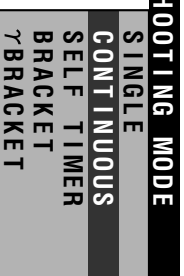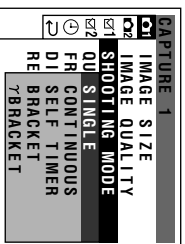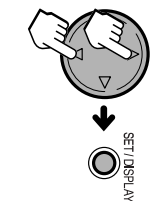**1** Turn on the camera in the desired mode.

2 Press the MENU button until the menu screen appears.

3 Press ▽ or △ to select "📷", then press the SET button.

4 Press ▽ or △ to select "SHOOTING MODE", then press the SET button.

```
CAPTURE 1
📷1  IMAGE SIZE
📷2  IMAGE QUALITY
🕐   SHOOTING MODE
↩   OU  SINGLE
     FR  CONTINUOUS
     DI  SELF TIMER
     RE  BRACKET
         γBRACKET
```

5 Press ▽ or △ to select the desired setting, then press the SET button.

```
SHOOTING MODE
SINGLE
CONTINUOUS
SELF TIMER
BRACKET
γBRACKET
```

SET/DISPLAY

6 Press the MENU button to turn off the menu screen.

Notes:

• Depending on your selection in step 5, perform the steps in the sections indicated below.
  - SINGLE: p. 13
  - CONTINUOUS: See the following section.
  - SELF TIMER: p. 25
  - BRACKET: p. 26
  - γ BRACKET: p. 27

• When the card capacity becomes nearly full in step 5, the settings, CONTINUOUS, BRACKET and γ BRACKET may not be selectable.

In CONTINUOUS mode

1 Press the Shutter button half-way down to focus on the subject.

2 Press the Shutter button fully to capture the image.

• The camera captures three consecutive still images.

Notes:

• In CONTINUOUS mode, the flash does not work.
• If the card becomes full or the battery runs down completely while shooting in continuous mode, the camera automatically stops image capture.

Using the Self Timer

Available in AUT0, P, A, S, M or SC. mode

The self-timer allows you to record images after a time-lag of 10 seconds. This is convenient when you want to record an image of you and your friends together.

1 Select "SELF TIMER" in SHOOTING MODE menu (see page 24).

```
SHOOTING MODE
SINGLE
CONTINUOUS
SELF TIMER
BRACKET
γBRACKET
```
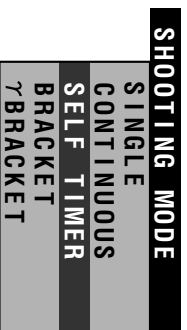
• The self timer mode icon appears when the on-screen indicators are turned on.
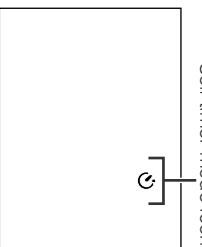
Self timer mode icon

2 Press the Shutter button half-way down to focus on the subject.

3 Press the Shutter button fully to activate the ten-second count-down to image capture.

• The self timer indicators on the body and LCD screen blink. Ten seconds after pressing the Shutter button, the camera automatically captures the image.

Self timer indicators
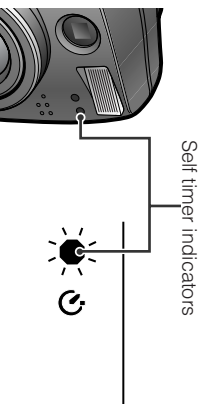
Useful Features

Using Automatic Exposure Bracketing

Available in P, A, S, M or SC. mode

This function allows you to take the same scene with three different exposure settings. The camera automatically takes three successive images while changing the exposure value for each image slightly.

1 Select "BRACKET" in SHOOTING MODE menu (see page 24).

```
SHOOTING MODE
SINGLE
CONTINUOUS
SELF TIMER
BRACKET
γBRACKET
```
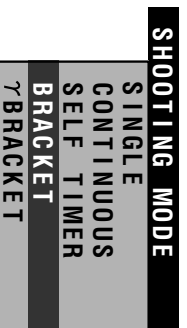
2 Press ▽ or △ to select the exposure value for brighter and darker images, then press the SET button.

```
BRACKET
±0.5EV
±1.0EV
±1.5EV
±2.0EV
```
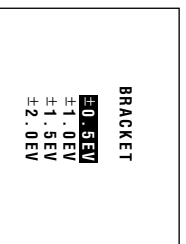
- Bracket mode icon appears on the screen.

Bracket mode icon
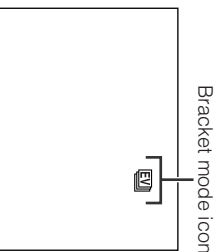
3 Press the Shutter button half-way down to focus on the subject.

4 Press the Shutter button fully to capture the image.

- The camera shoots three successive images at three different exposure values.

Below is an example of the effect you can excpect.

Darker image (−EV)

Standard image (0.0EV)

Brighter image (+EV)

Notes:
- This function cancels after one capture sequence. To use AE Bracketing again, perform the above steps again.
- See page 41 to read "About Exposure Value".
- ±0.5EV may result in a suttle difference while ±2.0EV result in stronger contrast between pictures.

Using Automatic Gamma Bracketing

Available in P, A, S, M or SC. mode

The camera automatically takes three successive images while changing the gamma setting for each image.

1 Select "γ BRACKET" in SHOOTING MODE menu (see page 24).

```
SHOOTING MODE
SINGLE
CONTINUOUS
SELF TIMER
BRACKET
γBRACKET
```

• γ bracket mode icon appears on the screen.

Gamma bracket mode icon

2 Press the Shutter button half-way down to focus on the subject.

3 Press the Shutter button fully to capture the image.

• The camera automatically captures three still images with different gamma settings.

Notes:

• This function cancels after one capture sequence. To use Automatic Gamma Bracketing again, perform the above steps again.

• This function does not work with Gamma Brightness Compensation.

Useful Features

Using Quick Shot

Available in AUTO, P, A, S, M or SC. mode

This function lets you take a quick snapshot. No need to push the shutter button halfway down to fix the focus then fully to capture. The camera automatically fixes the focus clearly on everything in the frame from close up to infinity.

1 Turn on the camera in the desired mode.

2 Press the MENU button until the menu screen appears.

3 Press ▽ or △ to select "◻", then press the SET button.

4 Press ▽ or △ to select "QUICK SHOT", then press the SET button.

SET/DISPLAY

CAPTURE 1
IMAGE SIZE
IMAGE QUALITY
SHOOTING MODE
QUICK SHOT
FR OFF
DI ON
RETURN
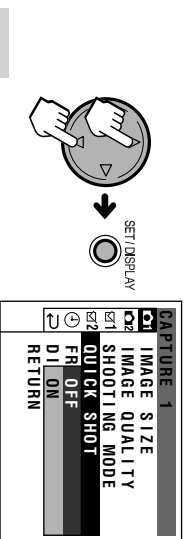
5 Press ▽ or △ to select "ON", then press the SET button.

QUICK SHOT
OFF
ON

6 Press the MENU button to turn off the menu screen.
• The camera automatically sets to pan-focus settings.

7 Press the Shutter button fully.
• The camera captures the image without first pressing halfway to lock the focus.

Note:
• Zooming is not available in Quick Shot.

Using the Frame Guide for Recording

Available in AUTO, P, A, S, M, SC, or ▶ mode

This function helps you decide on the size and composition of the subject occupying the screen.

Types
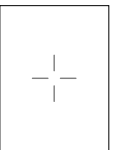
Cross: A cross mark at the center of the screen for placing the subject at the center.
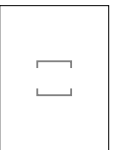
Focus: Focus brackets for guiding you to the focus area.

Portrait: Frame fitting an upper-body view.

Landscape: Grid lines dividing the screen into 9 areas to help you with the horizontal and vertical composition.
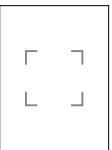
Snapshot: For capturing a small group of friends in a frame with surrounding background.
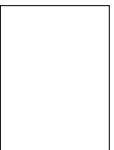
Off: No frame guide

---

1 Turn on the camera in the desired mode.

2 Press the MENU button until the menu screen appears.

3 Press ▽ or △ to select "▶" ("▶" in ▶ mode), then press the SET button.

4 Press ▽ or △ to select "FRAME GUIDE", then press the SET button.

```
CAPTURE 1
  IMAGE SIZE
  IMAGE QUALITY
  SHOOTING MODE
  QUICK SHOT
  FRAME GUIDE
  DIGITAL ZOOM
  RETURN        ▼
```
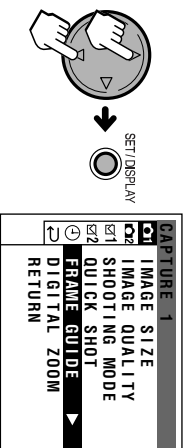
5 Press ◁, ▷, ▽ or △ to select the desired frame guide, then press the SET button.

SET/DISPLAY

```
FRAME GUIDE
```

6 Press the MENU button to turn off the menu screen.

Useful Features
Capturing

Setting the Digital Zoom

Available in AUTO, P, A, S, M or SC. mode

You can select two different zoom ranges : 1-3× (optical zoom), 3-9× (digital zoom).The digital zoom allows you to record powerful close-up pictures with the same operation as normal zooming.

1 Turn on the camera in the desired mode.

2 Press the MENU button until the menu screen appears.

3 Press ▽ or △ to select "📷1", then press the SET button.

4 Press ▽ or △ to select "DIGITAL ZOOM", then press the SET button.

SET/DISPLAY

```
CAPTURE  1
      IMAGE  SIZE
      IMAGE  QUALITY
      SHOOTING  MODE
      QUICK  SHOT
      FRAME  GUIDE
      DIGITAL  ZOOM
   RE   OFF
        ON
```

5 Press ▽ or △ to select "ON", then press the SET button.

```
DIGITAL  ZOOM
   OFF
   ON
```

6 Press the MENU button to turn off the menu screen.

When using the digital zoom range, a "D" appears in the zoom range indicator.

Power zoom buttons

Zoom range indicator

W — T D-ZOOM 6

"D" displays here.
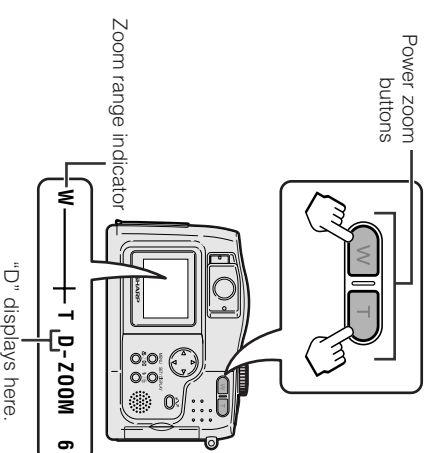
To use optical zoom only

Select "OFF" in step 5.

Note:

• When using the digital zoom, you have to turn the LCD screen backlight on. When you turn off the LCD screen (by pressing the SET/DISPLAY button), the zoom returns to the optical zoom range.

Turning off the Quick View

This camera presets to display a still image for approximately 3 seconds immediately after it is taken. You can turn off this function by performing the procedure below.

1 Turn on the camera in the desired mode.

2 Press the MENU button to display the menu screen.

3 Press ▽ or △ to select "◻2", then press the SET button.

4 Press ▽ or △ to select "QUICK VIEW", then press the SET button.
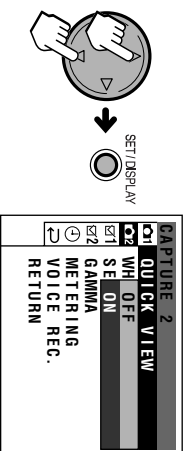
```
CAPTURE 2
◻1  QUICK VIEW
◻2  OFF
□1  WH  ON
□2  SE
    GAMMA
    METERING
    VOICE REC.
    RETURN
```

▽

○ SET/DISPLAY

5 Press ▽ or △ to select "OFF", then press the SET button.

```
QUICK VIEW
OFF
ON
```

6 Press the MENU button to turn off the menu screen.

Note:
• If the LCD screen is turned off, Quick View will turn it on and show the preview image for a few seconds, then turn it off again.

