SAMSUNG

SAMSUNG DIGIT*all*
everyone's invited™

ENGLISH

QuickTime
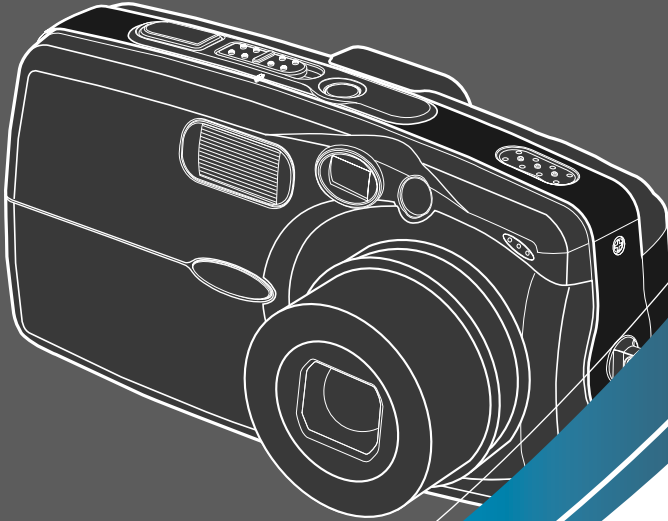
SAMSUNG CAMERA

User's Manual
U·CΛ 4

Thank you for buying a Samsung Camera. This manual will guide you through using the camera, including capturing images, downloading images and using the application software.
Please read this manual carefully before using your new camera.

Instructions

■ Use this camera in the following order

Set up the camera driver

Before connecting the camera to a PC, via the USB cable, you will need to set up the camera driver. Install the camera driver that is contained in the Application S/W CD-ROM.(p.95)

Take a picture

Take a picture (p.21)

Insert the USB cable

Insert the supplied USB cable into the PC's USB port and the camera's USB connection terminal.(p.83)

Check the camera's power

Check the camera's power
If the power is turned off, press the camera button to power it on.(p.24)

Check [Removable Disk]

Open Window's EXPLORER and search for [Removable Disk].(p.84)

● To play back a video shot with this camera, be sure to use the QuickTime player supplied on the software CD-ROM. Applications that do not support the MPEG-4 codec (e.g., Windows Media Player) may not be able to play back the video.

● If you use a card reader to copy the images on the memory card to your PC, the images could be damaged. When transferring the images taken with the camera to your PC, be sure to use the supplied USB cable to connect the camera to your PC. Please note that the manufacturer holds no responsibility for loss or damage of images on the memory card due to the use of a card reader.

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SETUP

SOFTWARE

Getting to know your camera

Thank you for buying a Samsung Digital Camera.

● Prior to using this camera, please read the user manual thoroughly.

● When you require After Sales service, please bring the camera and the cause of the camera malfunction (such as Batteries, Memory card etc.) to the A/S center.

● Please check that the camera is operating properly prior to when you intend to use it (e.g. for a trip or an important event) to avoid disappointment. Samsung camera takes no responsibility for any loss or damages that may result from camera malfunction.

● Keep the manual in a safe place.

✴ Microsoft, Windows and Windows logo are registered trademarks of Microsoft Corporation incorporated in the United States and/or other countries.

✴ Apple, Mac and QuickTime logo are registered trademarks of Apple computer.

✴ Memory Stick Duo is a registered trademark of Sony Corporation.

✴ All brand and product names appearing in this manual are registered trademarks of their respective companies.

About the icons

This manual contains instructions on using this camera that will help you to use this camera safely and correctly. This will help prevent danger and injury to others.

DANGER

DANGER indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

WARNING

WARNING indicates a potentially hazardous situation, which, if not avoided, could result in death or serious injury.

CAUTION

CAUTION indicates a potentially hazardous situation, which, if not avoided, may result in a minor or moderate injury.

Danger

- Do not attempt to modify this camera in any way. This may result in fire, injury, electric shock or severe damage to you or your camera. Internal inspection, maintenance and repairs should be carried out by your dealer or Samsung Camera Service Center.
- Please do not use this product in close proximity to flammable or explosive gases, as this could increase the risk of explosion.
- Should any form of liquid or a foreign object enter the camera, do not use it. Switch off the camera, and then disconnect the power source (batteries or AC Power Adapter). You must contact your dealer or Samsung Camera Service Center. Do not continue to use the camera as this may cause a fire or electric shock.
- Do not insert or drop metallic or inflammable foreign objects into the camera through access points e.g. the memory card slot and battery chamber. This may cause a fire or electric shock.
- Do not operate this camera with wet hands. This could pose a risk of electric shock.

DANGER

Warning

- Do not use the flash in close proximity to people or animals. Positioning the flash too close to your subject's eyes, may cause eyesight damage.
- When taking photographs, never point the lens of the camera directly into very strong light. This may result in permanent damage to your eyesight.
- For safety reasons keep this product and accessories out of reach of children or animals to prevent accidents e.g.:
  - Swallowing batteries or small camera accessories. If an accident should occur, please consult a doctor immediately.
  - There is the possibility of injury from the camera's moving parts.
- Batteries and camera may become hot during prolonged use and it may result in camera malfunction. Should this be the case, allow the camera to sit idle for a few minutes to allow it time to cool.
- Do not recharge non rechargeable batteries. This may cause an explosion.
- Do not leave this camera in places subject to extremely high temperatures, such as a sealed vehicle, direct sunlight or other places of extreme variances in temperature. Exposure to extreme temperatures may adversely affect the camera's internal components and could cause a fire.
- When in use, do not cover the camera or AC Power Adapter. This may cause heat to build up and distort the camera body or cause a fire. Always use the camera and its accessories in a well-ventilated area.

WARNING

Caution

■ Leaking, overheating, or burst batteries could result in fire or injury.
   • Use batteries with the correct specification for the camera.
   • Do not short circuit, heat or dispose of batteries in fire.
   • Do not insert the batteries with the reverse polarities.
■ Remove the batteries when not planning to use the camera for a long period of time. Batteries may leak corrosive electrolyte and irreparably damage the camera's components.
■ Do not fire the flash while it is in contact with hands or objects. Do not touch the flash after using it continuously. It may cause burns.
■ Do not move the camera while it is switched on, if you are using the AC Power Adapter. After use, always switch off the camera before unplugging the adapter from the wall socket. Then make sure that any connector cords or cables to other devices are disconnected before moving the camera. Failure to do so may damage the cords or cables and cause a fire or electric shock.

CAUTION

An FCC warning

• This device has been tested in accordance with the limits of a class B digital device under item 15 of the FCC rules. These limits are designed to provide protection against harmful interference in commercial installation. This equipment generates, absorbs and can emit radio frequency energy. If it is not installed and used in accordance with the instructions, it may cause harmful interference to radio communication. There is however, no guarantee that interference will not occur in some situations. Should any interference occur when this device is in operation, please try one or more of the following measures.

   ■ Change the location and direction of any aerial.
   ■ Increase distance between the camera and the affected device.
   ■ Use a different socket away from the affected device.
   ■ Please contact a Samsung agent or a radio/TV engineer.

• This device complies with part 15 of the FCC Rules.
• Changes or modifications not expressly approved by the party responsible for compliance could void user's authority to operate the equipment.

Information to the user

NOTE: 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.

CAUTION : Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This digital camera can be used for
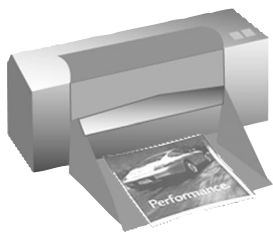
Printing images using a dedicated printer,
DPOF and PictBridge compatible printer or a
DPOF-equipped photo lab.
(refer to page 55~62)

Viewing images on a TV.
(refer to page 70)

Down loading image files from
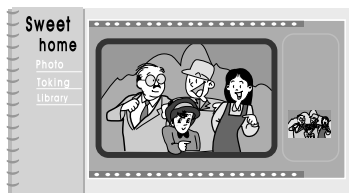camera to computer.
(refer to page 84)

Taking a picture.
(refer to page 20~41)

Editing images on a PC.
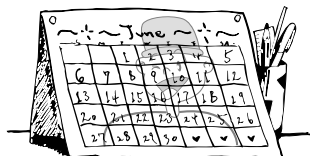(refer to page 113)

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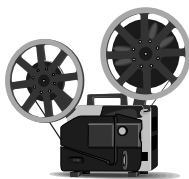# This digital camera can be used for

Creation of a digital photo album.

Taking a self-portrait and using the image to personalize calendar.

Recording your voice.
(refer to page 22)

Recording a movie clip
(refer to page 21)

You can even create your own unique gift wrap paper by using your digital images.

Inserting images directly into any electronic document.

Manufacturer's contents

Please check that you have the correct contents before using this product.

