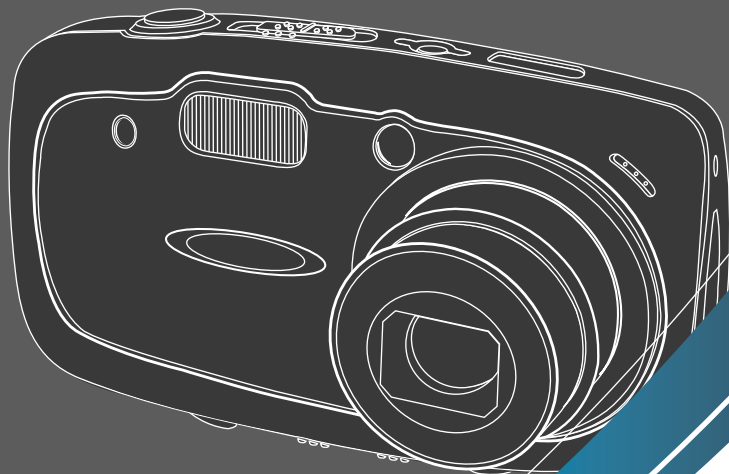SAMSUNG

SAMSUNG DIGIT*all*
everyone's invited™

ENGLISH

SAMSUNG CAMERA

User's Manual

Digimax U·CΛ 5

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 Application software CD-ROM. (p.90)

Take a picture

Take a picture (p.19)

* When taking a picture, you should use the rechargeable battery supplied with the camera.

Insert the USB cable

Insert the supplied USB cable into the PC's USB port and the camera's USB connection terminal. (p.98)

Check the camera's power

Check the camera's power. If the power is turned off, press the camera button to turn it on. (p.22)

Check [Removable Disk]

Open Window's EXPLORER and search for [Removable Disk]. (p.99)

● 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.

Contents

Contents

《4》

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

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

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

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.

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 centre.

■ 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 centre. 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.

■ You should use the rechargeable battery supplied with the camera. Do not use the AC adapter and non rechargeable battery at the same time. It may cause an explosion.

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.
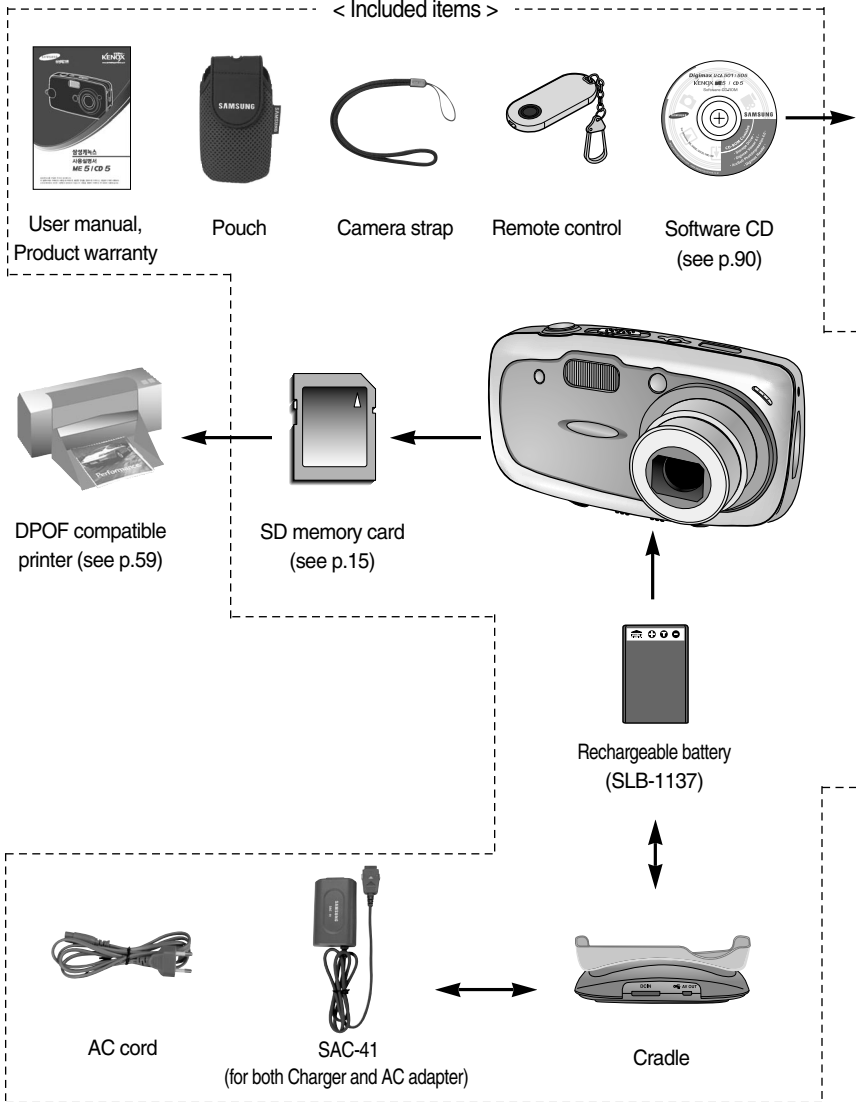
《6》

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 permanently 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
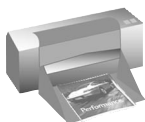 electric shock.