Useful Features

Useful Features
Capturing

Capturing a Still Image with Sound

Available in AUTO, P, A, S, M or SC. mode

You can record up to 10 seconds of sound while capturing each still image. The built-in microphone is used for sound recording.
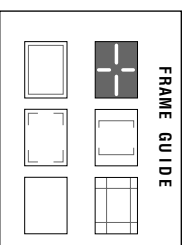
Microphone

1 Turn on the camera in the desired mode.

2 Press the MENU button until the menu screen appears.

3 Press ▽ or △ to select "🖿2", then press the SET button.

4 Press ▽ or △ to select "VOICE REC.", then press the SET button.

CAPTURE 2
🖿1 QUICK VIEW
🖿2 WHITE BALANCE
     SENSITIVITY
     GAMMA
     METERING
↩   VOICE REC.
     RE OFF
         ON

5 Press ▽ or △ to select "ON", then press the SET button.

SET/DISPLAY

VOICE REC.
OFF
ON

6 Press the MENU button to turn off the menu screen.

7 Capture the still image (see page 13).
• The camera captures a still image with 10 seconds of sound.

To quit the sound recording manually
Press the Shutter button.

Notes:
• See page 40 for previewing a still image with sound.
• You can only record with sound when the SHOOTING MODE menu is set to SINGLE.
• If an image has a sound file attached, the image protection setting will protect both files.

Protecting the Images

Available in ▶ mode

You can protect your important images recorded on the card from accidental erasure.

Selecting one image

1 Set the Mode Dial to "▶", then power the camera.

2 Press ◁ or ▷ to select the image to be protected.

3 Press the MENU button until the menu screen appears.

4 Press ▽ or △ to select "▶", then press the SET button.

5 Press ▽ or △ to select "PROTECT", then press the SET button.

```
PREVIEW
PROTECT
☑1  ONE IMAGE
☑2  ALL IMAGES
     PRINT ORDER
     DELETE ALL
     DUBBING
     RETURN
```

6 Press ▽ or △ to select "ONE IMAGE", then press the SET button.

```
PROTECT
ONE IMAGE
ALL IMAGES
```
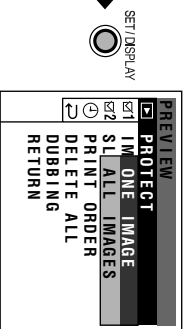
7 Press the SET button to protect the image.

```
PROTECT THIS IMAGE?
◀PREVIOUS      NEXT▶
SET/RESET:SET
EXIT          :MENU
100-0010
```
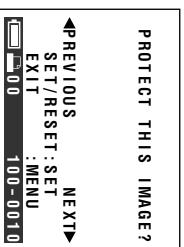
• The protection icon appears in the status bar.

```
100-0010
```
Protection icon

• To protect another image, press ◁ or ▷ to select the image, then press the SET button.

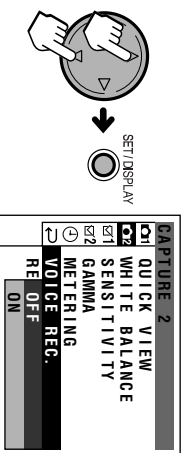**8** Press the MENU button to turn off the menu screen.

To cancel the protection setting

When you select a protected image in step 7, the following screen appears. Press the SET button to cancel protection.
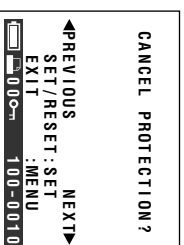
```
CANCEL PROTECTION?
◀PREVIOUS      NEXT▶
SET/RESET:SET
EXIT          :MENU
100-0010
```

Selecting all images

1 Select "ALL IMAGES" in step 6 of "Selecting one image".

```
PROTECT
ONE IMAGE
ALL IMAGES
```

2 Press ▽ or △ to select "SET", then press the SET button.

```
PROTECT ALL IMAGES?
SET
RESET
EXIT
```

To cancel protection setting for all images

Select "RESET" in step 2 of "Selecting all images".

**Useful Features
Previewing**
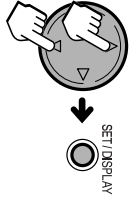
Using Image Effects

These filters allow you to alter a still image for more dramatic effect.

Available in ▣ mode

Types

SEPIA: Filling with sepia color similar to that of an old photograph

CROSS: Enhancing light spots with crosses

SOFT SPOT: Shading off to get a soft border around an image

1 Set the Mode Dial to "▣", then power on camera.

2 Press ◁ or ▷ to select the image to which you want to add an effect.

3 Press the MENU button until the menu screen appears.

4 Press ▽ or △ to select "▣", then press the SET button.

5 Press ▽ or △ to select "IMAGE EFFECT", then press the SET button.

```
        PREVIEW
▣1     ▐PROTECT
▣2      IMAGE EFFECT
SL      SEPIA
PR      CROSS
DE      SOFT SPOT
        DUBBING
        RETURN
```

SET/DISPLAY
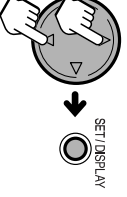
6 Press ▽ or △ to select the desired setting, then press the SET button.
• After processing, the image displays with the selected effect.

```
IMAGE  EFFECT
        SEPIA
        CROSS
        SOFT SPOT
```

7 Press the SET button.

8 Press ▽ or △ to select "YES" to save the image, then press the SET button.
• When you select "YES" to save the still image, the edited image is saved as an additional image file.

SET/DISPLAY

```
        SAVE THIS IMAGE?
  00
            NO
            YES      100-0010
```

• Select "NO" to cancel the effect.
• To add the image effect to another image, perform steps 2 to 8 again.

Previewing in a Slide Show

This camera can preview images in a slide show format, a useful feature when you want to check the still images that have been recorded on the card.

Available in ▶ mode

1 Set the Mode Dial to "▶", then power on camera.

2 Press ◁ or ▷ to select the image from which you want to begin the slide show.

3 Press the MENU button until the menu screen appears.

4 Press ▽ or △ to select "▶", then press the SET button.

5 Press ▽ or △ to select "SLIDE SHOW", then press the SET button.

PREVIEW
▶ PROTECT
✂1 IMAGE EFFECT
✂2 **SLIDE SHOW**
🕐 PR **5 SEC.**
↻ DE 10 SEC.
DU 15 SEC.
RE 30 SEC.
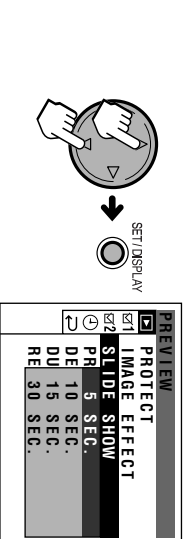
6 Press ▽ or △ to select the display interval, then press the SET button.

SET/DISPLAY

SLIDE SHOW
5 SEC.
10 SEC.
15 SEC.
30 SEC.

- Beginning from the image selected in step 2, the images display in full-screen view consecutively in order of capture.
- The Slide Show ends one image before the image that started the sequence.

To stop the Slide Show

Press the SET button to stop a Slide Show in progress.

Useful Features

Printing Order Information

Available in ▶ mode

The print order function allows you to add DPOF print information to still images recorded on a card.

About DPOF

DPOF (Digital Printing Order Format) is a system that allows capture devices to tag information of recorded images on memory cards for printing, number of copies and other details. You can order prints at shops with DPOF-compatible printing.

Selecting one image

1 Set the Mode Dial to "▶", then power the camera.

2 Press ◁ or ▷ to select one image for print order processing.

3 Press the MENU button until the menu screen appears.

4 Press ▽ or △ to select "▶", then press the SET button.

5 Press ▽ or △ to select "PRINT ORDER", then press the SET button.

PREVIEW
▶ PROTECT
1 IMAGE EFFECT
2 SLIDE SHOW
⇄ PRINT ORDER
ONE IMAGE
DU ALL IMAGES
RETURN

6 Press ▽ or △ to select "ONE IMAGE", then press the SET button.

SET/DISPLAY

PRINT ORDER
ONE IMAGE
ALL IMAGES

7 Press ▽ or △ to select the number of prints.
- You can set 1 through 99 for the number of prints.

ONE IMAGE
PRINT
◀ PREVIOUS   NEXT ▶
□ 00   SET : SET
EXIT : MENU
100-0010
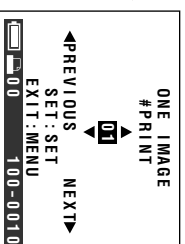
- To set the number of printouts to another image, press ◁ or ▷ to select the image, then press ▽ or △ to select the number of prints.

SET/DISPLAY

8 Press the SET button.

9 Press the MENU button to turn off the menu screen.

Note:
- You cannot add DPOF information to motion images.

To cancel the setting for one image

Select "0" for the number of prints in step 7 above.

Selecting all images

1 Select "ALL IMAGES" in step 6 of "Selecting one image", then press the SET button.

```
PRINT ORDER
ONE  IMAGE
ALL  IMAGES
```

2 Press ▽ or △ to select the number of prints, then press the SET button.

To cancel the setting for all images

Select "0" for the number of prints in step 2 of "Selecting all images".

Deleting All Images

You can delete all stored images on a card following the steps below.

Available in ▶ mode

1 Set the Mode Dial to "▶", then power on the camera.

2 Press the MENU button until the menu screen appears.

3 Press ▽ or △ to select "▶", then press the SET button.

4 Press ▽ or △ to select "DELETE ALL", then press the SET button.

```
 PREVIEW
▶   PROTECT
🗒1  IMAGE EFFECT
🗒2  SLIDE SHOW
🕒  PRINT ORDER
↩   DELETE ALL
    DUBBING
    RETURN
```

5 Press ▽ or △ to select "YES", then press the SET button.

SET/DISPLAY

```
        DELETE ALL
   DELETE ALL IMAGES
   EXCEPT PROTECTED?

        NO
        YES
```

SET/DISPLAY
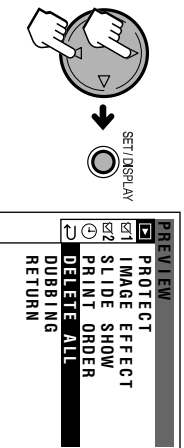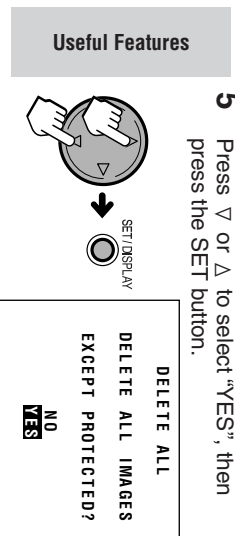
Notes:
● Protected images are not deleted in this procedure. To delete a protected image, first cancel its protection setting. (see page 33).
● DELETE ALL also erases the DPOF (print order information for all images including protected ones (see page 36).
● It may take several seconds to delete all images from the card.
● Do not turn the power off during the deletion process.

Adding Sound to a Still Image

You can add sound to a still image stored in the card.

Available in ▶ **mode**

1 Set the Mode Dial to "▶", then power on camera.

2 Press ◁ or ▷ to select the image to which you want to add sound.

3 Press the MENU button until the menu screen appears.

4 Press ▽ or △ to select "▶", then press the SET button.

5 Press ▽ or △ to select "DUBBING", then press the SET button.

```
PREVIEW
  PROTECT
  IMAGE EFFECT
  SLIDE SHOW
  PRINT ORDER
  DELETE ALL
  DUBBING
  RE OFF
  ON
```

SET/DISPLAY
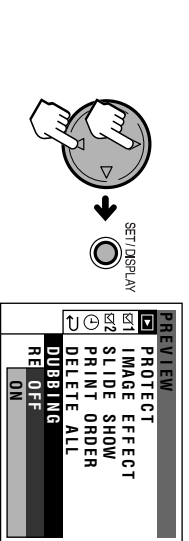
6 Press ▽ or △ to select "ON", then press the SET button.

```
DUBBING
OFF
ON
```

7 Press the Shutter button fully to begin dubbing.

8 Press the Shutter button fully to stop dubbing.
- The maximum dubbing time is 10 seconds. After 10 seconds elapse, the dubbing stops automatically even if you do not press the Shutter button.