[   ] marked contents are optional.
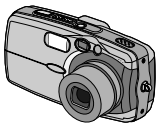
Digital Camera	Pouch	AV cable	USB cable	Camera strap

User manual	Product warranty	Software CD	DigiStudio

KENOX U-CA 4

DigiStudio
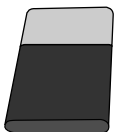
Duracell CP-1 battery	Memory Stick Duo/ Case/Adapter	Battery pack (SBP-3603)	AC adapter (3.3V)

Digimax Battery Pack : SLB-1037A KIT
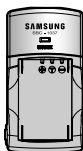
Battery charger	AC 코드	Rechargeable battery

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Identification of features

Front & Top

Mode switch

Shutter button

Flash

Function lamp

Power button

Viewfinder

Speaker

Auto Focus lamp

Microphone

Strap eyelet

Lens

Back & Bottom

Viewfinder

PLAY mode button

LCD monitor

Camera status lamp

TELE/Digital zoom button

WIDE/THUMBNAIL button

+&-/ DELETE button

USB/ AV connection terminal

DC input connection point

LCD button   Tripod socket
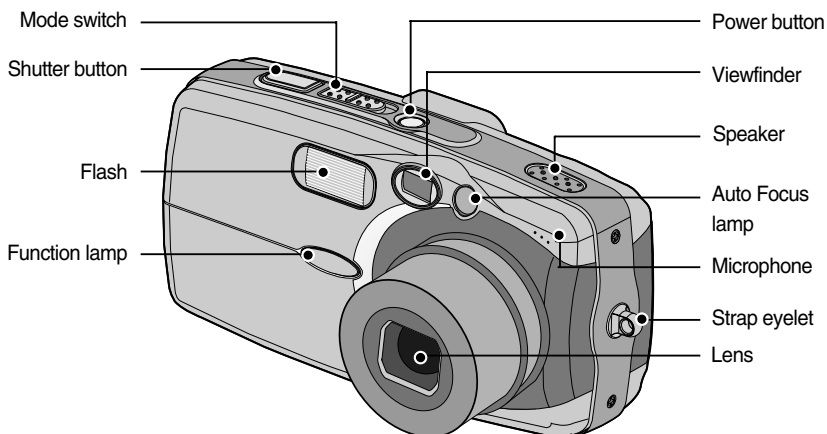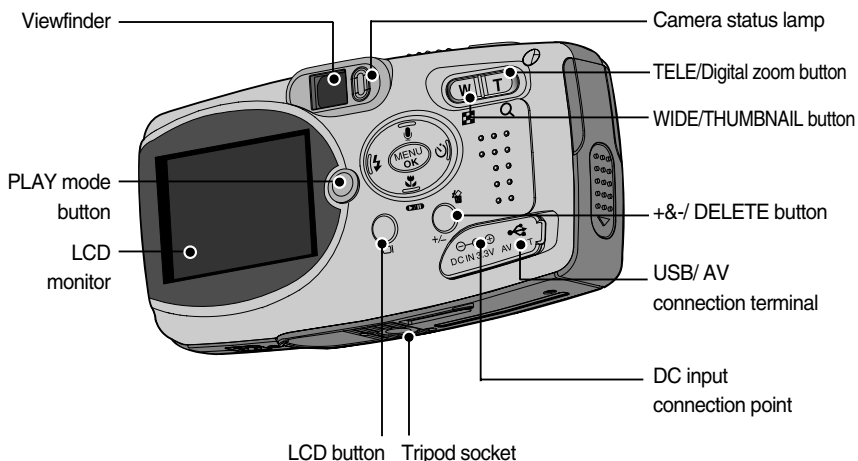
* When using the digital zoom to take a picture, the composition of the picture may be different depending on whether you are using the LCD monitor or the viewfinder. The picture will be taken in the composition of the picture as it appears on the LCD monitor.

Identification of features

Side/ 5-function button

Battery chamber cover

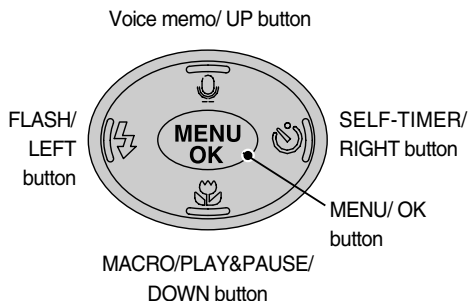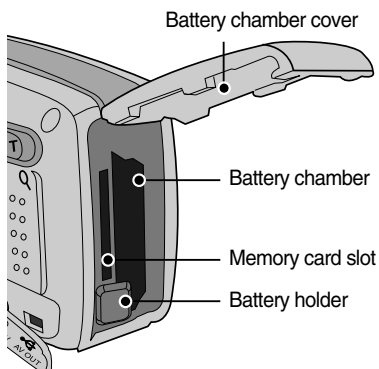Voice memo/ UP button

Battery chamber

FLASH/ LEFT button

MENU OK

SELF-TIMER/ RIGHT button

Memory card slot

Battery holder

MENU/ OK button

MACRO/PLAY&PAUSE/ DOWN button

Mode switch

■ You can select the desired working mode by using the mode switch located on the top of the camera. This digital camera has 3 recording modes. These are listed below.

● Movie clip mode
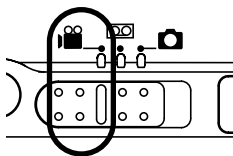
A movie clip can be recorded for as long as the available recording time of the memory capacity allows.
Image size and type are listed below.
- Image size : 320X240, 160X120
- Movie clip file type : *.mov (MPEG4)

● Voice recording mode

A voice recording can be recorded for as long as the available recording time of the memory capacity allows.
(Max: 1 hour)
- File type : *.wav

Identification of features

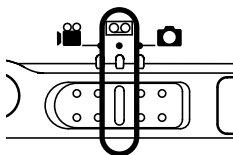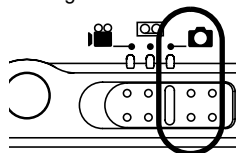● Still image mode

You can select from Auto, Manual, or Night mode. In Myset mode, any changes made to settings other than Self-Timer and Voice Recording will be maintained even after the camera is turned off.

Lamp

Type	Operation Lamp	Camera Status Lamp	LCD Monitor
When turning on the power	7 color lights blink and then turns off when the camera is ready to take a picture	Blinks orange	X
When the camera is in focus (when the SHUTTER button is pressed halfway)	X	Green lamp lights up	Autofocus mark lights up green
When the camera is out of focus (when the SHUTTER button is pressed halfway)	X	Green lamp blinks	Autofocus mark lights up red
While the flash is charging	X	Red lamp blinks	X
Flash is ready (when the SHUTTER button is pressed halfway)	X	Orange lamp lights up	X
While saving an image	X	Green lamp blinks	X
While shooting a video	Purple lamp blinks at a 1-second interval	X	Auto focus frame : White
During voice recording	Blue lamp blinks at a 1-second interval	X	X
While the camera is connected to a PC	X	Green lamp lights up	X
While transferring data between the camera and a PC	X	Green lamp blinks	X
When shooting an image	Green Lamp Blinks once.	X	X
While the self-timer is running	Red lamp blinks for 7 seconds at a 1-second interval/blinks for 3 seconds at a 0.25 second interval	X	X
When the LCD monitor is turned off in Still Image mode	X	Green lamp lights up	X

Connecting to a Power Source

■ There are two ways in which to provide the camera with power. You can use batteries or alternatively, you can use an AC(100 ~ 250V) Adapter (DC 3.3V 2.0A).

■ We recommend using batteries for a digital camera.
  (use batteries that are within a year of their date of manufacture) The batteries are listed below.
  Non rechargeable batteries   : Duracell CP-1 battery
 Rechargeable batteries   : SLB-1037

Connecting to a Power Source

INFORMATION

Important information about battery usage

● A non-rechargeable (disposable) battery can be used, but has a short lifespan because of its relatively low battery capacity. We recommend the rechargeable battery, which has a bigger capacity and longer lifespan than the non-rechargeable type. (Rechargeable batteries may not be available everywhere).

● Do not recharge the non rechargeable batteries. This may cause an explosion.

● Please remove the batteries if the camera will not be used for long periods.

● Batteries can lose power over time and are prone to leaking if kept inside the camera.

● Low temperatures (below 0 ℃) can affect the performance of the batteries and you may experience reduced battery life.

● Batteries will usually recover at normal temperatures.

● During extended use of the camera, the camera body may become warm. This is perfectly normal.

● If you are planning to use this camera for long periods of time, it is advisable to use an AC adapter (3.3V 2.0A).

Using the AC power adapter (3.3V 2.0A)
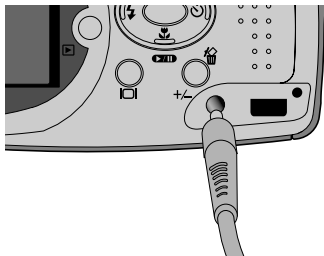
If you have access to a mains supply, using an AC Adapter (3.3V 2.0A) allows the camera to be used for long periods of time.
Plug the adapter into the connection point (DC IN 3.3V) on the camera.
Remove the batteries from the camera when using an AC adapter.

⚠ DANGER

● Always turn off the power before taking the AC adapter out of the mains supply.

● As with all mains powered devices, safety is important. Ensure that neither the camera nor adapter comes into contact with water or metallic materials.

● Please ensure that you use an AC adapter (3.3V 2.0A) with the correct specification for the camera. Failure to do so may affect your warranty.
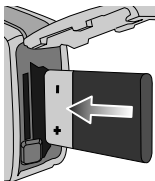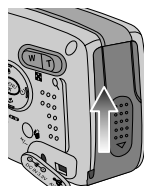
Connecting to a Power Source

: If the camera does not turn on after you have inserted batteries, please check whether the batteries are inserted with the polarity(+ and-).
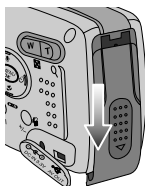
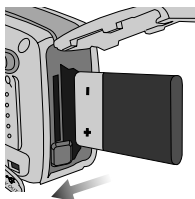1. Open the battery chamber cover by pushing in the direction of the arrow.