CAUTION

System chart

Please check that you have the correct contents before using this product. The contents can vary depending on the sales region. To buy the optional equipment, contact your nearest Samsung dealer or Samsung service centre.
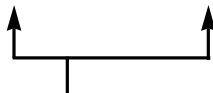
< Included items >

User manual, Product warranty

Pouch

Camera strap

Remote control

Software CD (see p.90)

DPOF compatible printer (see p.59)

SD memory card (see p.15)

Rechargeable battery (SLB-1137)

AC cord

SAC-41 (for both Charger and AC adapter)

Cradle

System chart

Computer
(see p.98)

PictBridge compatible
printer(see p.63)

USB cable
(for Cradle)

USB cable
(for Camera)

AV cable
(for Cradle)

AV cable
(for Camera)

External monitor
Yellow colour - Video,
White colour - Voice
(see p.83)

System Requirements

For Windows

- PC with processor better than MMX Pentium 233MHz (XP : Pentium II 300MHz)
- Windows 98/98SE/2000/ME/XP
- Minimum 32MB RAM (XP : 128MB)
- 140MB of available hard-disk space
- USB port
- CD-ROM drive
- 800x600 pixels, 16-bit colour display compatible monitor
  (24-bit colour display recommended)

For Macintosh

- Power Mac G3 or later
- Mac OS 9.0 ~ 10.3
- Minimum 64MB RAM
- 110MB of available hard-disk space
- USB port
- CD-ROM drive
- QuickTime 6.01 or later for Movie Clip

CAUTION

When you connect the camera to a computer, printer or external monitor, you have to use the USB/ Video cable supplied with the camera, or the external devices can't recognise the camera.

《9》

Identification of features

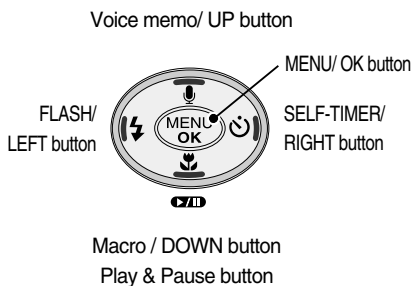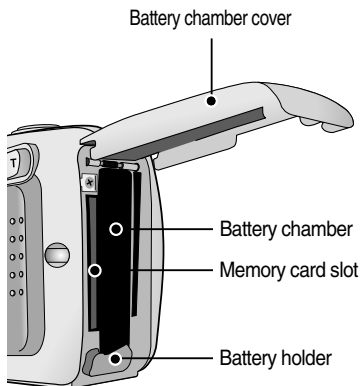## Front & Top

Mode switch

Shutter button

Flash

Remote control sensor

Function lamp & Self-timer lamp

Power button

Speaker

Auto Focus lamp

Microphone

Lens

Back & Bottom

LCD button

LCD monitor

Tripod socket

DC/USB/AV connection terminal/ Cradle connector

M button (Album button)

Zoom T button (Digital zoom)

Zoom W button (Thumbnail)

Strap eyelet

+/-, DELETE button

Play mode button

《10》
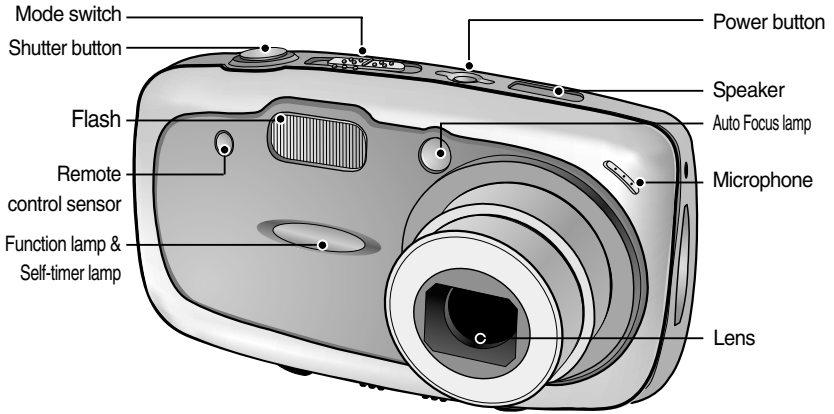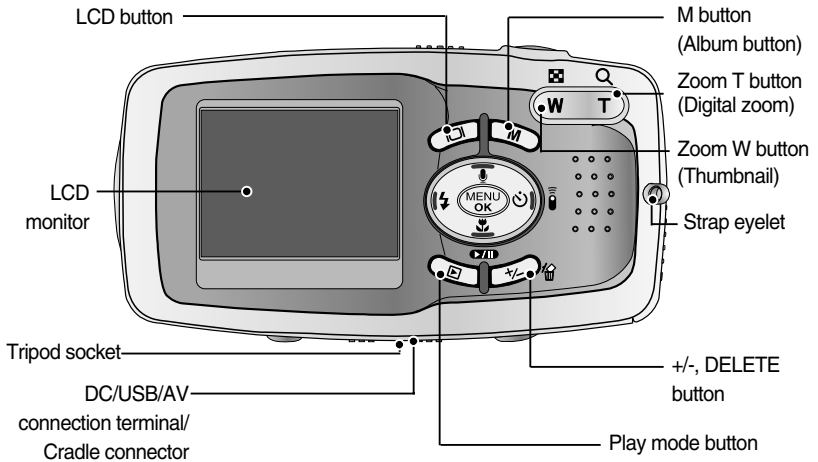
Identification of features