Notes:
- **If you dub an image that already has sound, the new sound overwrites the old.**
- If you want to overwrite the sound on a protected image, cancel the protection first.
- See page 40 to playback an image with sound.

Previewing an Image with Sound

Available in ▶ mode

You can play back the sound recorded with a still image.

1 Set the Mode Dial to "▶", then power on the camera.

2 Press ◁ or ▷ to select the image with sound.

• A sound icon appears on the image with sound.

3 Press the Shutter button fully to begin sound playback.

To pause the sound playback

Press the Shutter button fully again.

Advanced Features

About Exposure Value

Automatic exposure works by selecting an average value of all the different tones in the shot. If two different objects have an equal amount of dark and light parts, they will have the same exposure value.

However, when the scene is dominated by dark shadows or light objects, the AE system does not work properly, and may fail to select the best exposure. For example, if you capture a bride in white wedding dress, the image becomes darker than it actually looks. The camera tries to neutralize the light and dark portions and the dress becomes gray while skin tone becomes too dark.

Program AE Mode

In Program AE mode, the camera automatically determines the shutter speed and aperture, and you can set more detailed menu settings in comparison with the Auto mode (**AUTO**).

1 Set the Mode Dial to "**P**", then power on camera.

2 Set any desired menu items.

Note:
- The available mode is described below the function title in each page. You can set the functions indicated with "**P**" in that description.

Program AE mode icon

Exposure value

3 Press ◁ or ▷ to set the exposure value (EV).
- You can select 9 steps from –2.0EV to +2.0EV.
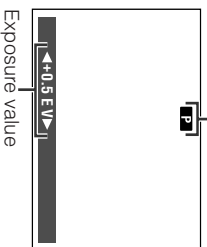
4 Press the Shutter button half-way down to focus on the subject.
- The camera automatically adjusts the shutter speed and aperture.

5 Press the Shutter button fully to capture the image.
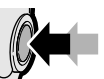
Note:
- AE is an abbreviation for Auto Exposure.

Aperture Priority Mode

In Aperture Priority mode, the camera determines the shutter speed automatically according to an aperture value set manually.

1 Set the Mode Dial to "**A**", then power on the camera.

POWER

2 Set any desired menu items.

Note:
• The available mode is described below the function title in each page. You can set the functions indicated with "**A**" in that description.

3 Press ▽ or △ to set the desired F-stop.
• You can select 9 steps from F2.0 to F8.0.
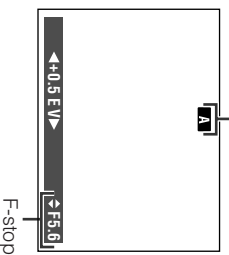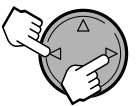
◀+0.5 EV▶

◆F5.6

Aperture Priority mode icon

F-stop

4 Press ◁ or ▷ to set the exposure value (EV).
• You can select 9 steps from –2.0EV to +2.0EV

◀+0.5 EV▶

◆F5.6

Exposure value
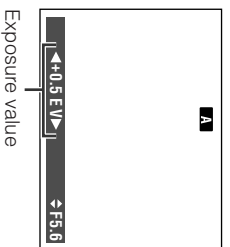
5 Press the Shutter button half-way down to focus on the subject.
• The camera automatically adjusts the shutter speed.

6 Press the Shutter button fully to capture the image.

About aperture setting

The larger the aperture (smaller f-number) the more blurred the background and foreground will become. On the other hand, the smaller the aperture (bigger f-number) the clearer the background and foreground will become. You may set a small f-number for portraits. And you may set a big f-number to capture a subject with background/foreground in various degrees of focus.
• Use a larger F-stop value to focus on both the subject and background.
• Use a smaller F-stop value to clearly capture both subject and background.

Shutter Speed Priority Mode

In Shutter Speed Priority mode, the camera determines the aperture value automatically according to a shutter speed set manually.

1 Set the Mode Dial to "**S**", then power on the camera.

POWER

2 Set any desired menu items.

Note:
- The available mode is described below the function title in each page. You can set the functions indicated with "**S**" in that description.

3 Press ▽ or △ to set the desired shutter speed.
- You can select 17 steps from 0.5 sec. to 1/500 sec.

Shutter Speed Priority mode icon
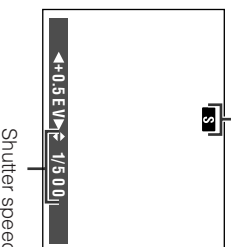
◀+0.5 E V▶◀ 1/5 0 0

Shutter speed

4 Press ◁ or ▷ to set the exposure value (EV).
- You can select 9 steps from –2.0EV to +2.0EV

◀+0.5 E V▶◀ 1/5 0 0

Exposure value
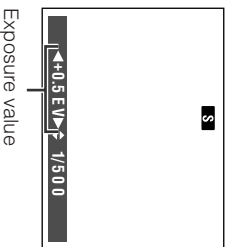
5 Press the Shutter button half-way down to focus on the subject.
- The camera automatically adjusts the aperture.

6 Press the Shutter button fully to capture the image.

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Recommended Shutter Speeds

The following are tips for setting the shutter speed. Use a shutter speed based on your subject and photographic objectives.

Situation	Recommended shutter speed
• Will make a fast-moving object look frozen (e.g. a runner, dancer).	1/500 sec.
• To capture most moderately moving objects.	1/250 sec.
• To capture objects that are not moving very fast. • Safe to hold by hand without shaking. • You can try a variety of depth of fields.	1/125 sec. | 1/60 sec.
• To capture images in fairly dark conditions.	1/30 sec.
• Creates a sense of motion by blurring moving objects.	1/15 sec. or slower

Tips on Using the Manual Shutter Speed

• Fast shutter speeds can be used to capture fast-moving objects such as a racehorse or athlete. The subject will look frozen in motion.
• Slower shutter speeds can be used in take pictures under low lighting conditions such as the evening light of the moon.
• Slower shutter speeds can also be used when you want the image blurred so it shows a trail of motion, such as in streams or waterfalls.

Notes:

• With 1/500, you can capture most sports. However, it may blur parts that are moving faster than the area of focus, like the clear head and torso of a galloping horse but with blurry legs.
• Recording with a shutter speed faster than 1/60 sec. tends to darken the picture. Record in bright locations when you use a fast shutter speed.
• Use of a tripod is recommended when using a slow shutter speed to avoid camera shaking unless you have a special reason to hold the camera by hand.
• Using a fast shutter speed under fluorescent lighting will cause flickering in the picture and possibly color shifts.
• When selecting 1/30 sec., you may get a shadow image behind a subject that is in motion.

Manual Exposure Control Mode

Use when your photographic objectives are not met by AE settings and you want complete control over exposure. Try various exposures and see the difference in effect. Also, review the captured image on the LCD screen before you try another exposure.

Selectable shutter speeds

F2.0 to F6.7 : 16s to 1/500s
F8   : 16s to 1/1000s

1 Set the Mode Dial to "**M**", then power on camera.

POWER

2 Set any desired menu items.

Note:
• The available mode is described below the function title in each page. You can set the functions indicated with "**M**" in that description.

3 Press ◁ or ▷ to select the desired shutter speed setting (①), and press ▽ or △ to select the desired F-stop (②).

Manual Exposure Control mode icon

1/500 ► F5.6

Shutter speed   F-stop
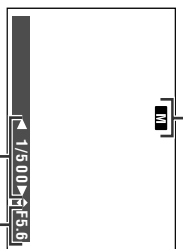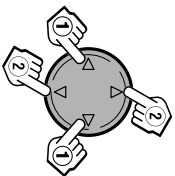
• If the photograph would be under- or over-exposed, the shutter speed and aperture values in the status bar will display red. In such case, select other combinations to obtain an appropriate setting, which will display the values in white.

• If you set a slow shutter speed the image taken could come out blurred. The shutter speed and aperture values will display yellow to alert you to this possibility.

4 Press the Shutter button half-way down to focus on the subject.

5 Press the Shutter button fully to capture the image.

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Scene Select Mode

You can select scene settings to create the best results for a specific situation. The camera will automatically set the exposure, white balance, and shutter speed to produce the optimum picture quality for the selected situation.

Types

PORTRAIT ( ): Captures a subject clearly with blurred background and foreground.

SNAP SHOT ( ): Captures the scene clearly with subjects in both background and foreground focused.

LANDSCAPE ( ): Captures a distant subject clearly.

NIGHT VIEW ( ): Captures your subject with the surrounding night view.

BLACK&WHITE ( ): Captures the scene in black and white.

1 Set the Mode Dial to "**SC.**," then power on the camera.

POWER

- SCENE MENU screen appears.

2 Press ▽ or △ to select the desired setting, then press the SET button.

- The subject displays in the selected mode and a frame guide matching the scene menu selection appears on-screen.

SET/DISPLAY

```
   SCENE  MENU
  PORTRAIT
  SNAP  SHOT
  LANDSCAPE
  NIGHT  VIEW
  BLACK  &  WHITE
```

3 Set any desired menu items.

Note:

- The available mode is described below the function title in each page. You can set the functions indicated with "**SC.**" in that description.

Changing the scene setting

To change the scene setting while in Scene Select mode, press the MENU button once. Pressing the MENU button twice displays the menu screen.

4 Press the Shutter button half-way down to focus on the subject.

5 Press the Shutter button fully to capture the image.

Setting the Metering Mode

Available in P, A, S or M mode

This camera has two metering methods. Choose the metering method that matches your composition and lighting conditions.

Types

CENTER: Suitable to correctly expose the whole image with emphasis on a subject in the center when the scene is under reasonably good lighting.

SPOT: Suitable to correctly expose a subject that is much darker or brighter than the background.

1 Turn on the camera in the desired mode.

2 Press the MENU button until the menu screen appears.

3 Press ▽ or △ to select "◻2", then press the SET button.

4 Press ▽ or △ to select "METERING", then press the SET button.
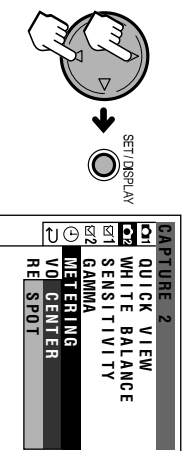
```
CAPTURE 2
     QUICK VIEW
     WHITE BALANCE
     SENSITIVITY
     GAMMA
     METERING
VO  CENTER
RE  SPOT
```

SET/DISPLAY

5 Press ▽ or △ to select the desired setting, then press the SET button.

```
METERING
CENTER
SPOT
```

6 Press the MENU button to turn off the menu screen.

Note:
• In Auto mode (**AUTO**), the METERING menu item is set to "CENTER".

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Setting the White Balance

Available in P, A, S, M, SC, or ▶🎬 mode

This mode fine-tunes colors based on settings that match the lighting conditions so that colors that look white to the human eye will also look white when captured. Select a setting that matches the condition.

Types

AUTO: The camera automatically adjusts the white balance
DAYLIGHT (☀): Suitable mode for capturing in outdoors
FLUORESCENT (🔆): Suitable for capturing under a fluorescent lamp
TUNGSTEN (💡): Suitable for capturing under a tungsten lamp

1 Turn on the camera in the desired mode.

2 Press the MENU button until the menu screen appears.

3 Press ▽ or △ to select "📷2", then press the SET button.

4 Press ▽ or △ to select "WHITE BALANCE", then press the SET button.
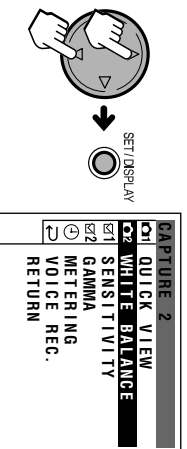
```
CAPTURE 2
📷1  QUICK VIEW
📷2  WHITE BALANCE
☑1  SENSITIVITY
☑2  GAMMA
🕐  METERING
↩  VOICE REC.
     RETURN
```

SET/DISPLAY

5 Press ▽ or △ to select the desired setting, then press the SET button.

```
WHITE BALANCE
     AUTO
     DAYLIGHT
     FLUORESCENT
     TUNGSTEN
◀ 0.0EV▶  1/500  F5.6
```

6 Press the MENU button to turn off the menu screen.

Note:
• In Auto mode (**AUTO**), the WHITE BALANCE menu item is set to "AUTO".
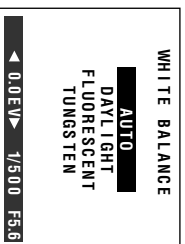
Setting the Light Sensitivity

Available in P, A, S or M mode

This mode emulates the sensitivity of camera film. The higher the ISO number, the faster the shutter speed you can use.