2. Insert the batteries according to the polarity marks (+ and -) on the back of the battery chamber cover.

3. To close the battery chamber cover, push it until it clicks.

Removing the battery

1. Turn off the camera power. Open the battery chamber cover and move the battery holder aside. The battery will be released.
2. Take out the battery and close the battery chamber cover.

■ There are 3 indicators for battery condition that are displayed on the LCD monitor.

Battery indicator			
Battery status	The batteries are fully charged.	Prepare new batteries.	There is no battery capacity. Replace with new batteries.

Precautions on Using the Memory Stick Duo

Some models of Memory Stick Duo media do not have the write-protect switch (B).

Card pins(A)

Write protect switch(B)

Label(C)

Back   Front

[Memory Stick Duo]

32MB
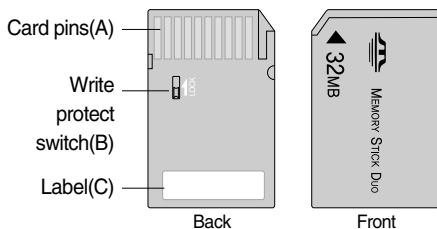
MEMORY STICK DUO

● Do not touch the card pins (part A) with your fingers or with metal objects.
● Do not press hard when writing on the label (part C).
● If you insert the Memory Stick Duo into the Memory Stick Duo adapter, you will be able to use it with a Memory Stick-compatible device.

● Do not insert the Memory Stick Duo on its own into a Memory Stick-compatible device.
● Do not insert the Memory Stick Duo adapter into a Memory Stick-compatible device without attaching the Memory Card Duo to the adapter. Using it without the Memory Stick Duo may adversely affect the device into which it is inserted.
● Be sure to check the proper direction of insertion before use .
● Insert the Memory Stick Duo all the way into the Memory Stick Duo adapter.
  If the Memory Stick Duo is not inserted correctly into the adapter, it may not operate properly.
● Do not attach labels to any part of the Memory Stick Duo and Memory Stick Duo adapter. The labels may come off as you insert the Memory Stick Duo into the adapter or into a Memory Stick-compatible device.
● When inserting the Memory Stick Duo into the slot, do not force or bend it.
● Do not touch the Memory Stick Duo adapter's card pins with your fingers or with metal objects.
● Do not allow dirt or foreign material to get into the Memory Stick Duo adapter slot.
● Do not leave the Memory Stick Duo with its adapter in areas subject to high temperatures.
● Those models with the write-protect switch on the back of the card prevents accidental erasure of data from deletion or formatting. By sliding the switch to the top of the memory card, the data will be protected. By sliding the switch to the bottom of the memory card, the data protection ability will be canceled. Please use a pointed object to move the write-protect switch. Slide the switch to the bottom of the memory card before taking a picture.

Precautions on Using the Memory Stick Duo

■ Maintenance of the Memory Stick Duo

(Hereafter the Memory Stick Duo is referred to as the "Memory Card".)
Be sure to format the memory card (see p. 66) if you are using a newly
purchased memory for the first time, if it contains data that the camera
cannot recognize, or if it contains images captured with a different camera.

● Turn off the camera power whenever the memory card is being inserted or removed.
● Repeated use of the memory card will eventually reduce the memory card's performance.
  Should this be the case, you will need to purchase a new memory card.
  Wear and tear on the memory card is not covered by the Samsung warranty.
● The memory card is an electronic precision device. Do not bend, drop or subject the memory
  card to any heavy impact.
● Do not store the memory card in an environment with strong electronic or magnetic fields, e.g.
  near loud speakers or TV receivers.
● Please do not use or store in an environment where there are extremes in temperature.
● Do not allow the memory card to become dirty or to come into contact with any liquid. Should
  this happen, clean the memory card with a soft cloth.
● Please keep the memory card in its case when not in use.
● During and after periods of extended use, you may notice that the memory card is warm.
  This is perfectly normal.
● Do not use a memory card that has been used in another digital camera or memory card reader.
● Do not use a memory card formatted by another digital camera or memory card reader.

■ Preserving the memory card data

● Do not remove the memory card while the camera status lamp (green) is blinking.
  Doing so will corrupt the data on the memory card.
● Samsung cannot be held responsible for lost data.
● It is advisable to copy important data onto other media as back-up e.g. floppy disks, hard disks,
  CD etc.
● If there are no shots remaining
  When you press the shutter button, a [CARD FULL !] message is displayed and the camera will
  not operate. To optimize the amount of memory in the camera, replace the memory card or
 delete unnecessary images stored in the memory.

Inserting the memory card

1. Turn off the camera's power and pull the memory card cover in the direction of the arrow to open.
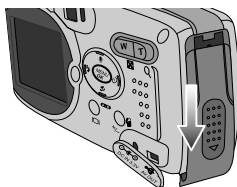
2. Have the front of the memory card facing toward the front of the camera (lens) and the card pins toward the back of the camera (LCD monitor), and then push the memory card into the card slot until you hear a click.
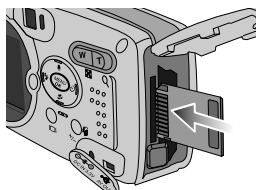
3. To close, push the card cover until you hear a click. If the memory card does not slide in smoothly, do not attempt to insert it by force. Check the direction of insertion, and then insert it correctly.
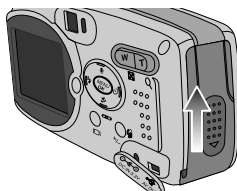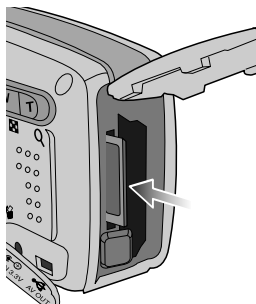
INFORMATION

● Do not insert the memory card the wrong way round . Doing so may damage the memory card slot.

Removing the memory card

1. Turn the power off using the power button.
   Open the battery chamber cover and press the memory card as shown in the image and release.

2. Remove the memory card and close the memory card cover.

When Using the Camera for the First Time

■ If the camera is turned on for the first time, a menu will be displayed to set date, time and language in the LCD monitor. This menu will not be displayed after setting up the date, time and language. Set up the date, time and language before using this camera.

● Setting up the date, time and date type
   1. Select the [DATE.TIME] menu by pressing the UP/DOWN button and press the RIGHT button.
   2. Select the desired sub menu by pressing the UP/ DOWN/ LEFT/ RIGHT button.

   RIGHT button   : selects YEAR/ MONTH/ DAY/ HOUR / MINUTE/DATE TYPE

   LEFT button   : Moves the cursor to the [DATE/TIME] main menu if the cursor is at the first item of the date and time setup. In all other instances, the cursor will be shifted to the left of its current position.

   UP/ DOWN button : changes the value of each item.

INFORMATION

   ● Date setting range : 2004/01/01 ~ 2050/12/31
                          (Leap years and months are corrected automatically)
   ● You will need to check and select the correct Date / Time when the batteries have been removed for a period longer than 1 hour.

● Setting up the language
   1. Select the [LANGUAGE] menu by pressing the UP/DOWN button and press the RIGHT button.
   2. Select the desired sub menu by pressing the UP/ DOWN button and press the OK button. When the settings are complete, press the MENU button twice to exit the menu screen.

INFORMATION

   ● You can select 16 languages. These are listed below:
     English, Korean, French, German, Spanish, Italian, S. Chinese, T. Chinese, Japanese, Russian, Portuguese, Dutch, Danish, Swedish, Finnish, Thai, and Malaysian.
   ● Even if the camera is restarted, the language setting will be maintained.

LCD monitor indicator

■ The LCD monitor displays information about the shooting functions and selections.
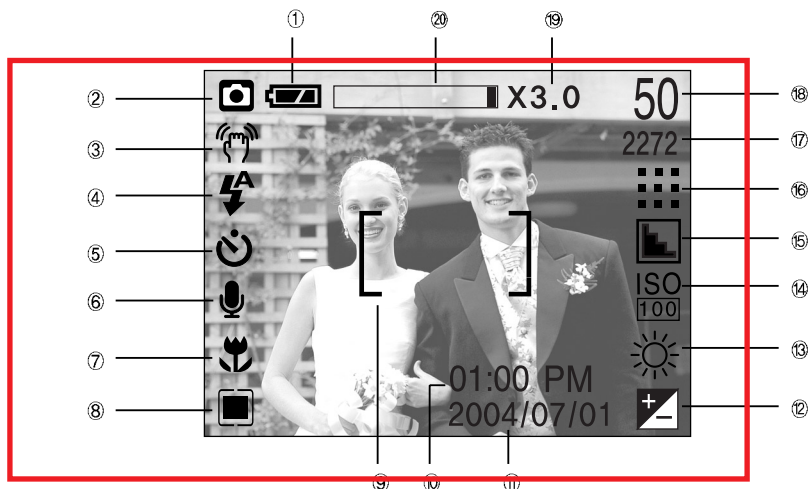
[Image & Full Status]

No.	Description	Icons	Page
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11	Date	2004/07/01	p.19, 67
12	Exposure compensation	LT	p.31
13	White Balance	AWB	p.32