Side/ 5-function button

Battery chamber cover

Battery chamber

Memory card slot

Battery holder

Voice memo/ UP button

MENU/ OK button

FLASH/
LEFT button

SELF-TIMER/
RIGHT button

Macro / DOWN button
Play & Pause button

Cradle

■ You can recharge your rechargeable battery, print a captured image and download images with the cradle. (Refer to page 00 and 00)

● Top

Camera connection
terminal

● Front

DCIN

AV OUT

DC input
connection point

USB port
AV connection terminal
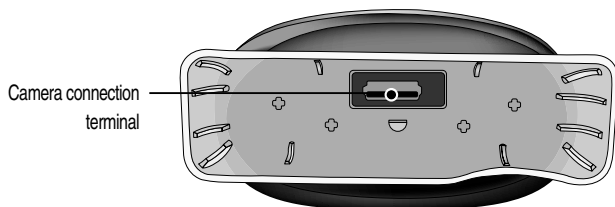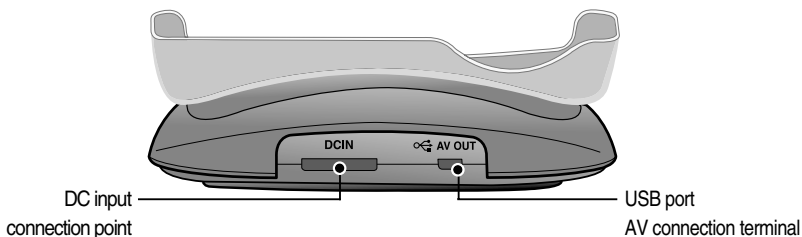
Identification of features

■ 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
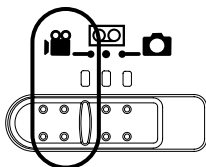
A movie clip can be recorded for as long as the available recording time of the memory capacity allows.
Image size and type are listed below.
- Image size : 640X480, 320X240, 160X128 (user selectable)
- Movie clip file type : *. avi(MJPEG-4)

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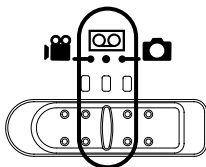
A voice recording can be recorded for as long as the available recording time of the memory capacity allows. (Max: 1 hour)
- File type : *.wav

● Still image mode
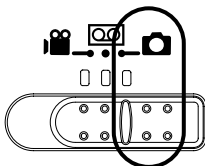
You can select from AUTO( ), MANUAL( ) or SCENE mode. In SCENE mode, you can select the NIGHT, PORTRAIT, CHILDREN, LANDSCAPE, CLOSE UP, TEXT RECOGNITION, SUNSET, DAWN, BACKLIGH, FIREWORKS and BEACH&SNOW scene menu.

Identification of features

■ Function lamp & Self-timer lamp

Function	Description
Power on	The lamp blinks and turns off when the camera is ready to take a picture
After taking a picture	The lamp blinks while saving the image data and turns off when the camera is ready to take a picture
While movie recording	The lamp blinks at a 1-second interval
While voice recording	The lamp blinks at a 1-second interval
When the USB cable is inserted	The lamp lights up
Transmitting Data	The lamp blinks
While the self timer is functioning	For the first 7 seconds, the lamp blinks at 1 second intervals. For the final 3 seconds, the lamp blinks quickly at 0.25 second intervals. * The lamp will function while using the self-timer even if the configuration is set to off the lamp. (Based on 10-second Self-timer; see p. 36)

■ Mode icons

MODE	MOVIE CLIP	VOICE RECORDING	AUTO	MANUAL	PLAY
ICON	📹	🎙	⚪	📷	▶
MODE	SCENE					
	NIGHT	PORTRAIT	CHILDREN	LANDSCAPE	CLOSE UP	TEXT
ICON	🌙	👤	🧒	🏔	🌷	T
MODE	SUNSET	DAWN	BACKLIGHT	FIREWORKS	BEACH&SNOW	-
ICON	🌅	🌄	🖼	🎆	🏖	-

Connecting to a Power Source

■ You should use the rechargeable battery (SLB-1137) supplied with the camera. Do not use the AC adapter and non rechargeable battery at the same time. It may cause an explosion.