Types

AUTO: The camera automatically produces the sensitivity to match lighting conditions.

ISO100, ISO200, ISO400: Setting increased sensitivities reduces the time needed to make an exposure.

1 Turn on the camera in the desired mode.

2 Press the MENU button until the menu screen appears.

3 Press ▽ or △ to select "📷2", then press the SET button.

4 Press ▽ or △ to select "SENSITIVITY", then press the SET button.
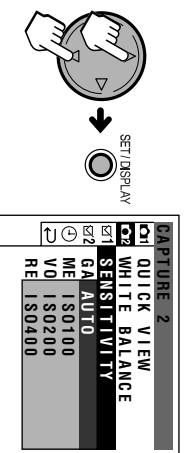
```
CAPTURE  2
📷1  QUICK VIEW
📷2  WHITE BALANCE
🏷1  SENSITIVITY      AUTO
🏷2  GA               ISO100
    ME               ISO200
    VO               ISO400
    RE
```

SET/DISPLAY

5 Press ▽ or △ to select the desired setting, then press the SET button.

```
SENSITIVITY
AUTO
ISO100
ISO200
ISO400
```
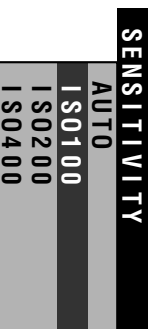
6 Press the MENU button to turn off the menu screen.

Notes:

- In Auto mode (**AUTO**), the SENSITIVITY menu item is set to "AUTO".
- In Manual mode (**M**), the default SENSITIVITY setting in the menu is "ISO 100", and "AUTO" is not selectable.

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Gamma Correction

Available in P, A, S, M or SC. mode

This function improves the picture by increasing the brightness of the darker portion or by decreasing the brightness of the brighter portion.

Types

STANDARD: Standard image without gamma correction

1 HIGHLIGHT (⊘1): Decreasing the brightness of brighter portion

2 DARKNESS (⊘2): Increasing the brightness of dark portion

3 CONTRAST (⊘3): Enhances the contrast

1 Turn on the camera in the desired mode.

2 Press the MENU button until the menu screen appears.

3 Press ▽ or △ to select "⊘2", then press the SET button.

4 Press ▽ or △ to select "GAMMA", then press the SET button.
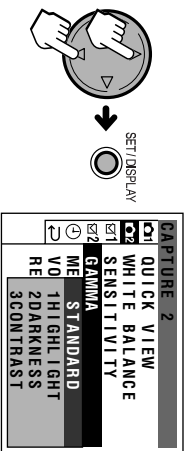
SET/DISPLAY

```
CAPTURE 2
⊘1   QUICK VIEW
⊘2   WHITE BALANCE
≡1   SENSITIVITY
≡2   GAMMA        STANDARD
     ME  1HIGHLIGHT
↻ ⊕ VO  2DARKNESS
     RE  3CONTRAST
```

5 Press ▽ or △ to select the desired setting, then press the SET button.

```
GAMMA
      STANDARD
      1HIGHLIGHT
      2DARKNESS
      3CONTRAST
```

6 Press the MENU button to turn off the menu screen.

Note:

• In Auto mode (**AUTO**), the GAMMA menu item is set to "STANDARD".

Displaying the Date and Time

You can display the date or both the date and time of capturing an image.

Available in ▶, AUTO, P, A, S, M, SC, or 🎬 mode

OFF: The date and time do not display.
DATE&TIME: Both the date and time display.
DATE: The date displays.

1 Turn on the camera in the desired mode.

2 Press the MENU button until the menu screen appears.

3 Press ▽ or △ to select "🕐", then press the SET button.

4 Press ▽ or △ to select "DISPLAY", then press the SET button.
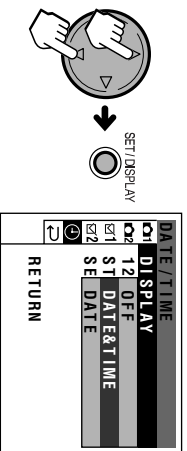
SET/DISPLAY

```
DATE/TIME
    DISPLAY
 12  OFF
 ST  DATE&TIME
 SE  DATE
🕐
↩  RETURN
```

5 Press ▽ or △ to select the desired setting, then press the SET button.

```
DISPLAY
    OFF
    DATE&TIME
    DATE
```

6 Press the MENU button to turn off the menu screen.

Note:
• If you capture an image without setting the date and time, under bars will display in the preview screen instead of the date and time values.

Selecting the Display Style of Date and Time

Follow the procedure below to select among three different display styles of date and time.

Available in ▶, AUTO, P, A, S, M, SC, or 🎬 mode

MMM.DD.YYYY: First 3 letters of month with day and year as numbers
DD.MM.YYYY: Day, month and year as numbers
YYYY.MM.DD: Year, month and day as numbers

1 Turn on the camera in the desired mode.

2 Press the MENU button until the menu screen appears.

3 Press ▽ or △ to select "🕐", then press the SET button.

4 Press ▽ or △ to select "STYLE", then press the SET button.
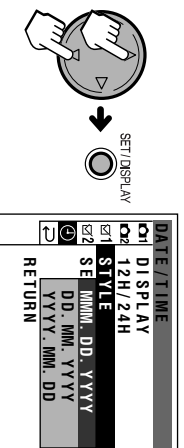
```
DATE/TIME
    DISPLAY
 12H/24H
 ST  STYLE
 SE  MMM. DD. YYYY
     DD. MM. YYYY
     YYYY. MM. DD
↩  RETURN
```


SET/DISPLAY

5 Press ▽ or △ to select the desired setting, then press the SET button.

```
STYLE
    MMM. DD. YYYY
    DD. MM. YYYY
    YYYY. MM. DD
```

6 Press the MENU button to turn off the menu screen.

Advanced Features

Setting to Factory Presettings

Available in ▶, AUTO, P, A, S, M or SC. mode

You can set the camera to the factory presetting by following the steps below.

1 Turn on the camera in the desired mode.

2 Press the MENU button until the menu screen appears.

3 Press ▽ or △ to select "☑ 1", then press the SET button.

4 Press ▽ or △ to select "DEFAULT", then press the SET button.

```
          SETTING 1
 ▣1  DEFAULT
 ▣2  FORMAT
 ⊠1  AUTO POWER OFF
 ⊠2  FILE NUMBER
 ⟲   RETURN
 ⏲
```

5 Press ▽ or △ to select "YES", then press the SET button.

SET/DISPLAY

```
      DEFAULT
ALL SETTINGS WILL
RETURN TO FACTORY
SETTINGS.
OK?

    NO
    YES
```
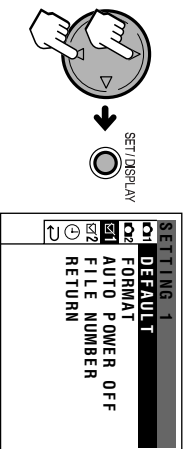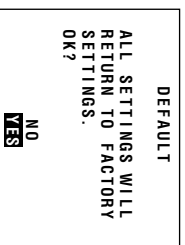
• Select "NO" to cancel the procedure.

Formatting the card

Available in ▶, AUTO, P, A, S, M or SC. mode

Format any commercially available card before using. Also, you may have to format a card that has been used in a different camera. Be aware that formatting a card erases all the stored images.

Notes:
• **Formatting a card erases all stored images, including delete-protected images. Be sure to backup important data on your computer or other media before formatting the card.**
• Do not remove the power source during formatting, as this may cause damage to the card. It is recommended that you use the AC outlet for the power supply when formatting.

1 Turn on the camera in the desired mode.

2 Press the MENU button until the menu screen appears.

3 Press ▽ or △ to select "☑ 1", then press the SET button.

4 Press ▽ or △ to select "FORMAT", then press the SET button.

```
          SETTING 1
 ▣1  DEFAULT
 ▣2  FORMAT
 ⊠1  AUTO POWER OFF
 ⊠2  FILE NUMBER
 ⟲   RETURN
 ⏲
```

5 Press ▽ or △ to select "YES", then press the SET button.

SET/DISPLAY

```
      FORMAT
ALL IMAGES WILL BE
DELETED!
OK?

    NO
    YES
```
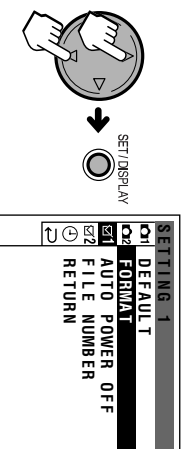
6 Press the MENU button to turn off the menu screen.
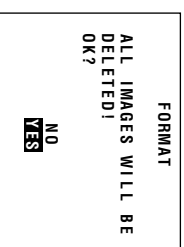
• Select "NO" to cancel card format.

Note:
• The supplied card is preformatted for immediate use.

Setting the Time for Automatic Power Off

Available in ▶, AUTO, P, A, S, M, SC, or 🎬 mode

When you do not operate the camera for a certain period of time, the power turns off automatically. Select the automatic power off time.

1 Turn on the camera in the desired mode.

2 Press the MENU button until the menu screen appears.

3 Press ▽ or △ to select "☑1", then press the SET button.

4 Press ▽ or △ to select "AUTO POWER OFF", then press the SET button.

```
SETTING 1
 📷1  DEFAULT
 📷2  FORMAT
 ☑1  AUTO POWER OFF
 ☑2  FI  1 MIN.
 ⏱  RE  3 MIN.
 ↩      5 MIN.
```
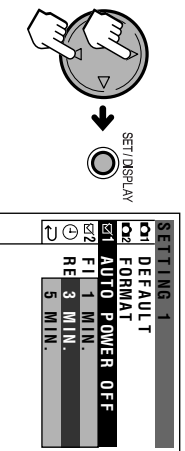
5 Press ▽ or △ to select the desired time for powering off, then press the SET button.

SET/DISPLAY

```
AUTO POWER OFF
1 MIN.
3 MIN.
5 MIN.
```

6 Press the MENU button to turn off the menu screen.

Setting the File Numbering Method

Available in ▶, AUTO, P, A, S, M or SC. mode

The camera automatically assigns file numbers to captured images. You can select two different methods of file numbering.

Types

SERIAL: Defines file numbers by incrementing up from the last image captured when inserting a new card

RESET: Defines a new set of file numbers when inserting a new card

1 Turn on the camera in the desired mode.

2 Press the MENU button until the menu screen appears.

3 Press ▽ or △ to select "☑1", then press the SET button.

4 Press ▽ or △ to select "FILE NUMBER", then press the SET button.

```
SETTING 1
 📷1  DEFAULT
 📷2  FORMAT
 ☑1  AUTO POWER OFF
 ☑2  FILE NUMBER
 ⏱  RE  SERIAL
 ↩      RESET
```

SET/DISPLAY
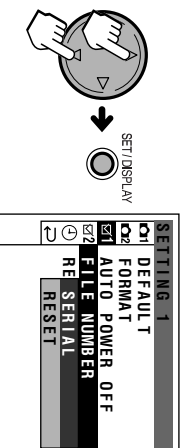
5 Press ▽ or △ to select the desired setting, then press the SET button.

```
FILE NUMBER
SERIAL
RESET
```

6 Press the MENU button to turn off the menu screen.

Advanced Features

Advanced Features

Restoring the Last Image Deleted

Available in ▶ mode

You can restore an image erased by mistake if it is the most recent image deleted. Do not perform any operation, except the procedure below to recover the image.