LCD monitor indicator

14	ISO	ISO AUTO	ISO 100	ISO 200	ISO 400	p.33
15	Sharpness		� ▞ ▙			p.41
16	Image quality		▦ ⁚⁚ ⋰			p.39
17	Image size		2272, 2048, 1600, 1024, 640			p.38
18	Number of available shots remaining		50			
	Remaining time(Movie clip/ Voice recording)		00:05:00 / 01:00:00			p.21
19	Digital Zoom rate		X3.0			p.25
20	Optical zoom		[＿＿＿＿＿＿＿▮]			

Starting the recording mode

■ Recording a Movie clip
1. Insert the batteries (p.15). Insert the batteries taking note of the polarity (+ / -).
2. Insert the memory card (p.18).
3. Close the memory card cover.
4. Press the power button to turn on the camera.
5. Select the MOVIE CLIP(🎥) mode by sliding the mode switch.
6. Point the camera towards the subject and compose the image by using either the viewfinder or LCD monitor.
7. Press the shutter button to take a movie clip.
   Press the shutter button once and movie clips are recorded for as long as the available recording time allows. Movie clips will still be recorded if the shutter button is released. If you wish to stop recording, press the shutter button again. Image size and type are listed below.
   - Image size : 320X240, 160X120(Selectable)
   - File type   : *.mov (MPEG4)
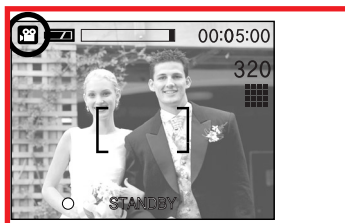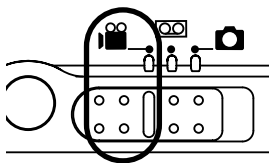
[MOVIE CLIP mode]

INFORMATION

● The available recording time may vary depending on shooting conditions and camera settings.
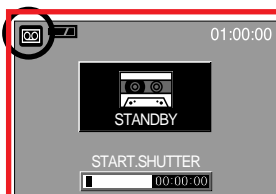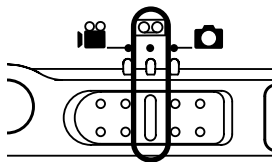
Starting recording mode

■ Recording Voice
  Steps from 1-4 are the same as those for recording a movie clip.
  5. Select the VOICE RECORDING(🔲) mode by sliding the mode switch.
  6. Press the shutter button to record a voice.
    - Press the shutter button once and voice is recorded for as long as the available recording time(Max : 1 hour) allows. The recording time will be displayed on the LCD monitor.
    - Voice will still be recorded if the shutter button is released.
    - If you wish to stop recording, press the shutter button again.
    - File type : *.wav

[VOICE RECORDING mode]

INFORMATION

● A distance of 40cm between you and the camera (microphone) is the best distance to record sound.

■ Recording a still image
  Steps from 1-4 are the same as those for recording a movie clip.
  5. Select the STILL IMAGE(📷) mode by sliding the mode switch.
  6. Point the camera towards the subject and compose the image by using either the viewfinder or LCD monitor.
  7. Press the shutter button to capture an image.
  ※ A [DELETE?] message may be displayed after taking a picture. Refer to p.49 for more information about this [DEL. ANSWER].
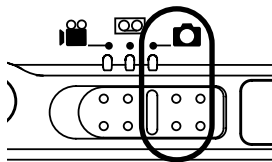
[STILL IMAGE mode]

INFORMATION

● Manner mode: Pressing the power button for more than 3 seconds changes the buzzer and start-up sound setting to OFF, even though you may have set these to ON.
  To turn on the startup sound and operation sound, set the startup sound (MyCAM mode) and operation sound (Setup mode) to a submenu other than [OFF].

《22》

Things to watch out for when taking pictures

INFORMATION

● If the camera is in focus, when you press the SHUTTER button halfway, the camera status lamp (green) will light up and the LCD monitor's autofocus mark will turn green. If the camera is out of focus, when you press the SHUTTER button halfway, the camera status lamp (green) will blink and the LCD monitor's autofocus mark will turn red. Should this be the case, the camera is unable to capture an image clearly.

● If the camera status lamp (orange) lights up when you press the SHUTTER button halfway, the camera is in focus and you can use the flash also.
The camera status lamp (red) blinks while the flash is charging.
The camera status lamp (green) blinks while saving a picture to the memory card and turns off when saving is finished.

● When the Flash Off or Slow synchro mode is selected in a low lighting condition, the camera shake warning indicator (〰) may appear on the LCD monitor. In this case, use a tripod, support the camera on a solid surface or change the flash mode to flash shot mode.

● Backlight compensated shots : When taking an outdoor shot, avoid facing the sun, as the image may be dark because of the strong backlight. In backlight conditions, please use Fill-in flash(p.29), Spot metering(p.40) or Exposure compensation(p.31).

● Avoid obstructing the lens or the flash when you capture an image.

● As there can be some differences between what is seen through the Viewfinder and the resulting image when taken at a range closer than 1.5m, it is recommended that you use the LCD monitor to compose these shots.

● Using the LCD monitor extensively will drain the batteries.
We recommend turning off the LCD monitor and using the optical viewfinder as often as possible in order to extend battery life.

● Under certain conditions the auto focus system may not perform as expected.
  - When photographing a subject that has little contrast.
  - If the subject is highly reflective or shiny.
  - If the subject is moving at high speed.
  - When there is strong reflected light, or when the background is very bright.
  - When the subject matter has only horizontal lines or the subject is very narrow
    (such as a stick or flagpole).
  - When the surroundings are dark
 - If the subject is the same colour as the background

Using the camera buttons to adjust the camera

■ The RECORDING(STILL IMAGE, VOICE RECORDING, MOVIE CLIP) mode function can be set up by using the camera buttons.

POWER button

● Used for turning the camera's power on / off.
● If there is no operation during the specified time, the camera's power will be turned off automatically to save battery life. Pressing the power button for over 3 seconds will deactivate the buzzer sound function.
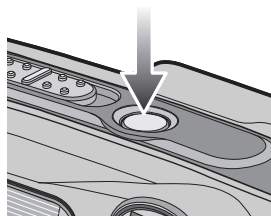
SHUTTER button

● Used for taking an image or recording voice in the RECORDING (STILL IMAGE, VOICE RECORDING, MOVIE CLIP) mode.
● In MOVIE CLIP mode : Pressing the shutter button down fully starts the process for recording a movie clip. Press the shutter button once and the movie clip is recorded for as long as the available recording time in the memory allows. If you wish to stop recording, press the shutter button again.
● In STILL IMAGE mode

  Pressing the shutter button down halfway activates the autofocus and checks the condition of the flash. Pressing the shutter down fully takes the image and stores the relevant data regarding the shot. If you select voice memo recording, the recording will start after the camera has finished storing the image data.
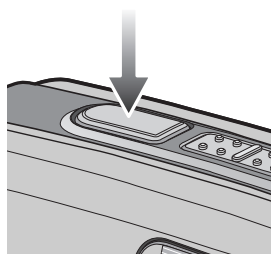
WIDE / TELE button

● If the menu is displayed in Still Image mode, pressing the WIDE(W)/TELE(T) button will skip 5 menu tabs at a time.
● If the menu is not displayed, this button works as the OPTICAL ZOOM or DIGITAL ZOOM button.
● This camera has a 3X optical zoom and a 3X digital zoom function. Using both will offer a total zoom ratio of 9X. When you press the zoom (W/T) button, the zoom bar will display in the upper center part of the LCD monitor.

《24》
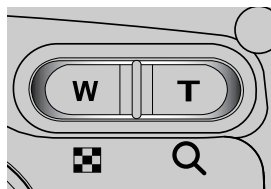
WIDE / TELE button

● TELE Zoom

Optical zoom TELE : Pressing the zoom button T. This will zoom into the subject i.e. the subject will appear nearer.

Digital zoom TELE : When the maximum (3X) optical zoom is selected, pressing the zoom button T activates the digital zoom software. Releasing zoom button T stops the digital zooming at the required setting. Once the maximum digital zoom (3X) is achieved, pressing the zoom button T will have no effect. You can check the digital zoom rate with the [X1.5 ~ X 3.0] numerical mark next to the zoom bar.

[WIDE zoom] → Pressing the TELE button → [TELE zoom] → Pressing the TELE button → [Digital zoom 2.0X]
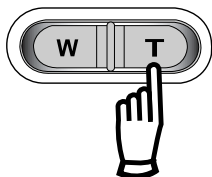
● WIDE Zoom

Optical zoom WIDE : Pressing the zoom button W. This will zoom out from the subject i.e. the subject will appear further away. Pressing the W button continuously will set the camera to its minimum zoom setting i.e. the subject appears at its furthest from the camera.

[TELE zoom] → Pressing the WIDE button → [Optical zoom 2X] → Pressing the WIDE button → [WIDE zoom]
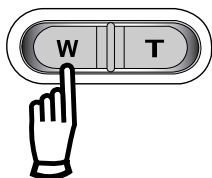
Digital zoom WIDE : When the digital zoom is in operation, pressing the zoom button W will reduce the digital zooming in steps. Releasing zoom button W stops digital zooming. Pressing the W button will reduce the digital zoom and then it will continue to reduce the optical zoom until the minimum setting is reached.