INFORMATION

Important information about battery usage
● When the camera is not used, turn off the camera power.
● Do not use the non rechargeable batteries. It 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°C) 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.

Using the SAC-41(for both Charger and AC adapter)

If you have access to a mains supply, using an SAC-41 (for both Charger and AC adapter) allows the camera to be used for long periods of time.Plug the SAC-41 (for both Charger and AC adapter) into the connection point (DC IN 4.2V) on the camera.
* Insert the rechargeable batteries when using an AC adapter.
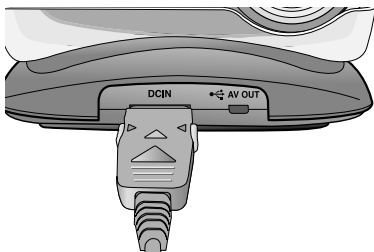
[Using the AC adapter with Cradle]   [Using the AC adapter with Camera]
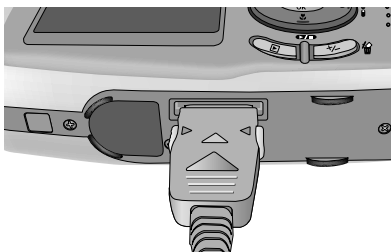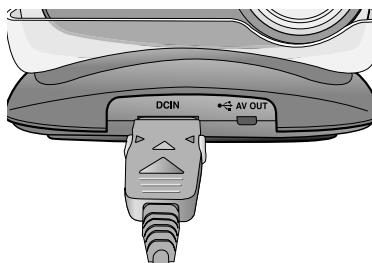
Connecting to a Power Source

DANGER

● Always turn off the power before taking the SAC-41 (for both Charger and 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 the SAC-41 (for both Charger and AC adapter) or TTA
standardized chargers with the correct specification for the camera. Failure to do so may
affect your warranty.
● Do not use the flash frequently or take many pictures with the fully discharged
rechargeable battery charged for a short time. Even if the charger is inserted, the camera
power may be turned off because the rechargeable battery is discharged again.

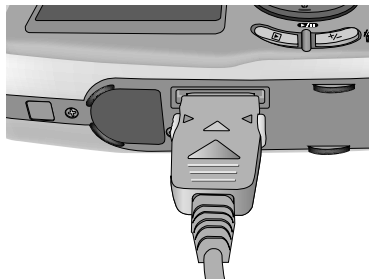■ How to charge the rechargeable battery (SLB-1137)

● Charging with the cradle
   - Insert the rechargeable battery into the
     battery chamber.
   - Place the camera correctly in the cradle.
   - Put the SAC-41 (for both Charger and AC
     adapter) into your power socket and DC
     input connection point of the camera.

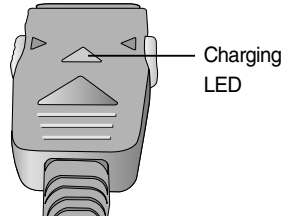● Charging with the camera
   - Insert the rechargeable battery into the
     battery chamber.
   - Put the SAC-41 (for both Charger and AC
     adapter) into the socket and DC input
     connection point of the camera.

Connecting to a Power Source

■ Important information about battery (SLB-1137) charging

● If the charging LED of the SAC-41 does not turn
on or blink after inserting the rechargeable battery,
please check whether the batteries are inserted
correctly.

Charging
LED

■ Charging LED

Status	Using the cradle	Direct to the camera
Being Charged	Red LED is on	Red LED is on
Charging is complete	Green LED is on	Green LED is on
Charging error	Red LED is off or blinking	Red LED is off or blinking

● If there is a charging error, please check all the power connections are in place.

● All of the chargers (24 pin) have been tested in accordance with TTA (Telecommunication
Technology Association) can be used as AC adapter. We recommend the SAC-41(for both
Charger and AC adapter). Failure to do so may affect your warranty.

● You can charge the battery with a USB charging cable(TTA standardized 24 pin cable) by
connecting a PC, but the charging time will be longer than using SAC-41. (About 3 hours)

● If you use the USB charging cable (TTA standardized 24 pin cable) as a power cable, please
insert the SLB-1137 rechargeable battery first.

● The USB charging cable (TTA standardized 24 pin cable) is optional.