1 Set the Mode Dial to "▶", then power the camera.

2 Press the MENU button until the menu screen appears.

3 Press ▽ or △ to select "⚙ 2", then press the SET button.

4 Press ▽ or △ to select "UNDO LAST IMAGE", then press the SET button.
- The camera displays the last deleted image and restores it to the memory card.

```
SETTING 2
▶    PC CONNECT
⚙1   LANGUAGE
⚙2   VIDEO OUT
🕐   UNDO LAST IMAGE
↩    SPEAKER
     BEEP
     RETURN
```

SET/DISPLAY
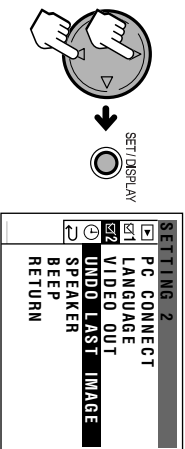
5 Press the MENU button to turn off the menu screen.

Note:
- You cannot restore an image after performing any of the operations below.
  - Deleting all images
  - Deleting another image
  - Capturing an image
  - Setting the protection or print order
  - Formatting the card
  - Saving the image with effect

Turning off the Speaker

Available in ▶ mode

You can turn off the sound while viewing motion images or still images with sound data attached.

1 Set the Mode Dial to "▶", then power the camera.

2 Press the MENU button until the menu screen appears.

3 Press ▽ or △ to select "⚙ 2", then press the SET button.

4 Press ▽ or △ to select "SPEAKER", then press the SET button.

```
SETTING 2
▶    PC CONNECT
⚙1   LANGUAGE
⚙2   VIDEO OUT
🕐   UNDO LAST IMAGE
↩    SPEAKER
     BE  OFF
     RE  ON
```

SET/DISPLAY
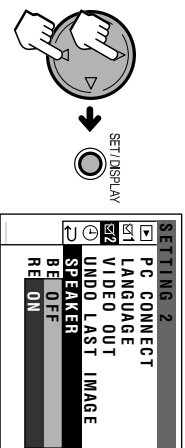
5 Press ▽ or △ to select "OFF", then press the SET button.

```
SPEAKER
OFF
ON
```

Note:
- SPEAKER turns the camera speaker on or off. When you playback images on a TV screen, the recorded sound outputs from the TV speakers regardless of the camera's speaker setting.

Turning off the Confirmation Sound

Available in ▶, AUTO, P, A, S, M, SC, or 🎬 **mode**

The camera beeps when turning the power on, controlling the buttons, or when an error occurs. You can turn off the confirmation sound if you like.

1 Turn on the camera in the desired mode.

2 Press the MENU button to display the menu screen.

3 Press ▽ or △ to select "🔧 2", then press the SET button.

4 Press ▽ or △ to select "BEEP", then press the SET button.

```
SET/DISPLAY
         ▽
    ←→

SETTING 2
📷1  PC CONNECT
📷2  LANGUAGE
📹1  VIDEO OUT
📹2  UNDO LAST IMAGE
     SPEAKER
     BEEP
RE   OFF
     ON
```
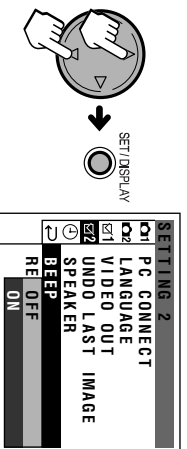
5 Press ▽ or △ to select "OFF", then press the SET button.

```
BEEP
OFF
ON
```

6 Press the MENU button to turn off the menu screen.

Changing the Language for the On-screen Display

Available in ▶, AUTO, P, A, S, M, SC, or 🎬 mode

This camera allows you to choose English, German, French, Spanish or Japanese as the on-screen display language. To change the language for on-screen display, perform the steps below. The default language setting is English.
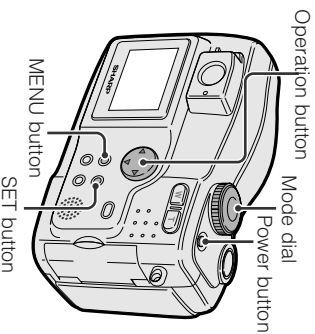
Operation button

Mode dial

MENU button

SET button

Power button

1 Press the Power button until the camera turns on.

2 Press the MENU button until the menu screen appears.

3 Press ▽ or △ on the operation button to select "🛠2", then press the SET button.

4 Press ▽ or △ to select "LANGUAGE", then press the SET button.

SET/DISPLAY

```
SETTING 2
🗂1  PC CONNECT
🗂2  LANGUAGE
🕘1  ENGLISH
🕘2  DEUTSCH
↻   FRANÇAIS
VI  ESPAÑOL
UN  日本語
SP
BE
RE
```
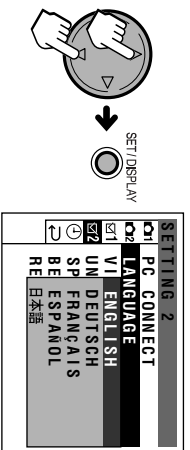
• "LANGUAGE" menu is "SPRACHE" in German, "LANGUE" in French, "IDIOMA" in Spanish or "言語" in Japanese.

5 Press ▽ or △ to select the desired language, then press the SET button.
• The menu screen displays in the language selected.

```
LANGUAGE
ENGLISH
DEUTSCH
FRANÇAIS
ESPAÑOL
日本語
```
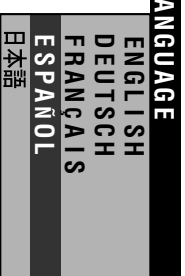
6 Press the MENU button to turn off the menu screen.

Note:
• **The operation procedures in this manual are based on using the English on-screen displays.**

Transferring Data on Card to Computer

Using the supplied USB cable, you can transfer all image, sound and related data to a computer.

System Requirements

- Microsoft Windows® 98 Service Pack 1, Windows® 98 Second Edition, Windows® 2000 Professional Service Pack 2, Windows® Me or Windows® XP Home/Professional Editions (recommended)
- USB terminal
- CD-ROM drive (for driver installation)
- Mouse or other pointing device

Note:
- The USB driver is not compatible with Macintosh operating systems.

Preparation

1 Turn on the PC.

2 Connect the camera to a PC with the supplied USB cable as shown below.

3 Connect the supplied AC adapter to the camera.

To USB terminal

DC plug for AC adapter

USB cable (supplied)

To USB terminal
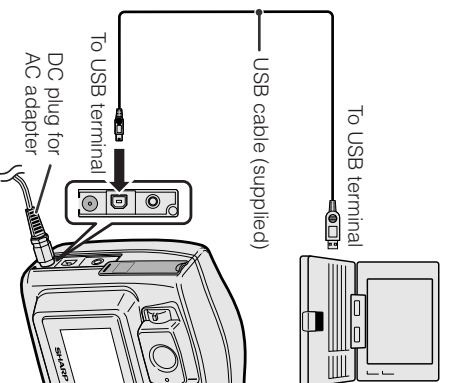
4 Set the Mode Dial to "▶", then power the camera.

5 Press the ▲✓ button to have your PC recognize the USB cable.

Note:
- When you connect the USB cable for the first time, you need to install the USB driver. Before installing the USB driver, you must read and agree to the "LIMITED USE SOFTWARE LICENSE" on the first page of the supplied Installation Guide.
- The installation procedure varies depending on your PC operating system. Find your operating system and follow the steps in "Installing the USB driver".

Disconnecting the USB cable

Windows 2000/Me/XP

1 Quit PixLab.

2 Click the "Safely Remove Hardware" icon that appears on the task bar, and choose an applicable hard drive to stop.

3 After the message "Safe To Remove Hardware" appears, disconnect the USB cable or eject the card.

Note:
- See Windows Help for the procedure of disconnecting USB cable in detail.

Windows 98

1 Quit PixLab.

2 When data is not being transferred (the indicator on LCD display stays still), right-click on the disk drive icon, which appears on explorer window, to eject the disk. After that, disconnect the USB cable or eject the card.

Installing the USB driver

• In the examples below the CD-ROM drive letter is taken as "R:". Select the correct drive letter according to your operating environment.

Windows 98 SP1/98 SE

1 "Add New Hardware Wizard" appears after performing "Preparation".

2 Insert the CD-ROM containing the USB driver into the CD-ROM drive, then click "Next".

3 Select "Search for the best driver for your device.", then click "Next".

4 Select "Specify a location:", and specify "R:\USBDRV\WIN98", then click "Next".

5 Check the message, then click "Next" to begin installation.

6 Click "Finish" to complete the installation.

Windows 2000 SP2

For installing the USB driver, you need to log in as the system administrator.

1 "Found New Hardware Wizard" appears after performing "Preparation", then click "Next".

2 Select "Search for a suitable driver for my device", then click "Next".

3 Select "Specify a location", insert the CD-ROM containing the USB driver into the CD-ROM drive, then click "Next".

4 Specify "R:\USBDRV\WIN2KXP", then click "OK".

5 Check the message, then click "Next" to begin installation.

6 Click "Finish" to complete the installation.

Windows Me

1 "Add New Hardware Wizard" appears after performing "Preparation".

2 Select "Specify the location of the driver".

3 Insert the CD-ROM containing the USB driver into the CD-ROM drive, then click "Next".

4 Select "Search for the best driver for your device." and "Specify a location.", then click "Next".

5 Specify "R:\USBDRV\WINME" and click "Next".

6 Click "Finish" to complete the installation.

Windows XP HE/PE

For installing the USB driver, you need to log in as the system administrator.

1 "Found New Hardware Wizard" appears after performing "Preparation".

2 Select "Install from a list or specific location".

3 Insert the CD-ROM containing the USB driver into the CD-ROM drive, then click "Next".

4 Select "Search for the best driver in these locations." and "Include this location in the search:".

5 Specify "R:\USBDRV\WIN2KXP", then click "Next".

6 Click "Finish" to complete the installation.

Installing the software

Before you start transferring data, install the Quick File Transfer Software included in the supplied CD-ROM. (Refer to the Installation Guide for details.)

Transferring the data

To transfer all the data to your PC at one time, simply press the ⤳ button after making the necessary preparations.

1 Press the MENU button to display the menu screen.

2 Press ▽ or △ to select "☑2", then press the SET button.

3 Press ▽ or △ to select "PC CON-NECT", then press the SET button.
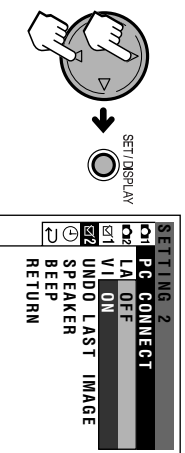
4 Make sure the PC CONNECT menu is set to ON, then press the SET button.

SET/DISPLAY

```
SETTING 2
☑1 ☑2 ⏱ ↩
PC CONNECT
LA   OFF
VI   ON
UNDO LAST IMAGE
SPEAKER
BEEP
RETURN
```

```
PC  CONNECT
OFF
ON
```

5 Press the MENU button to turn off the menu screen.

6 Press the ⤳ (data transfer) button.

- Transfer indicator moves, and all images, sound and related data on the card will automatically transfer to the PC.

⤳

- If you select OFF, double-click the "My Computer" icon and choose "Removable Disk" in the window. See Image Folders and File Names.

Note:
- Refer to the PDF manual of the Quick File Transfer Software for details.

Image Folders and File Names

If you select OFF in step 4 on page 58, you will find a new drive called "Removable Disk (F:)" (or other drive letter, depending on your PC configuration). Image, sound and related data are stored in files and on a card as shown below.