Optical zoom

X3.0

Digital zoom

[Digital zoom 3.0X] → Pressing the WIDE button → [Digital zoom 2.0X] → Pressing the WIDE button → [Optical zoom 3X]

《25》
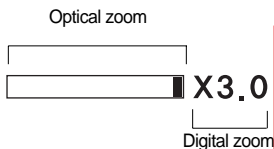
WIDE / TELE button

INFORMATION

- To use the digital zoom the LCD monitor has to be turned on.
- Images taken using the digital zoom may take a little longer for the camera to process. Allow time for this to take place.
- The digital zoom cannot be used in movie clip shots.
- Digital Zoom will not work in Night Scene mode.
- You may notice a decrease in image quality when using the digital zoom.
- When the maximum(3X) optical zoom is selected, pressing the zoom button T increases the digital zoom ratio by 0.5 steps.
- If the movie clip is being recorded, the zoom operation cannot be activated.
- Take care not to touch the lens to avoid taking an unclear image and possibly causing camera malfunction.
  If the image is dim, turn the camera power off and on again to modify the lens position.
- Take care not to press the lens as this may cause a camera malfunction.
- When the camera is turned on, take care not to touch the camera's moving lens parts as this may cause the resulting image to be dim and unclear.
- Take care not to touch the lens during zoom operation as this may cause damage.

Voice memo( ) / UP button

- While the menu is showing, press the UP button to move up the submenu cursor.
- When the menu is not displayed on the LCD monitor, the UP button operates as the voice memo( ) button. You can add your voice-over to a stored still image.

- Recording a voice memo
  1. Select the STILL IMAGE mode by sliding the mode switch.
  2. Press the VOICE MEMO( ) button. If the voice memo indicator is displayed on the LCD monitor, the setting is completed.

[Preparing for Voice Memo]   [Recording Voice Memo]
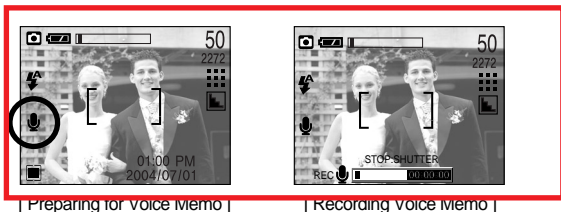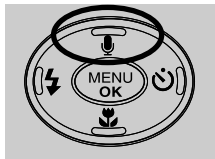
Voice memo(🎤)/ UP button

3. Press the shutter button and take a picture. The picture is stored on the memory card.
4. Voice memo will be recorded for ten seconds from the moment the picture is stored.
   In the middle of the sound recording, pressing the shutter button will stop the voice memo.

INFORMATION

● A distance of 40cm between you and the camera (microphone) is the best distance to record sound.

Macro(🌷) / Down button (Focusing)

■ While the menu is showing, press the DOWN button to move from the main menu to a submenu, or to move down the submenu cursor.

■ When the menu is not showing, you can use the MACRO (🌷)/DOWN button to take macro pictures (within the distance range of 5-80 cm for WIDE and 50-80 cm for TELE) in the STILL IMAGE mode.

[Autofocus]   [Macro]
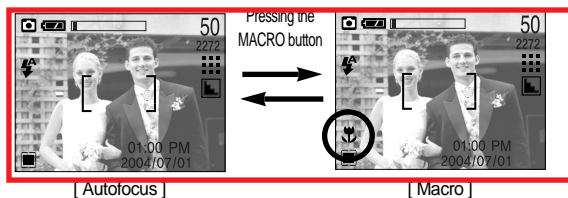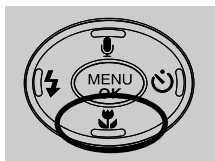
INFORMATION

● Auto   : The changed Focus mode will be maintained until the camera is turned off.
  Manual : The changed Focus mode will be maintained even after the camera is turned off.
  Night : The MACRO button will not work.
● When the macro mode is selected, it is possible that camera shake will occur.
  If this is the case, use a tripod to eliminate this.
● When the macro mode is selected, it is recommended that you use the LCD monitor to compose these shots.

Focus lock

■ To focus on the subject positioned outside of the center, use the focus lock function.

● Using the Focus Lock
  1. Ensure the subject in the center of the autofocus frame.
  2. Press the SHUTTER button halfway. The camera status lamp (green) will light up, indicating that the camera is in focus. Be careful not to press the SHUTTER button all the way down to avoid taking an unwanted picture.
  3. With the SHUTTER button still pressed down only halfway, move the camera to recompose your picture as desired, and then press the SHUTTER button completely to take the picture. If you release your finger from the SHUTTER button, the focus lock function will be canceled.

[The image to be captured] [Press the SHUTTER button halfway and focus on the subject] [Recompose the picture and fully depress the SHUTTER button]

FLASH(⚡) / LEFT button

■ When the menu is displayed on the LCD monitor, pressing the LEFT(◀) button makes the cursor shift to the left tab.
■ When the menu is not displayed on the LCD monitor, the LEFT(◀) button operates as the FLASH (⚡) button.
● Selecting the flash mode
  1. Slide the mode switch to the STILL IMAGE mode.
  2. Press the Flash(⚡) button until the desired flash mode indicator displays on the LCD monitor.
  3. A flash mode indicator will be displayed on the LCD monitor. Use the correct flash to suit the environment.

[Selecting the Auto flash]

● Flash range

(Unit : m)

ISO	AUTO FOCUS		MACRO	
	WIDE	TELE	WIDE	TELE
AUTO	0.8~3	0.8~2	0.2~0.8	0.5~0.8

《28》

FLASH(⚡) / LEFT button

● Flash mode indicator

ICON	Flash mode	Description
⚡A	Auto flash	If the subject or background is dark, the camera flash will operate automatically.
👁	Red eye reduction	If a subject or background is dark, the camera flash will work automatically and will reduce the red-eye effect by using the red-eye reduction function.
⚡	Fill in flash	The flash fires regardless of available light. The intensity of the flash will be controlled, according to the prevailing conditions. The brighter the background or subject is, the less intense the flash will be.
⚡S	Slow synchro	The flash will operate in conjunction with a slow shutter speed in order to obtain the correct exposure. We recommend using a tripod for this function. When you take an image in a condition with poor light, the camera shake warning indicator (🖐) will display on the LCD monitor.
🚫⚡	Flash off	The flash does not fire. Select this mode when capturing images in a place or situation where flash photography is prohibited. When you capture an image in a poorly lit condition, the camera shake warning indicator (🖐) will display on the LCD monitor.

INFORMATION

- ● Using the flash frequently will reduce the life of the batteries.
- ● Under normal operating conditions the charging time for the flash is normally within 6 seconds. If the batteries are weak, the charging time will be longer.
- ● During the movie clip mode, the flash function will not operate.
- ● Take photographs within the flash range.
- ● The image quality is not guaranteed if the subject is too close or highly reflective.
- ● The LCD monitor is turned off for a while after using the flash to recharge it.

Self-timer(⏱) / Right(▶) button

■ When the menu is displayed on the LCD monitor, pressing the Right button makes the cursor shift to the sub tab.

■ When the menu is not displayed on the LCD monitor, the RIGHT button operates as the Self-timer(⏱) button. This function is used when the photographer would also like to be in the image.

● Selecting the self-timer
  1. Slide the mode switch to the STILL IMAGE mode.
  2. Press the SELF-TIMER(⏱) button until the desired mode indicator displays on the LCD monitor. A 2 second self-timer or 10 second self-timer icon appears on the LCD monitor.
    · 2SEC self-timer(⏱ ^{2S})
     : Pressing the shutter button will allow an interval of 2 seconds before the image is taken.
    · 10SEC self-timer(⏱)
     : Pressing the shutter button will allow an interval of 10 seconds before the image is taken.
  3. Press the SHUTTER button. The picture will be taken after the specified time has elapsed.
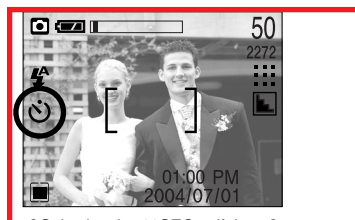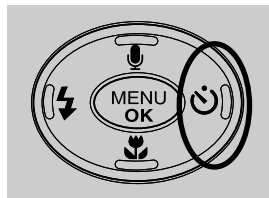
[Selecting the 10SEC self-timer]

INFORMATION

● The default is OFF.
● When taking a picture using the self-timer, the function lamp works as follows:
  2 second self-timer setting   : The function lamp blinks at 0.25 second interval for 2 seconds.
  10 second self-timer setting : The function lamp blinks at 1 second interval for the first 7 seconds. It blinks at 0.25 second interval for the remaining 3 seconds.
● If you operate the Power button, Mode switch, and Self-timer button during the self-timer operation, the self-timer function is cancelled.
● Use a tripod to prevent the camera from shaking.

MENU/ OK button

■ If the menu is displayed, use the 5-Function buttons (▲/ ▼/ ◀/ ▶) to change the data values and for your changes to be accepted.

■ If the menu is not displayed, press the MENU/OK button to display a menu for the current camera mode on the LCD monitor. Press the button again to return to the previous state.

Pressing the MENU button
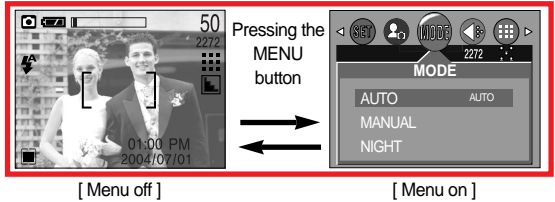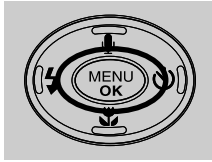
[Menu off]   [Menu on]

+/- button

■ You can use the +/- button to adjust the values for the exposure compensation, white balance, and ISO.