■ Charging time (When the camera is turned off)
   - Using the cradle : About 150MIN
   - Using the SAC-41 : About 150MIN
   - Using the USB charging cable (TTA standardized 24 pin cable) : About 180MIN or longer.
     (The charging time may vary depending on the manufacturers.)
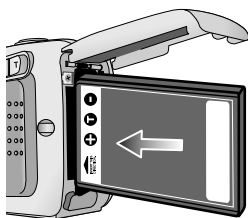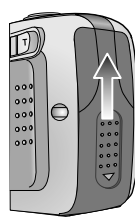
《16》

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 correct polarity(+/-).
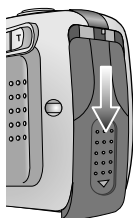
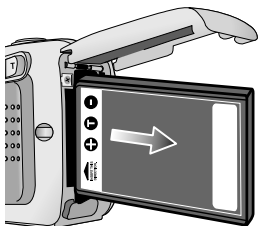1. Open the battery chamber cover by pushing in the direction of the arrow.

2. Insert the batteries taking note of the polarity (+ / -).

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.

INFORMATION

● When the battery chamber cover is opened, do not press the battery chamber cover by force. This may cause the battery chamber cover modification or breakage.

■ 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.

Instructions on how to use the memory card

● Be sure to format the memory card (see p.72) if you are using a newly purchased memory for the first time, if it contains data that the camera cannot recognise, 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 is used in another digital camera.
  To use the memory card in this camera, format first the memory card by using this camera.
● Do not use a memory card formatted by another digital camera or memory card reader.
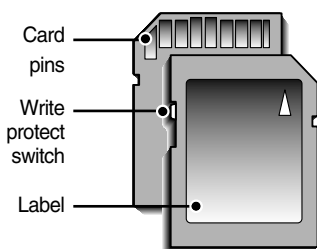
Preserving the memory card data

● If the memory card is subjected to any of the following, the recorded data may become corrupted :
  - When the memory card is used incorrectly.
  - If the power is switched off or the memory card is removed while recording, deleting (formatting) or reading.
● 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 is insufficient memory available : If you press the shutter button for the shot, a [Card Full !] message will appear and the camera will not operate. To optimise the amount of memory in the camera, replace the memory card or delete unnecessary images stored on the memory.

Instructions on how to use the memory card

INFORMATION

● Don't remove the memory card when the function lamp is blinking as this may cause damage to data in the memory card.

■ The camera can use SD Memory Cards and MMC (Multi Media Cards). Please consult the enclosed manual for using the MMC Cards.
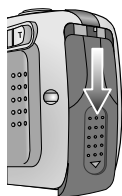
Card pins

Write protect switch

Label

The SD memory card has a write protect switch that prevents image files from being deleted or formatted. By sliding the switch to the bottom of the SD memory card, the data will be protected. By sliding the switch to the top of the SD memory card, the data protection will be cancelled. Slide the switch to the top of the SD memory card before taking a picture.

[SD (Secure Digital) memory card]

■ When using a 32MB SD memory card, the specified shooting capacity will be as follows. These figures are approximate as image capacities can be affected by variables such as subject matter.

| Recorded image size		S. Fine	Fine	Normal	30FPS	15FPS
Still image	2592X1944	9	18	29	-	-
	2272X1704	10	24	38	-	-
	2048X1536	16	36	58	-	-
	1600X1200	36	67	117	-	-
	1024X768	36	67	117	-	-
	640X480	72	121	214	-	-
Movie clip	640X480	-	-	-	35SEC	20SEC
	320X240	-	-	-	1MIN 25SEC	44SEC
	160X128	-	-	-	1MIN 25SEC	44SEC

Inserting the memory card

1. Turn off the camera's power and pull the battery chamber cover in the direction of the arrow to open.

2. Have the front of the memory card facing toward the front ofthe 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.
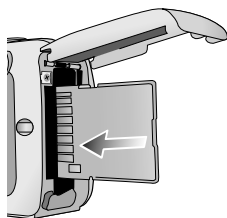
3. To close, push the battery chamber cover until you hear a click. If the memory card does not slide in smoothly, do not attempt to insert it by force. Check the direction of insertion, and then insert it correctly. Do not insert the memory card the wrong way round. Doing so may damage the memory card slot.
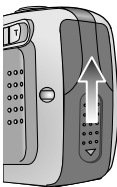
Removing the memory card

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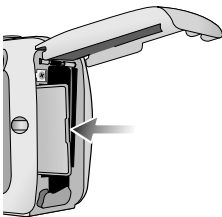
2. Remove the memory card and close the battery chamber cover.

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 [D & 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 [D & 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.