DCIM・・・・・・ Folder of still image files

100SHARP ◀ Sub-folder of still images

Serial number (100 to 999)

PICS0001.WAV ◀ Audio data

PICT0001.JPG
PICT0002.JPG Still images

PICT0003.AVI ◀ Motion image
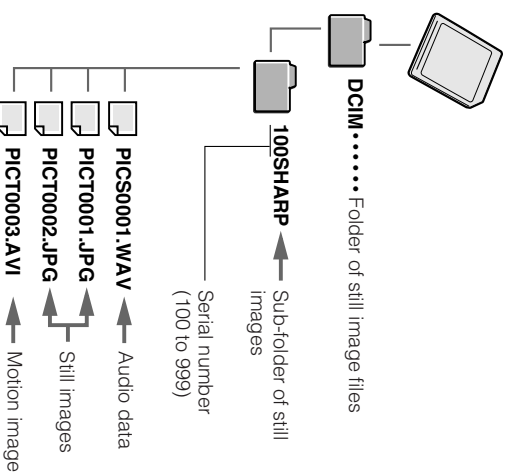
Caution on transferring data

While transferring data, the transfer indicator moves. Do not execute the operations below.

- Disconnect the USB cable
- Turn the power on/off
- Turn off the PC or setting it to Standby
- Open the card slot cover

You cannot transfer data when;
- The card is full.
- The card is write-protected.

Delete a few unneeded images or shift the write protect switch to the unlocked position and try transferring again.

Note:
- In case of data transfer error, disconnect the USB cable, then connect it again, or turn the power off, then turn it on again.

Appendix

Useful Information

SD™ Memory Card

SD (Secure Digital) Memory Cards are small, handy and flexible storage media used in a variety of mobile applications. They are one of the smallest memory solutions available on the market.

This camera uses an SD Memory Card. It cannot use a SmartMedia™ card or Memory Stick®.

SD™ Memory Card
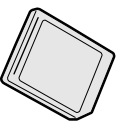
SmartMedia™ card   Memory Stick® media

Note:
- An SD Memory Card has advanced features including cryptographic security for copy-righted data and a selectable mechanical write protect switch.
- The card slot on this camera is compatible with an SD Memory Card.

Note:
- This camera is verified to work properly with the SD Memory Card (128 MB or less).

Removable Storage Care

Below are some precautions to ensure a long life and perfect performance from your SD Memory Card. Information specific to one card is attached with the card's acronym.

Precautions

- Be sure to insert the card in the correct direction. Do not try to force the card in.
- Store the card in its antistatic plastic case when not in use.
- Do not disassemble or modify the card.
- Do not strike, bend or drop the card.
- Do not allow the card to become wet.
- Do not peel off the card label.
- Do not attach other labels or stickers to the card.
- Do not expose to extreme heat sources (e.g. sunlight, heating appliances).
- Do not store in a highly humid or dusty place.
- Do not store in a place exposed to corrosive gas.
- Do not use in a place exposed to strong electromagnetism.

Protecting your images

- Select the write protect switch on the exterior card casing to protect your images.
- Do not power off any devices while transferring data, as this may destroy the data.
- Back up your image data often to a hard disk or other permanent storage media.
- Be aware that formatting will erase all image data stored on the card.

Note:
- **Sharp Corporation cannot be held liable for data that is lost through improper handling of the storage media.**

Cleaning

- Be careful not to allow dirt and finger grime buildup around the card contacts.
- Be careful about static electricity, which can suddenly erase data.
- If you notice dirt or static electricity, clean the card with a soft, dry cloth.

Condensation

- Be careful about condensation forming on the card surface, which can cause malfunction.
- If you notice beads of water on the card, allow it to evaporate and dry naturally.

AC Adapter

- The AC adapter may interfere with reception if used near a radio.
- Prevent flammables, liquids, and metal objects from entering the adapter.
- The adapter is a sealed unit. Do not attempt to open or modify it.
- Do not damage, drop, or subject the adapter to vibration.
- Do not leave the adapter in direct sunlight.
- Avoid using the adapter in humid or extremely hot places.

Cleaning

- Many plastic parts are used in the camera casing. Do not use thinner, benzene or other strong chemical cleaners. These may cause discoloration and damage to the casing.
- Clean the casing with a soft, dry cloth. If the casing is particularly dirty, wipe the casing with a tightly wrung cloth dampened with a diluted, neutral detergent. Then wipe it again with a soft, dry cloth.
- Use a soft cloth to wipe finger marks and other smudges off the LCD screen.
- Use a soft cloth or compressed air and lens paper designed for photographic lenses to clean the lens.

Using Your Camera Abroad

Television signal standards and electrical voltages and frequencies vary substantially from country to country. When you are abroad, check the sections below before using the AC adapter or connecting the camera to a TV.

AC Adapter (Supplied Accessory)

The supplied AC adapter is compatible with 50 Hz and 60 Hz electrical systems in the range of 110 V to 120 V AC.
Use a commercially available AC plug adapter, if necessary, depending on the design of the wall outlet.

Television Signal Standards

In any country, you can always preview the image by using the LCD monitor. However, if you want to preview the image on a TV screen, the TV must be either NTSC-M or PAL system compatible.

NTSC-M is used in the following areas:
The Bahamas, Barbados, Bermuda, Myanmar (formerly Burma), Canada, Chile, Colombia, Costa Rica, Cuba, the Dominican Republic, Ecuador, El Salvador, Greenland, Guam, Guatemala, Haiti, Honduras, Jamaica, Japan, South Korea, Mexico, the Netherland Antilles, Nicaragua, Panama, Peru, the Philippines, Puerto Rico, St. Kitts, St. Lucia, Surinam, Taiwan, Trinidad, the U.S.A., Venezuela, Southern Vietnam, and the Virgin Islands.

PAL is used in the following areas:
Germany, United Kingdom, Ireland, Sweden, Denmark, Austria, Belgium, Switzerland, Italy, Spain, Holland, Finland, Portugal, Norway, Hong Kong, Thailand, Australia, New Zealand, Singapore, Kuwait, China, etc.

Trouble Shooting

General

Symptom	Possible causes	Suggested solution
The camera does not power on.	The AA batteries are depleted.	Replace them with new ones **(p. 7)**.
	You did not press the Power button long enough.	Press and hold down the Power button for approximately 1 second.
	You did not insert the AA batteries correctly.	Make sure the battery polarity matches the indicators on the bottom of the camera body **(p. 7)**.
Cannot format the card.	The write protect switch is set to lock position.	Set the write protect switch to unlocked position **(p. 9)**.
The camera turns power off suddenly.	The AA batteries are depleted.	Replace them with new ones **(p. 7)**.
	The card is broken.	Replace the card with new one **(p. 9)**.
	The power automatically turns off when there is no operation for a certain period of time.	Select a desired time setting in "AUTO POWER OFF" menu **(p. 53)**.
The startup screen stays on and the status indicator blinks green.	The Mode Dial is set halfway between two modes.	Set the dial so it securely snaps in to the desired position.

In AUTO, P, A, S, M or SC. mode

Symptom	Possible causes	Suggested solution
The Shutter button does not function to capture.	You did not press the Shutter button enough.	Press the Shutter button fully.
The LCD screen does not display the image from the lens.	The LCD screen turns off.	Press the DISPLAY button to turn it on **(p. 6)**.
The captured image is too dark or too bright in **M** mode.	The exposure setting does not match the lighting condition.	Use a different mode to capture the image.
The flash does not function.	You set the flash to off mode.	Press the ↯ button and try other modes **(p. 16)**.
	You set the flash to Auto mode in a bright condition.	Not a malfunction.
	The flash has malfunctioned.	Call for service **(p. 64)**.
Cannot focus on a close up subject.	The camera cannot automatically focus on a subject closer than 1 ft (30 cm).	Press the ♣ button to use Macro Shot **(p. 16)**.
The captured image appears unclear.	The focus is not properly locked.	Press the Shutter button half-way down and wait a few moments until the focus locks **(p. 13)**.
Cannot use the digital zoom.	The DIGITAL ZOOM menu item is set to "OFF".	Set it to "ON" **(p. 30)**.

In AUTO, P, A, S, M or SC. mode

Symptom	Possible causes	Suggested solution
Cannot select the menu items "BRACKET" or "γ BRACKET".	Battery power is too low to capture 3 or more images.	Replace the batteries with new ones (**p. 7**).
	There is not enough card capacity to store 3 or more images.	Replace the card with new one (**p. 9**) or delete unwanted files (**p. 19**).
The menu screen does not appear when pressing the MENU button in **SC.** mode.	You have not selected a scene menu in the initial screen.	Select a desired scene menu, and press the SET button, then press the MENU button again (**p. 46**)

In ⊞ mode

Symptom	Possible causes	Suggested solution
The camera automatically stops capturing a movie image.	The AA batteries are depleted.	Replace them with new ones (**p. 7**).
	30 second movie capture limit has elapsed.	Not a malfunction.
Cannot use the digital zoom.	You cannot use the digital zoom in ⊞ mode.	Not a malfunction.

In ▶ mode

Symptom	Possible causes	Suggested solution
Cannot delete an image.	The image is protected.	Cancel the protection (**p. 33**).
The image does not display in full screen.	The image size is larger than 2448×1632.	Cannot display an image larger than 2448×1632 on this camera.
Cannot display the image on TV.	The video input channel or TV channel is not selected properly.	Check the operation manual for your VCR or TV, and select the proper channel (**p. 20**).
	The A/V cable is not properly connected.	Check the cable connection (**p. 20**).
	The VIDEO OUT menu is not set to the correct item.	Check the TV system that applies to where you live (**p. 61**), and set it to correct item (**p. 20**).
Cannot transfer the data to the PC.	The USB driver is not correctly installed.	Check the installation procedure, and try again (**p. 58**).
	The USB cable is not properly connected.	Check the cable connection (**p. 57**).
	The PC CONNECT menu is set to "OFF".	Set it to "ON" (**p. 59**).

Specifications

Digital still camera

Image Capturing Device	1/1.8" CCD image sensor (effective pixels: 4.04 megapixels)
Lens	F2.0-F2.5, f=7-21mm (35mm film equivalent: 33-99mm)
Power zoom	1-3× in optical range, 3-9× in digital range
Color Temperature Compensation	Auto white balance with daylight, fluorescent or tungsten
LCD monitor	1.5" CGSilicon, 134,000pixels
Power Source	AA size alkaline batteries
	Ni-MH rechargeable batteries
	DC 6.0 V with AC adapter
Power Consumption	3.2 W
Recording Format	JPEG for still images/Motion JPEG for motion images
Recording Medium	SD Memory Card
Sound Recording Format	WAV (monaural)
Dimensions (W × H × D)	4.5" × 2.9" × 2.4" (113.5 × 74.5 × 60 mm)
Weight	0.64 lbs (290 g) (without batteries, card, wrist strap, and lens cap)
Operating Temperature	32°F to 104°F (0°C to +40°C)
Storage Temperature	–4°F to 140°F (–20°C to +60°C)
Operating Humidity	30% to 80%

AC adapter

Power Requirement	AC 100-120V, 50/60Hz
DC Output	6 V
Operating Temperature	32°F to 104°F (0°C to +40°C)
Dimensions (W × H × D)	2.0" × 1.1" × 2.6" (50.0 × 27.0 × 65.5 mm)
Weight	0.24lbs (110g)

Specifications are subject to change without notice.

SERVICE INFORMATION (For the U.S.)

For the location of the nearest Sharp Authorized Service Center, or to obtain product literature, accessories, supplies or customer assistance, please call 1-800-BE SHARP (1-800-237-4277) or visit SHARP's website (http://www.sharpusa.com).

Información importante para los consumidores de los EE.UU.

ADVERTENCIA: PARA REDUCIR EL RIESGO DE CAUSAR UN INCENDIO O RECIBIR UNA DESCARGA ELÉCTRICA, NO EXPONGA ESTE APARATO A LA LLUVIA NI A LA HUMEDAD.

PRECAUCION

Si el adaptador de CA se extravía o tiene que ser cambiado, adquiera otro del mismo tipo en el centro de servicio SHARP de su concesionario.

ADVERTENCIA SOBRE EL COPYRIGHT

SHARP está resuelta a que esta unidad sea utilizada cumpliendo plenamente con las leyes del copyright de Estados Unidos, y a que se obtengan los permisos previos de los propietarios del copyright siempre que sea necesario.