Main menu	Sub menu	Available camera mode
Exposure	-2.0EV ~ +2.0EV(0.5EV steps)	
	LT	
White balance	AWB ☼ ☁ ⛄ ☀ ▄▄	
ISO	ISO AUTO ISO 100 ISO 200 ISO 400	

■ Exposure compensation

: This camera automatically adjusts the exposure according to the ambient lighting conditions. In Auto or Myset mode, the exposure compensation can be adjusted between -2.0EV and +2.0EV (at 0.5EV increment), and in Night mode, you can set the long time shutter. The setting value you have adjusted in Manual mode will remain unchanged even after the camera is turned off.

● Compensating Exposure

1. Press the +/- button, and then use the UP and DOWN buttons to select the exposure compensation icon (�). The exposure compensation menubar will appear as shown.

《31》
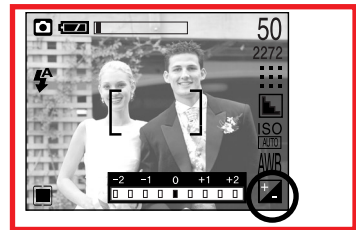
+/- button

2. Use the LEFT and RIGHT buttons to set the desired exposure compensation factor ($\triangle$ Ev).
3. Press the +/- button again. The value you set will be saved and the Exposure Compensation setup mode will close. If you change the exposure value, the exposure indicator (🖼) will be displayed on the bottom of the LCD monitor.
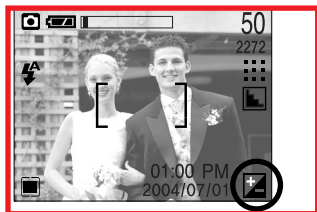
INFORMATION

● A negative exposure compensation value reduces the exposure. Note that a positive exposure compensation value increases the exposure and the LCD monitor will appear white or you may not get good pictures.

■ White balance
: The white balance control allows you to adjust the colours to appear more natural looking. The White Balance is available in Auto Shooting mode (📷), Manual mode, and Movie Clip mode.
● Selecting a White Balance
1. Press the +/- button, and then use the UP and DOWN buttons to select the white balance icon (AWB). The white balance menu bar will appear as shown.
2. Use the LEFT and RIGHT buttons to set the white balance to the desired value. The value you set will be displayed on the LCD monitor.
- AUTO   AWB : The camera automatically selects the appropriate white balance settings, depending on the prevailing lighting conditions.
- DAYLIGHT   ☼ : For taking images outside.
- CLOUDY   ☁ : For taking images under a cloudy and overcast sky.
- FLUOR.   ⛛ : For shooting under fluorescent lighting.
- TUNGSTEN ⚡ : For shooting under tungsten (standard light bulb) lighting.
- CUSTOM   ◣ : Allows the user to set the white balance according to the shooting condition.
Different lighting conditions may cause a colour cast on your images.
3. Press the +/- button again. The value you set will be saved and White Balance setup mode will end.
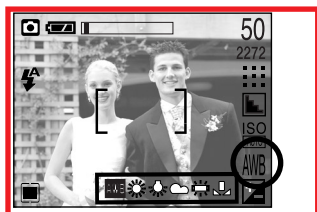
《32》

+/- button

● Using the Custom White Balance
   White balance settings may vary slightly depending on the shooting environment. You can select the most appropriate white balance setting for a given shooting environment by setting up the custom white balance.

   1. Select the CUSTOM (▄▅▄) menu of the White Balance.
   2. Place a sheet of white paper in front of the camera so that the LCD monitor's auto focus frame ([   ]) shows only white, and then press the SHUTTER button.
   3. Your custom white balance value will be stored.
   4. Press the +/- button. The white balance menubar will disappear.
      - The custom white balance value will be applied to the next picture you take and thereafter.
      - The custom white balance value will not change until you set it again to another value.

White paper
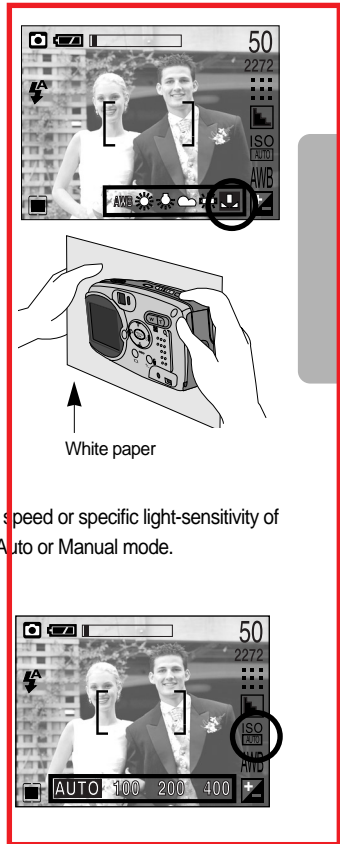
■ ISO: You can select the ISO sensitivity when taking pictures. The speed or specific light-sensitivity of a camera is rated by ISO numbers. This is available only in Auto or Manual mode.

● Selecting an ISO Sensitivity
   1. Press the +/- button, and the use the UP button to select the ISO icon(🆗). The ISO menu bar will appear as shown.
   2. Use the LEFT and RIGHT buttons to select the desired ISO sensitivity value.
      - AUTO   : The camera's sensitivity is automatically changed by variables such as lighting value or subject brightness.
      - 100, 200, 400 : You can increase the shutter speed while the same amount of light is present, by increasing the ISO sensitivity. However, the image may be saturated in high luminance.

   The higher the ISO value, the higher the camera's sensitivity to light is and therefore the greater its capacity to take pictures in dark conditions. However, the noise level in the image will increase as the ISO value increases, making the image appear coarse.
   3. When you press the +/- button again, the value you set will be saved and ISO setup mode will end.
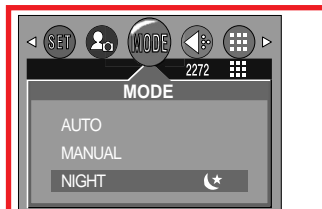
+/- button

■ Userset mode

: This camera automatically adjusts the shutter speed and aperture values to the shooting environment. However, in Night Shot mode, you can set the shutter speed and aperture values to your preference. Select Night Shot mode, and then press the +/- button. The zoom function does not work while setting up the aperture value and shutter speed.

1) Selecting the Night Shot Mode
   1. Slide the MODE switch to select Still Image mode (<img>).
   2. Press the MENU button.
   3. Use the LEFT and RIGHT buttons to select the [MODE] menu tab, and then use the UP and DOWN buttons to select the [NIGHT] menu.
   4. Press the MENU button. The menu will disappear and the mode will switch to Night Shot mode.

2) Setting Userset mode
   1. In Night Shot mode, press the +/- button. A screen appears as shown to the right.
   2. Use the LEFT and RIGHT buttons to set the shutter speed. Available shutter speeds are as follows: AUTO, 1/8, 1/4, 1/2, 1, 2, 4, 6, 8, 12, and 16 seconds.
   ● Use the UP and DOWN buttons to set the aperture value. Use the UP and DOWN buttons to display the large/small aperture values to the left of the shutter speed bar.
   3. Press the +/- button again. The value you set will be saved and the mode will switch to Night Shot mode. Press the SHUTTER button to take the picture.
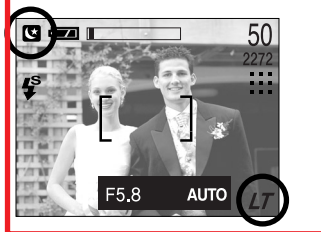
+/- button

■ Aperture values that can be selected for each zoom position are as follows:

Optical Zoom									
Zoom Position		zoom1	zoom2	zoom3	zoom4	zoom5	zoom6	zoom7	zoom8
Focusing range(mm)		5.8	7.5	9.1	10.8	12.4	14.1	15.7	17.4
Aperture Value	Large	2.8	3.1	3.4	3.7	3.9	4.2	4.5	4.8
	Small	5.8	6.4	7.0	7.6	8.2	8.8	9.4	10.0

Large (Press the UP button.)

Aperture Value ⟶ **F5.8   AUTO**

Small (Press the DOWN button.)

Fast (Press the LEFT button.) ⟵ Shutter Speed ⟶ Slow (Press the RIGHT button.)

LCD button

■ You can check the recording status in the LCD monitor. Pressing the LCD button in the RECORDING (STILL IMAGE, MOVIE CLIP) mode will change the display as shown below.

[Image & full information] → Pressing the LCD button → [Image & basic information] → Pressing the LCD button → [LCD off]

Pressing the LCD button
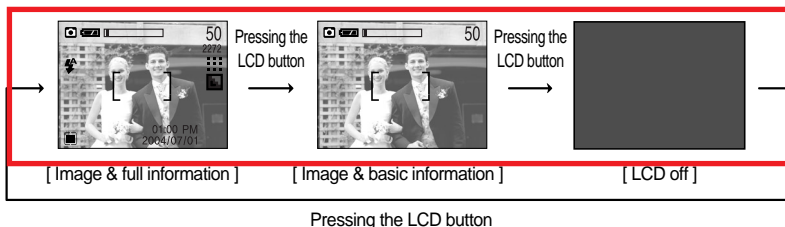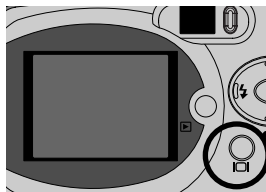
■ If the LCD monitor is turned off, the camera status lamp will light up.