● 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 18 languages. These are listed below
   : English, Korean, French, German, Spanish, Italian, S. Chinese, T. Chinese, Japanese, Russian, Portuguese, Dutch, Danish, Swedish, Finnish, Thai, Malaysian and Arabic.
● 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.
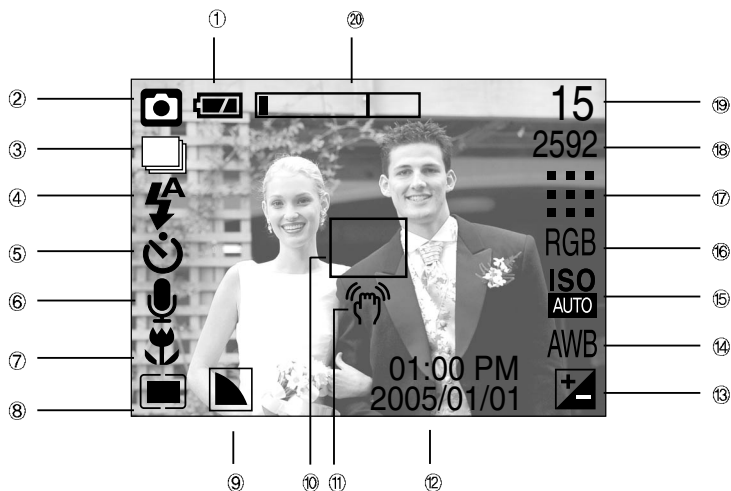
[Image & Full Status]

No.	Description	Icons	Page
1	Battery		p.15
2	Recording mode	SCENE	p.12~13
3	Continuous shot		
4	Flash		p.34
5	Self-timer		p.36
6	Voice memo		p.31
7	Macro		p.32
8	Metering		p.50
9	Sharpness		p.51
10	Auto focus frame		
11	Camera shake warning		
12	Date/ Time	2005/01/01 01:00 PM	

LCD monitor indicator

13	Exposure compensation	⊿	p.39
14	White Balance	AWB ☼ ⇆ ⇆ ☀ ◣	p.40
15	ISO	ISO AUTO ISO 100 ISO 200 ISO 400	p.41
16	RGB	RGB	p.51
17	Image quality	⠿ ⠿ ⠿	p.49
18	Image size	2592, 2272, 2048, 1600, 1024, 640	p.48
19	Number of available shots remaining	15	
	Remaining time (Movie clip/ Voice recording)	00:01:30/ 01:00:00	
20	Optical/ Digital zoom bar	▮	

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 battery chamber cover.
4. Press the power button to turn on the camera.
   (If the date/time that is displayed on the LCD monitor is incorrect, reset the date/time before taking a picture.)
5. Select the MOVIE CLIP(🎥) mode by sliding the mode switch.
6. Point the camera towards the subject and compose the image by using the 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 : 640X480, 320X240, 160X128 (Selectable)
   - File type : *. avi(MJPEG-4)
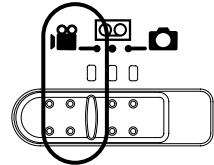
[MOVIE CLIP mode]

Starting the recording mode

● Pausing while recording a movie clip (Successive Recording)
  This camera allows you to temporarily stop during unwanted scenes, while recording a movie clip. Using this function, you can record your favourite scenes into a movie clip without having to create multiple movie clips.

● Using Successive Recording
  Steps from 1-6 are the same as those for MOVIE CLIP mode.

 7. Point the camera towards the subject and compose the image by using the LCD monitor. Press the shutter button and movie clips are recorded for as long as the available recording time. Movie clips will still be recorded if the shutter button is released.
  8. Press the Pause button (▶/❚❚) to pause recording.
  9. Press the Pause button (▶/❚❚) again to resume the recording.
  10. If you wish to stop recording, press the shutter button again.

[Successive recording of a movie clip]

Starting the recording mode

● Recording Voice

Steps from 1-4 are the same as those for recording a
movie clip.

5. Select the VOICE RECORDING([QO]) 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

01:04:33

Start:Shutter
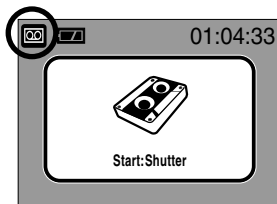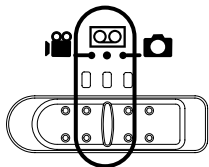
[VOICE RECORDING mode]

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 the LCD monitor.
7. Press the shutter button to capture an image.

15
2592

01:00 PM
2005/01/01
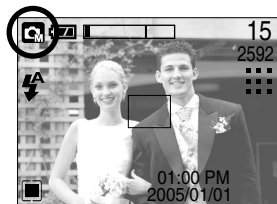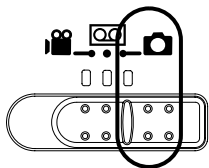
[Still image mode]

INFORMATION

● If the auto focus frame turns to red when you press the shutter button down half way, it
means that the camera cannot focus on the subject. Should this be the case, the camera
is unable to capture an image clearly.