NOTA

El monitor de cristal líquido de la videocámara es un producto de alta tecnología, con más de 134.000 transistores de película fina ⁎, lo que le proporciona una imagen perfectamente detallada. De vez en cuando tal vez aparezca un pixel en la pantalla en forma de punto fijo de color azul, verde, rojo o negro. Tenga en cuenta que esto no tiene ninguna influencia en las prestaciones de la videocámara.

⁎ Las especificaciones están sujetas a cambios sin previo aviso.

Marcas comerciales

- Microsoft y Windows son marcas registradas o marcas de fábrica de Microsoft Corporation en los Estados Unidos y/o en otros países.
- DPOF es una marca comercial de CANON INC., Eastman Kodak Company, Fuji Photo Film Co., Ltd. y Matsushita Electric Industrial Co., Ltd.
- Todos los demás nombres de marcas o productos son marcas comerciales registradas o marcas comerciales de sus respectivos titulares.

AVISOS DE SEGURIDAD IMPORTANTES

1. Lectura de las instrucciones—Antes de utilizar este producto deberán leerse todas las instrucciones de seguridad y manejo.

2. Conservación de las instrucciones—Las instrucciones de seguridad y manejo deberán guardarse para poder consultarlas en futuro en caso de ser necesario.

3. Cumplimiento de las advertencias— Deberán cumplirse todas las advertencias del producto y de las instrucciones de manejo.

4. Cumplimiento de las instrucciones— Deberán seguirse todas las instrucciones de manejo.

5. Limpieza—Desenchufe este producto de la toma de corriente de la pared antes de limpiarlo. No utilice agentes de limpieza líquidos ni en aerosol. Utilice un paño húmedo para hacer la limpieza.

6. Aditamentos—No utilice aditamentos que no sean recomendados por el fabricante del producto, porque pueden causar peligros.

7. Agua y humedad—No utilice este producto cerca del agua y la humedad como, —por ejemplo, cerca de una bañera, lavabo, fregadero de cocina o lavadora; no lo utilice tampoco en un sótano húmedo, cerca de una piscina o en otros lugares similares.

8. Accesorios—No coloque este producto sobre un carrito, soporte, trípode, ménsula o mesa inestable. El producto podría caerse y causar lesiones graves a un niño o a un adulto, y también podría estropearse.
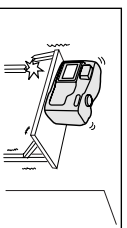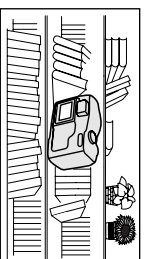
Utilícelo solamente con un carrito, soporte, trípode, ménsula o mesa recomendado por el fabricante, o vendido con el producto. Cuando quiera que monte el producto hágalo siguiendo las instrucciones del fabricante, y utilizando los accesorios de montaje recomendado por él.

9. La combinación del producto y un carrito deberá moverse con mucho cuidado. Las paradas repentinas, la fuerza excesiva y las superficies irregulares pueden ser la causa de que la combinación del producto y el carrito se vuelquen.

10. Ventilación—Las ranuras y aberturas de la caja sirven para la ventilación del producto, y para asegurar un funcionamiento fiable del mismo y evitar que éste se recaliente, por lo tanto, éstas no deberán taparse. Las aberturas no deberán taparse nunca colocando el producto en una cama, sofá, alfombra u otras superficies similares. Este producto no deberá colocarse en una instalación empotrada como, por ejemplo, un mueble librería o una estantería, a menos que disponga de la ventilación apropiada o se cumplan las instrucciones del fabricante.

11. Fuentes de alimentación—Este producto sólo deberá ser utilizado con el tipo de fuente de alimentación indicado en la etiqueta de características. Si no está seguro del tipo de alimentación empleado en su casa, consulte a su concesionario o a la compañía eléctrica local. Para los productos que van a ser utilizados con energía de baterías u otras fuentes, consulte las instrucciones de manejo.

12. Puesta a tierra o polarización—Este producto puede estar equipado con una clavija de alimentación de corriente alterna polarizada (una clavija con una patilla más ancha que la otra). Esta clavija sólo entrará en la toma de corriente de una forma, lo que constituye una característica de seguridad. Si no puede introducir a fondo la clavija en la toma de corriente, pruebe invirtiendo la clavija. Si la clavija sigue sin poder introducirse en la toma de corriente, póngase en contacto con un electricista para que le cambie la toma de corriente obsoleta. No anule la característica de seguridad de la clavija polarizada.

13. Protección de cables de alimentación—Los cables de alimentación deberán instalarse de forma que nadie camine sobre ellos ni queden pellizcados por objetos colocados encima o contra ellos, poniendo mucha atención a las clavijas, receptáculos y al punto donde entran y salen del producto.

14. Tormentas eléctricas—Para que este producto disponga de una mayor protección durante una tormenta eléctrica, o para cuando se deje sin atender durante un largo período de tiempo, desenchúfelo de la toma de corriente y desconecte la antena o el sistema de cable. Esto impedirá que el producto se estropee debido a las tormentas eléctrica o a la sobretensión en la línea de alimentación.

15. Líneas de alimentación—Una antena exterior no deberá colocarse cerca de líneas de alimentación elevadas ni tampoco cerca de luces eléctricas o circuitos de alimentación, ni donde pueda caer encima de tales líneas de alimentación o circuitos. Cuando instale un sistema de antena exterior deberá tener mucho cuidado para que éste no toque tales líneas de alimentación o circuitos porque el contacto con ellos podría causar un accidente mortal.

16. Sobrecarga—No sobrecargue las tomas de corriente de la pared, los cables de extensión o los receptáculos integrales de otros equipos porque existe el riesgo de que se produzca un incendio o una descarga eléctrica.

17. Entrada de objetos y líquidos—No meta nunca objetos de ningún tipo en este

    producto a través de las aberturas porque pueden tocar puntos de tensión peligrosos o cortocircuitar partes que pueden causar un incendio o una descarga eléctrica. No derrame nunca líquidos de ningún tipo en el producto.

18. Servicio—No intente reparar este producto usted mismo ya que al abrirlo o retirar las cubiertas puede exponerse a una tensión peligrosa o a otros peligros. Solicite las reparaciones al personal de servicio cualificado.

19. Daños que requieren ser reparados— Desenchufe este producto de la toma de corriente y solicite las reparaciones al personal de servicio cualificado cuando se produzcan las condiciones siguientes:
    a. Cuando el cable de alimentación o su clavija estén estropeados.
    b. Si se ha derramado líquido, o han entrado objetos, en el interior del producto.
    c. Si el producto ha estado expuesto a la lluvia o al agua.
    d. Si el producto no funciona normalmente siguiendo las instrucciones de manejo. Ajuste solamente los controles indicados en las instrucciones de manejo, ya que el ajuste incorrecto de otros controles puede causar daños y tal vez se requiera un trabajo de reparación extensivo por parte de un técnico cualificado para devolver el producto a su estado de funcionamiento normal.

    e. Si el producto se ha caído o se ha estropeado de cualquier forma.
    f. Cuando el producto muestre un cambio visible en su rendimiento,— esto indica la necesidad de tener que realizar reparaciones.

20. Partes de recambio—Cuando sea necesario utilizar partes de recambio, asegúrese de que el técnico de servicio emplee aquellas que hayan sido especificadas por el fabricante o que tengan las mismas características que las partes originales. Los cambios no autorizados pueden causar un incendio, descargas eléctricas u otros peligros.

21. Comprobación de seguridad—Al terminar cualquier trabajo de mantenimiento o reparación en este producto, pida al técnico de servicio que realice las comprobaciones de seguridad para determinar si el producto se encuentra en condiciones de funcionamiento apropiadas.

22. Montaje en la pared o en el techo—El producto deberá montarse en una pared o en un techo sólo como lo recomienda su fabricante

23. Calor—El producto deberá instalarse lejos de fuentes de calor tales como radiadores, salidas de calor, estufas y otros aparatos (incluyendo amplificadores) que produzcan calor.
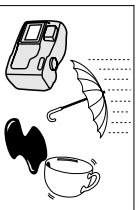
Precauciones

- **Antes de grabar una escena importante, realice una prueba de grabación, y luego reproduzca para comprobar si la escena se grabó correctamente.**

- **Cuando no utilice la cámara digital, no se olvide de extraer la tarjeta, desconectar la alimentación y desenchufar la cámara digital de la fuente de alimentación.**

- **No dirija el objetivo hacia el sol.**
  No permita que la luz del sol directa llegue al objetivo ni a la pantalla del monitor LCD de la cámara digital, tanto si está realizando la grabación como si no, porque esto podría dañar el sensor de CCD o la superficie de la pantalla LCD. Tenga mucho cuidado especialmente cuando grabe en exteriores.

- **Evite los campos magnéticos.**
  La utilización de la cámara digital cerca de lámparas fluorescentes fuertes, motores, televisores u otros campos magnéticos puede afectar negativamente a las imágenes grabadas.

- **La utilización de la cámara digital cerca de una emisora u otra fuente potente de transmisión puede causar zumbidos o deterioro en la imagen.**

- **Evite golpearla o dejarla caer.**
  No deje caer la cámara digital ni tampoco la someta a golpes o vibraciones intensas. Los golpes producidos durante la grabación ocasionarán ruidos en la imagen grabada.
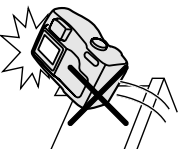
- **Esta cámara digital está equipada con un objetivo móvil. No lo golpee ni lo presione con fuerza.**

- **Evite poner la cámara digital cerca de equipos de iluminación.**
  El calor producido por las luces incandescentes puede deformar la cámara digital o hacer que ésta funcione mal.
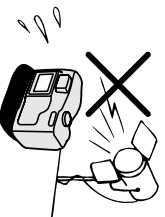
- **Respete siempre las prohibiciones o restricciones relacionadas con la utilización de equipos electrónicos en vuelos comerciales o en otras áreas susceptibles.**

- **Tenga cuidado con la temperatura y la humedad.**
  Podrá utilizar su cámara digital a temperaturas de entre 32°F y 104°F (0°C y +40°C), con una humedad relativa de entre el 30% y el 80%. Durante el verano, no deje el aparato en el interior de un automóvil sin ventilación; no lo deje tampoco bajo la luz del sol directa ni cerca de fuentes de calor intenso; esto podría estropear considerablemente la caja del aparato y su circuito.
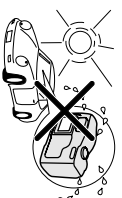
- **Evite situaciones en las que el agua, la arena, el polvo u otras sustancias extrañas puedan entrar en la cámara digital, y no utilice ni deje su cámara digital en lugares con excesivo humo, vapor o humedad.**
  En estos ambientes pueden producirse fallos en el funcionamiento o se puede formar moho en el objetivo.
  Asegúrese de guardar este aparato en un lugar bien ventilado.

- **Algunos trípodes pequeños y portátiles quizá se acoplen mal a la cámara digital, y puede que no sirvan de apoyo seguro. Utilice siempre trípodes fuertes y estables.**
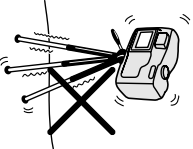
- **Cuando utilice su cámara digital en un ambiente frío, la pantalla del monitor LCD aparecerá a menudo menos brillante inmediatamente después de conectar la alimentación. Esto no es ningún fallo de funcionamiento. Para evitar que la cámara digital se enfríe excesivamente, envuélvala en un paño grueso, una manta, etc...**
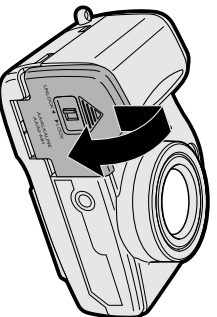
Guía de operación rápida
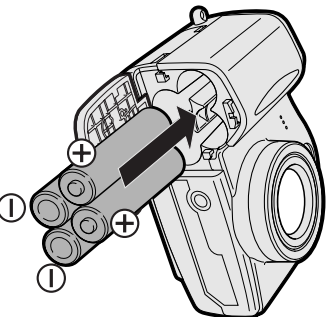
Inserción y extracción de las pilas AA

1 Asegúrese de que la alimentación esté desconectada.

2 Deslice el mando de abertura de la puerta del compartimiento de las pilas a la posición UNLOCK.

Mando de abertura de la puerta del compartimiento de las pilas
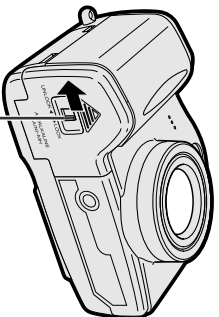
3 Deslice la puerta y luego ábrala en el sentido de la flecha.