Using the LCD monitor to adjust the camera settings

■ You can use the menu on the LCD monitor to set up recording functions.
In the STILL IMAGE/ MOVIE CLIP mode, pressing the MENU button displays the menu on the LCD monitor.

INFORMATION

● The menu will not be displayed on the LCD monitor in the following circumstances:
- When another button is being operated.
- While image data is being processed.
  (when the green LED next to the viewfinder blinks)
- When there is no battery capacity.
● When the menu is showing on the LCD monitor, it is not possible to operate the shutter button i.e. capture an image. To capture an image, simply cancel the menu display by pressing the MENU button.

■ The following functions are available, depending on the mode you have selected.
The items indicated by   are default settings.

Menu tab	Main menu	Sub menu	Camera working mode
MODE	MODE	AUTO	📷 CM 🌙
		MANUAL	
		NIGHT	
	SIZE	2272x1704	📷 CM 🌙
		2048x1536	
		1600x1200	
		1024x768	
		640x480	
		320X240	🎥
		160X120	
	QUALITY	S.FINE	📷 CM 🌙
		FINE	
		NORMAL	
		HIGH	🎥
		LOW	
	METERING	MULTI	📷 CM
		SPOT	

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Using the LCD monitor to adjust the camera settings

Menu tab	Main menu	Sub menu	Camera working mode
	EFFECT	NORMAL	
		B&W	
		SUNSET	
		SEPIA	
		RGB	
	SHARP	SOFT	
		NORMAL	
		VIVID	

How to use the menu

1. Turn on the camera and press the MENU button. A menu for each camera mode appears. However, there is no menu for Voice Recording mode. (🔘)
2. Use the LEFT and RIGHT buttons to navigate through the menus.

MODE 2272 AUTO AUTO MANUAL NIGHT	Press the LEFT or RIGHT button.	**SIZE** AUTO 2272 2272x1704 2272 2048x1536 1600x1200 1024x768

	Press the LEFT or RIGHT button.	AUTO 2272 **QUALITY** NOR S.FINE FINE NORMAL

3. Use the UP and DOWN buttons to select a sub menu.

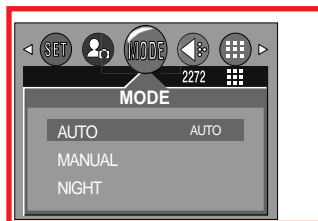|		
MODE 2272 AUTO AUTO MANUAL NIGHT	Press the UP or DOWN button.	**MODE** 2272 AUTO MANUAL CM NIGHT	Press the UP or DOWN button.	**MODE** 2272 AUTO MANUAL NIGHT 🌙

4. Select a sub menu, and then press the OK button. The value you set will be saved and the menu will disappear.

Mode

■ You can select the desired Still Image mode.
This is available in Auto, Manual, and Night modes.

🔲 AUTO : Use this for shooting basic still images.

CM MANUAL : Use this to store your custom settings for the camera. Any changes made to settings other than Self-Timer and Voice Recording will be saved.

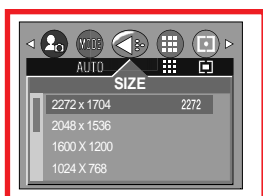☪ NIGHT : Use this for shooting still images at night or in other dark conditions.

[STILL IMAGE mode]

Size

■ You can select the image size appropriate for your application.
You can select from AUTO, MANUAL, NIGHT and Movie Clip modes.

Mode	STILL IMAGE mode					MOVIE CLIP mode	
Icon	2272	2048	1600	1024	640	320	160
Size	2272x1704	2048x1536	1600 ×1200	1024 ×768	640 ×480	320 ×240	160 ×120

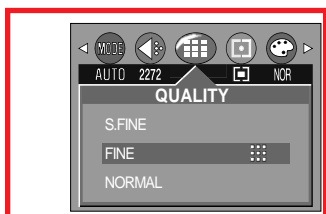[STILL IMAGE mode]   [MOVIE CLIP mode]

INFORMATION

● The higher the resolution, the lower the number of available shots will be because high resolution images require more memory than lower resolution images.

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Quality

■ You can select the compression ratio appropriate for your application of the captured images. The higher the compression ratio, the lower the picture quality. This is available in Auto, Manual, Night, and Movie clip modes

Mode	STILL IMAGE mode			MOVIE CLIP mode	
Icon	▦	▦	⋰	320	160
Sub menu	S.FINE	FINE	NORMAL	HIGH	LOW
File Format	jpeg	jpeg	jpeg	mov	mov

[STILL IMAGE mode]
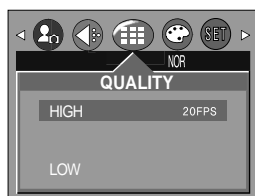
[MOVIE CLIP mode]

● Image Size and Quality for the Number of Images that can be saved in a Memory Card/Shooting Time(When using a 32MB Memory Stick Duo; based on Samsung's own testing)

Mode	STILL IMAGE mode					MOVIE CLIP mode	
Quality/Size	2272	2048	1600	1024	640	320×240	160×120
S.FINE	11	14	24	50	120	-	-
FINE	22	28	42	77	180	-	-
NORMAL	36	42	57	110	240	-	-
HIGH	-	-	-	-	-	4 MIN	8 MIN
LOW	-	-	-	-	-	7 MIN	12 MIN

INFORMATION

- S.FINE is the highest quality and NORMAL is the lowest setting. Choose the setting appropriate for your needs.
- This file format complies with the DCF(Design rule for Camera File system).
- Even if the camera should be restarted, the quality setting is maintained.
- JPEG (Joint Photographic Experts Group): JPEG is the image compression standard developed by the Joint Photographic Experts Group. This type of compression is most commonly used for compressing photos and graphics because it can compress the files efficiently without damaging the data.
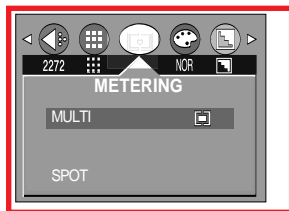
Metering

■ If you cannot obtain suitable exposure conditions, you can change the metering method to take brighter pictures. This can be set in Auto and Manual modes.

MULTI(▣) : Exposure will be calculated based on an average of the available light in the image area. However, the calculation will be biased towards the centre of the image area. This is suitable for general use.

SPOT(▣) : Only the rectangular area in the center of the LCD monitor will be metered for light. This is suitable when the subject in the center is exposed correctly, regardless of the back lighting.

INFORMATION

● The default metering mode is Multi pattern metering.
● If the subject is not the centre of the focus area, do not use the spot metering as this may result in an exposure error. In this circumstance, rather use exposure compensation.

Effect

■ By using the camera's digital processor, it is possible to add special effects to your images. You can select from AUTO, MANUAL, and Movie Clip modes. The value you set will remain unchanged until the camera is turned off.
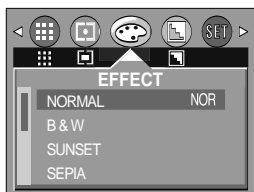
[STILL IMAGE mode]
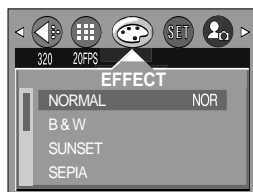
[MOVIE CLIP mode]

NORMAL : No effect is added to the image.
B & W : Converts the image to black and white.
SUNSET : Used for capturing images at sunset
SEPIA : Captured images will be stored in a sepia tone (a gradient of yellowish brown colours).
RGB : Allows the user to adjust the R (Red), G (Green), and B (Blue) values of the images to be captured.

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Effect

● Setting RGB Values

1. Use the DOWN button to select [RGB] among the Effect submenus, and then press the OK button. A screen that looks like the one shown on the right will appear.

2. Use the UP and DOWN buttons to select the [OFF] or [ON] auxiliary menu, and then press the OK button.

   [OFF] : Select this if you do not want to change the RGB values.

   [ON] : Select this to open a window where you can adjust the RGB values.

   Use the UP and DOWN buttons to navigate the R, G, and B controls. Use the LEFT and RIGHT buttons to set the value for each control. If you press the OK button, your changes will be saved and the menu will disappear.
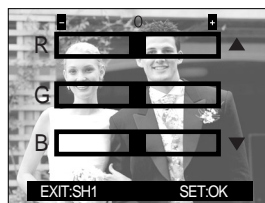
Sharpness

■ You can adjust the sharpness of the picture you want to take. You cannot check the sharpness effect on the LCD monitor before you take a picture, because this function is applied only when the captured image is stored on the memory. You can select from AUTO and MANUAL modes.

[STILL IMAGE mode]

Sub menu	Icon	Description
SOFT		The edges of the image are softened. This effect is suitable for editing images on your PC.
NORMAL		The edges of the image are sharp. This is suitable for printing.
VIVID		The edges of the image are emphasized. The edges will appear sharp, but noise may occur in the recorded image.

Starting play mode

■ Turn the camera on and select Play mode by pressing the play mode button (▶).
  The camera can now play back the images stored in the memory.
■ If you have turned on the camera by pressing the POWER button, you can press the PLAY
  button once to switch to Play mode and press it again to switch to Recording mode.
  If you have turned on the camera by pressing the PLAY button, you can press the PLAY button
  again to turn off the camera.
■ You can set up the PLAY mode function by using the camera buttons and LCD monitor.