Things to Watch Out for When Taking Pictures

■ Pressing the shutter button down half way
  Lightly press the shutter button to confirm focus and flash battery charge.
  Press the shutter button all way down to take the picture.
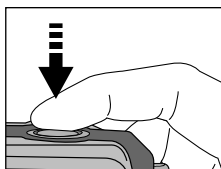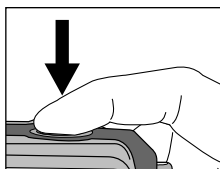
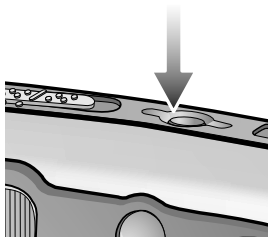[Lightly press the shutter button]   [Press the shutter button]

■ The available recording time may vary depending on shooting conditions and camera settings.
■ 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.
  To take a picture against the sun, please use the [Backlight] in the scene shooting mode (see page 50), Fill-in flash (see page 32), Spot metering (see page 46), or Exposure compensation (see page 38).
■ 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.
  - 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

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. Refer to page 70 for more information about the auto power off function.
● Pressing the power button for over 3 seconds will deactivate the start-up sound and 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.
  ※ When the flash is charging, a flash mode icon (red colour) will blink on the LCD monitor. 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.
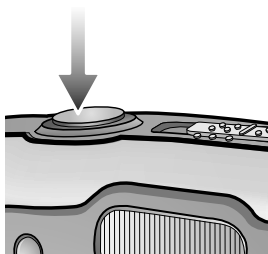
ZOOM W/T button

● If the menu is not displayed, this button works as the OPTICAL ZOOM or DIGITAL ZOOM button.
● If the menu is displayed in Still Image mode, pressing the ZOOM W/T button will skip 5 menu tabs at a time.
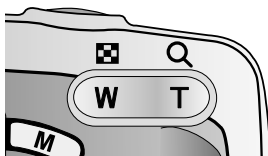
ZOOM W/ T button

■ This camera has a 3X optical zoom and a 5X digital zoom function. Using both will offer a total zoom ratio of 15X.

● TELE Zoom

Optical zoom TELE : Pressing the ZOOM T button. 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 T button activates the digital zoom software. Releasing ZOOM T button stops the digital zooming at the required setting. Once the maximum digital zoom (5X) is achieved, pressing the ZOOM T button will have no effect.

[WIDE zoom]   [TELE zoom]   [Digital zoom 5.0X]
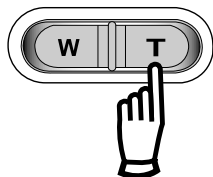
● WIDE Zoom

Optical zoom WIDE : Pressing the ZOOM W button. This will zoom out from the subject i.e. the subject will appear further away. Pressing the ZOOM 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]   [Optical zoom 2X]   [WIDE zoom]
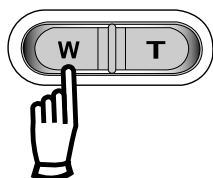
Digital zoom WIDE : When the digital zoom is in operation, pressing the ZOOM W button will reduce the digital zooming in steps.
Releasing ZOOM W button stops digital zooming.
Pressing the ZOOM W button will reduce the digital zoom and then it will continue to reduce the optical zoom until the minimum setting is reached.

Optical zoom

Digital zoom

[Digital zoom 5.0X]   [TELE zoom]   [WIDE zoom]

《28》
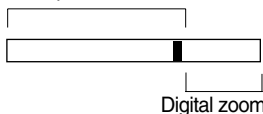
ZOOM W/ T button

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.
● You may notice a decrease in image quality when using the digital zoom.
● 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.
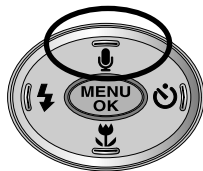
[Preparing for Voice Memo]   [Recording Voice Memo]

Voice memo(🎤) / UP button

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

■ 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).

■ The auto macro function will be activated automatically in the AUTO mode.

[Auto macro]   [Macro]

■ Types of focus modes and focus ranges (W: Wide, T: Tele)   (Unit : cm)

Focus type	Auto	Macro(🌷)		Auto macro	
Focus range	80 ~ Infinity	W : 5 ~ 80	T : 50 ~ 80	W : 5 ~ Infinity	T : 50 ~ Infinity

INFORMATION

● 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 you take a picture within 30cm(MACRO focus), select the FLASH OFF mode.

Macro(✿) / Down button (Focusing)

■ Available focusing method, by recording mode (O : Selectable , X : Not selectable, ∞: Infinity focus range)

Mode	🎥	📷	📷M
Auto	O	X	O
Macro	O	X	O
Auto macro	X	O	X

Mode	SCENE										
	🌙	🏞	👤	🏔	🌷	T	🌄	🍽	🖼	🎆	📄
Auto	O	O	O	∞	X	X	∞	∞	O	∞	O
Macro	X	X	X	X	O	X	X	X	X	X	X
Auto macro	X	X	X	X	X	O	X	X	X	X	X

Focus lock

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

● Using the Focus Lock
1. Ensure the subject in the centre of the autofocus frame.
2. Press the SHUTTER button halfway. When the green auto focus frame lights up, it means the camera is focused on the subject. 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 cancelled.