4 Inserte las pilas AA como se muestra abajo.
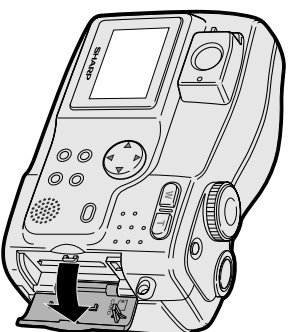
5 Cierre la puerta y luego deslícela a LOCK.

Nota:
- También puede utilizar la cámara conectándola a una toma de corriente empleando el adaptador de CA suministrado.

Inserción y extracción de una tarjeta

Inserción

1 Asegúrese de que la alimentación esté desconectada.

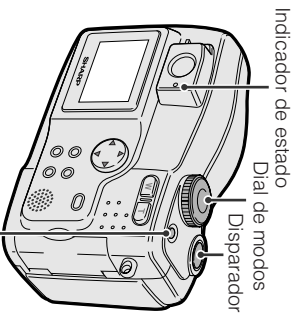**2** Abra la tapa de la ranura de la tarjeta en el sentido de la flecha.

3 Inserte una tarjeta como se muestra abajo, y luego empújela a fondo.

Esquina recortada

Interruptor de protección contra escritura
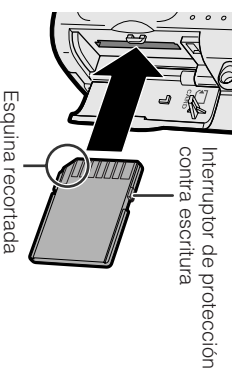
4 Cierre la tapa de la ranura de la tarjeta.

Captura de una imagen fija en el modo automático

Indicador de estado

Dial de modos

Disparador

Botón de la alimentación

1 Inserte una tarjeta en la cámara.

2 Quite la tapa del objetivo.

3 Ponga el dial de modos en "**AUTO**".

4 Pulse el botón de la alimentación hasta que la cámara se encienda.

POWER

5 Pulse hasta la mitad el disparador para enfocar el motivo.

6 Pulse completamente el disparador para capturar la imagen.

* El indicador de estado parpadeará mientras los datos estén siendo grabados en la tarjeta, y dejará de hacerlo cuando termine la grabación.

Notas:
* No desconecte la alimentación mientras el indicador de estado está parpadeando en el paso 6.
* Quite la tapa del objetivo antes de encender la cámara.

Captura de una imagen en movimiento

1 Inserte una tarjeta en la cámara.

2 Quite la tapa del objetivo.

3 Ponga el dial de modos en "🎦".

4 Pulse el botón de la alimentación hasta que se encienda la cámara.

POWER

5 Pulse a fondo el disparador para empezar a capturar imágenes.

Para hacer una pausa en la captura

Pulse otra vez a fondo el disparador.

Empleo del zoom

Acercamiento con zoom

Pulse el botón del zoom motorizado "T" (telefoto) para obtener una vista de primer plano (①).
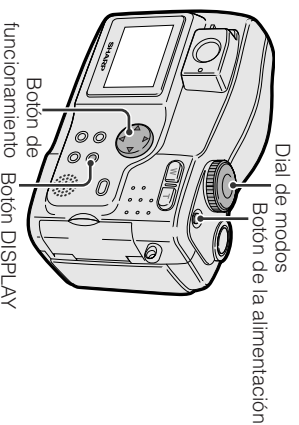
Alejamiento con zoom

Pulse el botón del zoom motorizado "W" (granangular) para obtener un campo de visión más amplio (②).

* El indicador de alcance del zoom le indica el ajuste actual del zoom.

Botones del zoom motorizado

Indicador de alcance del zoom

W — T ZOOM 3

Presentación preliminar de imágenes

Dial de modos
Botón de la alimentación
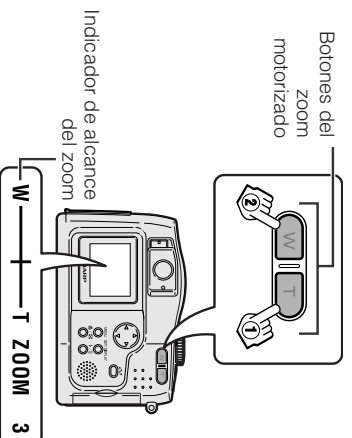
Botón de funcionamiento Botón DISPLAY
Dial de modos
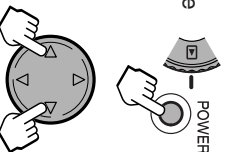
Presentación preliminar de imágenes fijas

1 Ponga el dial de modos en "▶".

2 Pulse el botón de la alimentación hasta que se encienda la cámara.

• La última imagen grabada en la tarjeta se visualiza en toda la pantalla.

POWER

[2448]
Fine
±0.0EV
1/500
F2.5

100-0005
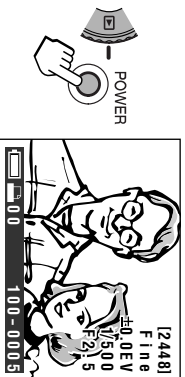
3 Pulse ◁ o ▷ para seleccionar la imagen.

Presentación preliminar de imágenes en movimiento

1 Ponga el dial de modos en "▶".

2 Pulse el botón de la alimentación hasta que se encienda la cámara.

POWER

3 Pulse ◁ o ▷ para seleccionar la imagen en movimiento.

• Cuando se visualiza un archivo de imagen en movimiento aparece el icono de película.

00

100-0005

4 Pulse DISPLAY para iniciar la presentación preliminar.

• La imagen seleccionada aparece en toda la pantalla.

SET/DISPLAY

[▶] 100-0005

### Operaciones disponibles durante la presentación preliminar de una imagen en movimiento

• Para hacer una pausa en la presentación preliminar, pulse △. Pulse de nuevo △ para volver a la presentación preliminar normal.

• Para buscar una escena en el archivo de presentación preliminar, pulse ◁ o ▷. Pulse △ para volver a la presentación preliminar normal.

• Para detener la presentación preliminar, pulse ▽.

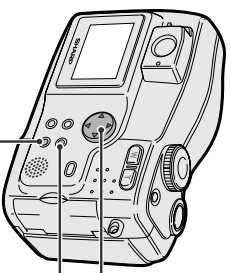### Cambio a la presentación preliminar de imagen miniatura

1 Pulse el botón ⊞.
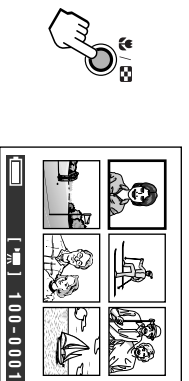
2 Pulse ◁, ▷, ▽ o △ para seleccionar la imagen deseada.

• Pulse de nuevo el botón ⊞ para volver a la presentación preliminar de pantalla completa.

[▶] 100-0001

00

100-0005

71

Guía de operación rápida
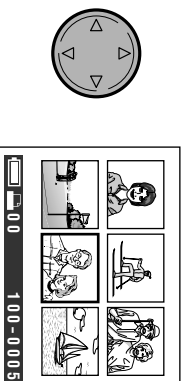
Borrado de una imagen almacenada
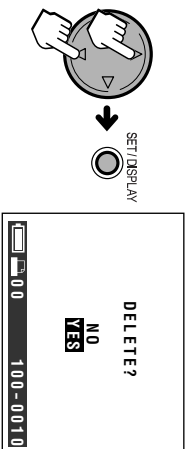
Botón "🗑"

Botón de funcionamiento

Botón SET

1 Ponga el dial de modos en "▶", y luego encienda la cámara.

- Las imágenes grabadas en la tarjeta se visualizan en toda la pantalla.

2 Pulse ◁ o ▷ en el botón de funcionamiento para seleccionar la imagen que va a borrar.
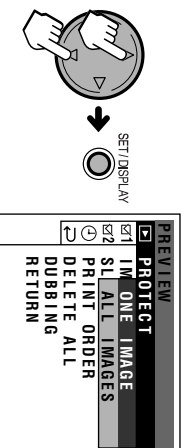
3 Pulse el botón 🗑.

4 Pulse ▽ o △ para seleccionar "YES", y luego pulse el botón SET para borrar la imagen.

SET/DISPLAY

```
DELETE?
NO
YES
100-0010
```
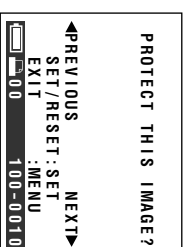
Protección de las imágenes

1 Ponga el dial de modos en "▶", y luego encienda la cámara.

2 Pulse ◁ o ▷ para seleccionar la imagen que va a proteger.

3 Pulse el botón MENU hasta que aparezca la pantalla de menú.

4 Pulse ▽ o △ para seleccionar "▶", y luego pulse el botón SET.

5 Pulse ▽ o △ para seleccionar "PRO-TECT", y luego pulse el botón SET.

SET/DISPLAY

```
PREVIEW
▶   PROTECT
🗂1  IMAGE
🗂2  SL ALL IMAGES
⊕   PRINT ORDER
↩   DELETE ALL
    DUBBING
    RETURN
```

6 Pulse ▽ o △ para seleccionar "ONE IMAGE", y luego pulse el botón SET.

```
PROTECT
ONE IMAGE
ALL IMAGES
```

7 Pulse el botón SET para proteger la imagen.

```
PROTECT THIS IMAGE?

◀PREVIOUS        NEXT▶
SET/RESET:SET
EXIT        :MENU
100-0010
```
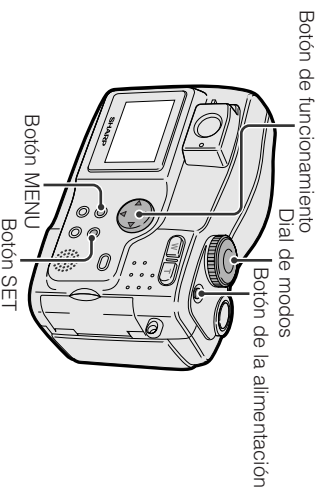
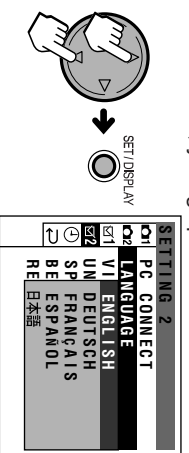**8** Pulse el botón MENU para volver a la pantalla de menú.

Nota:
- Seleccione "ALL IMAGES" en el paso 6 de "Selección de una imagen" para proteger todas las imágenes guardadas.

Cambio del idioma de la visualización en pantalla

Botón de funcionamiento

Dial de modos

Botón de la alimentación

Botón MENU

Botón SET

1 Pulse el botón de la alimentación hasta que se encienda la cámara.

2 Pulse el botón MENU hasta que aparezca la pantalla de menú.

3 Pulse ▽ o △ en el botón de funcionamiento para seleccionar "☑ 2", y luego pulse el botón SET.

4 Pulse ▽ o △ para seleccionar "LANGUAGE", y luego pulse el botón SET.

SET/DISPLAY

```
SETTING 2
C1   PC CONNECT
C2   LANGUAGE
☑1   VI  ENGLISH
☑2   UN  DEUTSCH
⏲    SP  FRANÇAIS
↩    BE  ESPAÑOL
RE       日本語
```

5 Pulse ▽ o △ para seleccionar el idioma deseado, y luego pulse el botón SET.

- El menú "LANGUAGE" es "SPRACHE" en alemán, "LANGUE" en francés, "IDIOMA" en español o "言語" en japonés.

```
LANGUAGE
ENGLISH
DEUTSCH
FRANÇAIS
ESPAÑOL
日本語
```

6 Pulse el botón MENU para apagar la pantalla de menú.

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