● Playing back a still image
  1. Select the PLAY mode(▶) by pressing the
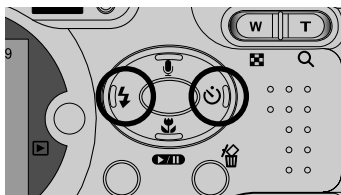   play mode button.

  2. The last image stored on the memory is
     displayed on the LCD monitor.

  3. Select an image that you want to play back by
     pressing the LEFT / RIGHT button.

   ※ Press and hold the LEFT or RIGHT button to
     play back the images quickly.

INFORMATION

● Manner mode: Pressing the power button for more than 3 seconds changes the buzzer
             and start-up sound setting to OFF, even though you may have set these
             to ON. To turn on the startup sound and operation sound, set the startup
             sound (MyCAM mode) and operation sound (Setup mode) to a setting
             other than [OFF].
● Even if the camera's power is off, you can start the play mode by pressing the play
  mode button.

Starting play mode

■ Playing back a movie clip
Steps from 1-2 are the same as those to play back a still image.

3. Select the recorded movie clip that you want to play back by using the LEFT/RIGHT button. If you select a movie clip, the movie clip indicator ( ) will be displayed on the LCD monitor.
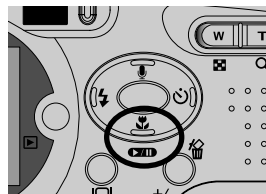
4. Press the play & pause button ( ) to play back a movie clip file.
   - To pause a movie clip file while playing it back, press the play & pause button again.
   - Pressing the play & pause button again will cause the movie clip file will restart.
   - To rewind the movie clip while it is playing, press the LEFT button. To fast forward the movie clip, press the RIGHT button.
   - To stop playback of the movie clip, press the play & pause button ( ), and then press the LEFT or RIGHT button.

■ Playing back a recorded voice
Steps from 1-2 are the same as those to play back a still image.

3. Select the recorded voice that you want to play back by using the LEFT/RIGHT button. If you select a recorded voice file, the voice indicator ( ) will be displayed on the LCD monitor.

4. Press the play & pause button ( ) to play back a recorded voice file.
   - To pause a recorded voice file, while playing it back, press the play & pause button again.
   - To resume playback of the voice file, press the play & pause button.
   - To rewind the voice file while it is playing, press the LEFT button. To fast forward the voice file, press the RIGHT button.
   - To stop playback of the voice file, press the play & pause button, and then press the LEFT or RIGHT button.

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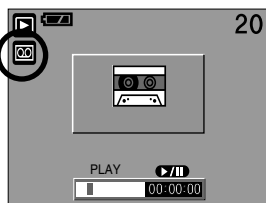
LCD monitor indicator

■ The LCD monitor displays information about the shooting conditions.

No.	Description	Icon	Page
1	Battery		P.15
2	Play mode		
3	File Type		
4	Voice memo		P.46
5	Protect indicator		P.52
6	DPOF indicator		P.56
7	Stored image number	9	

■ If you press the LCD button, you can check the following recording information:

SIZE	: 2272X1704	Size
AV	: F2.8	Aperture value
TV	: 1/60	Shutter speed
ISO	: 100	ISO sensitivity
FLASH	: OFF	Whether or not the flash is used.
DATE	: 04/07/01	Recording date

# Using the camera buttons to adjust the camera

■ In Play mode, you can use the buttons on the camera to conveniently set up the Play mode functions.

Thumbnail(▦) / Enlargement(🔍) button

● You can view multiple pictures, enlarge a selected picture, and crop and save a selected area of an image.
● Thumbnail display
  1. While an image is displayed full screen, press the thumbnail button.
  2. The thumbnail display will highlight the image that had been showing at the time the thumbnail mode was selected.
  3. Press the 5 function button to move to a desired image.
  4. To view an image separately, press the enlargement button (🔍).
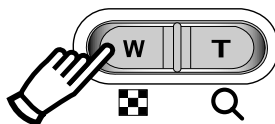
[Normal display mode]

Pressing the thumbnail button(▦)

Pressing the enlargement button(🔍)

Highlighted image

[Thumbnail display mode]

● Image enlargement
  1. Select an image that you want to enlarge and press the enlargement button.
  2. Different parts of the image can be viewed by pressing the 5 function button.
  3. Pressing the thumbnail button will zoom back to the original full sized image.
    - You can tell whether the image displayed is an enlarged view by checking the image enlargement indicator shown at the bottom left of the LCD monitor. (If the image is not an enlarged view, the indicator will not be displayed.) You can also check the area of enlargement.
    - Movie clips and WAV files can't be enlarged.
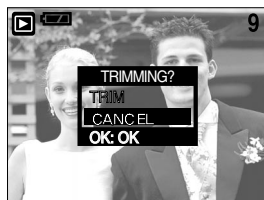   - If an image is enlarged, a loss of quality may occur.

X1.2
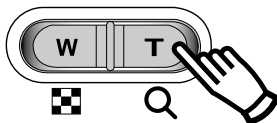
Thumbnail(▦) / Enlargement(🔍) button

● The maximum enlargement rate in proportion to the image size.

Image size	2272/2048	1600/1024	640
Maximum enlargement rate	X5	X3	X1.5

● Trimming : You can extract part of the image that you want
              and save it separately.
  1. Select an image that you want to enlarge and press the
     enlargement button.
  2. Different parts of the image can be viewed by pressing the
     5 function button.
  3. Press the MENU button and a message will be displayed
     as shown alongside.
  4. Select the submenu values by pressing the UP/DOWN
     button and then press the OK button.
   TRIM   : trimmed images are saved in their last file names.
     CANCEL   : cancels trimming.
     - If there is little memory space to save the trimmed image, the image can't be trimmed.

Voice(🎤) memo / Up button

■ When the menu is displayed on the LCD monitor, pressing the UP button makes the menu
  cursor move up.
■ When the menu is not displayed on the LCD monitor, the UP button operates as the voice
  memo button. You can add your audio to a stored still image.

● Adding a Voice Memo to a Still Image
  1. Press the LEFT/ RIGHT button to select an image that
     you wish to add sound to.
  2. Press the voice memo button (🎤)and the voice memo
     indicator will display. The camera is now ready to record a
     voice memo.

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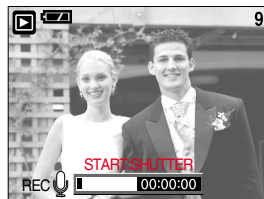
Voice(🎤) memo / Up button

3. Press the shutter button to start recording. The [REC] message will be displayed on the LCD monitor (as shown) and voice will be recorded to the still image for 10 seconds.

4. The recording can be stopped by pressing the shutter button again.

5. The (🎵) icon will be displayed on the LCD monitor after voice memo recording has finished.
   - Voice memos can't be recorded onto movie clip files.
   - A distance of 40cm between you and the camera (microphone) is the best distance to record sound.
   - The voice memo will be saved in *.wav format, but has the same file name as the still image to which it corresponds.
   - If you add a new voice memo to the still image that already has a voice memo, the existing voice memo will be erased.

Play & Pause(▶/❚❚)/ Down button

■ In Play mode, the play & pause/ down button works as follows:
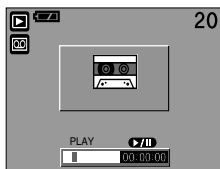   - If the menu is displayed
     Press the DOWN button to move from the main menu to a sub menu, or to move down the sub menu cursor.
   - If a still image with a voice memo, a voice file, or a movie clip is playing
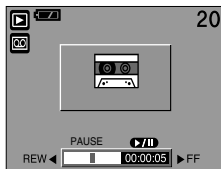   In Stop mode   : Plays a still image with a voice memo, a voice file, or a movie clip.
     During playback : Temporarily stops playback.
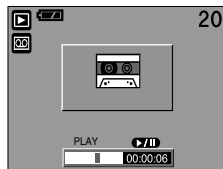   In Pause mode   : Resumes playback

[Voice recording is stopped]   [Voice file is playing]   [Voice recording is paused]

LEFT / RIGHT/ MENU/ OK button

■ LEFT / RIGHT/ MENU/ OK buttons activate the following.

- LEFT button : While the menu is showing, press the LEFT button to select the menu tab to the left of the cursor.

- RIGHT button : While the menu is showing, press the RIGHT button to select the menu tab to the right of the cursor, or to move an auxiliary menu.

- MENU button : When you press the MENU button, the play mode menu will be displayed on the LCD monitor. Pressing it again will return the LCD to the initial display.

- OK button : When the menu is displayed on the LCD monitor, the OK button is used for confirming data that is changed by using the 5 function button.

LCD(|▢|) button

■ The shooting information will be displayed on the LCD monitor.

The last image stored in the memory is displayed on the LCD monitor by pressing the play mode button.

Pressing the LCD button in the PLAY mode will change the display as shown below. [Image & Icons] → [Image & Information] → [Image only]
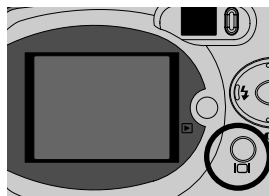
[Image & Icons]   Pressing the LCD button   [Image & Information]   Pressing the LCD button   [Image only]

Pressing the LCD button

■ If you press the LCD button in Thumbnail Display mode, the image to be deleted (🗑 will be selected.

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