1. The image to be captured.
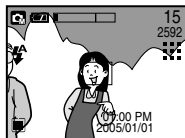
2. Press the SHUTTER button halfway and focus on the subject.

3. 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.
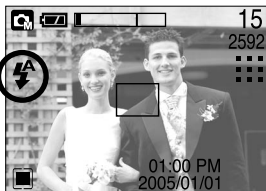
[Selecting the Auto flash]

● Flash range   (Unit : m)

ISO	Auto		Macro		Auto macro	
	WIDE	TELE	WIDE	TELE	WIDE	TELE
Auto	0.8 ~ 3.0	0.8 ~ 2.0	0.2 ~ 0.8	0.5 ~ 0.8	0.2 ~ 3.0	0.5 ~ 2.0

INFORMATION

● When the flash is charging, a flash mode icon (red colour) will blink on the LCD monitor.
● Using the flash frequently will reduce the life of the batteries.
● Under normal operating conditions the charging time for the flash is normally within 7 seconds. If the batteries are weak, the charging time will be longer.
● During the continuous shot, 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.

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.
👁	Auto & 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.
SF	SF (Safety Flash)	In poor light conditions, Safety Flash will help you get a good image without the use of a flash.

Flash (⚡) / Left button

■ Things to watch out for when using the SF(Safety Flash)
   1. You can use the SF in the AUTO and MANUAL mode.
   2. If you take a moving subject, there may be an afterimage in the captured image.
   3. We recommend that you use the SF in a fluorescent lighting condition.
   4. If the lighting condition is darker than fluorescent lighting condition, [Low light] message will display. In this condition, use the correct flash to get a fine image.
   5. If the lighting condition is brighter than fluorescent lighting condition, the SF doesn't activate.
   6. As the SF uses the camera's digital processor, images taken using the SF may take a little longer for the camera to process.

● Available flash mode, by recording mode

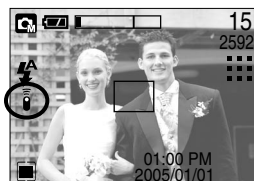|	🎥	📷	Gᴹ	🕐	🌃	👤	⛰	🌷	T	🍴	🎆	👥	🎇	📹
⚡A	X	X	O	X	X	X	X	X	X	X	X	X	X	X
SF	X	O	O	X	O	O	X	X	X	X	X	X	X	X
👁	X	O	O	X	O	O	X	X	X	X	X	X	X	X
⚡	X	X	O	X	X	X	X	X	X	X	X	O	X	X
⚡S	X	X	O	O	X	X	X	X	X	X	X	X	X	X
🚫	O	O	O	O	O	O	O	O	O	O	O	X	O	O

Self-timer(☺) / Remote (⬤)/ Right button

■ When the menu is displayed on the LCD monitor, pressing the Right button makes the cursor shift to the right tab. The right button can also be used to move to a sub menu to select a different setting.

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

● Using the self-timer and remote control.
   1. Slide the mode switch to the STILL IMAGE or MOVIE CLIP mode.
      In VOICE RECORDING mode, only the remote control can be used.
   2. Press the SELF-TIMER button until the desired mode indicator displays on the LCD monitor. A self-timer icon or remote control icon appears on the LCD monitor.
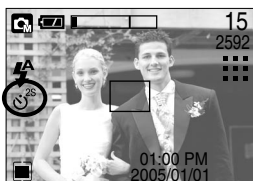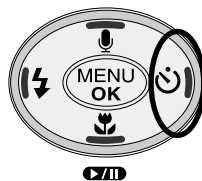
[Selecting the 2 SEC self-timer]   [Selecting the remote control]

- Selecting a self-timer   : When you press the SHUTTER button, the picture will be taken after the specified time has elapsed and the self-timer function will be cancelled.
- Selecting a remote mode : Pressing the shutter button of remote control will allow an interval of 2 seconds before the image is taken. In the remote mode, the shutter button of the camera can't be activated. After taking a picture, the remote mode will be maintained. But, pressing the power button and sliding the mode switch will cancel the remote mode.

● Description of Self-timer/Remote mode

Icon	Mode	Description
☺²ˢ	2s	Pressing the shutter button will allow an interval of 2 seconds before the image is taken.
☺	10s	Pressing the shutter button will allow an interval of 10 seconds before the image is taken.
☺	Double	A picture will be taken after about 10 seconds and 2 seconds later a second picture will be taken.
⬤	Remote mode	You can take a picture by remote control instead of using the shutter button of the camera.

Self-timer( ) / Remote ( )/ Right button

● Range for taking a picture with the remote control
  When you take a picture with the remote control, refer to
  the illustration shown alongside.
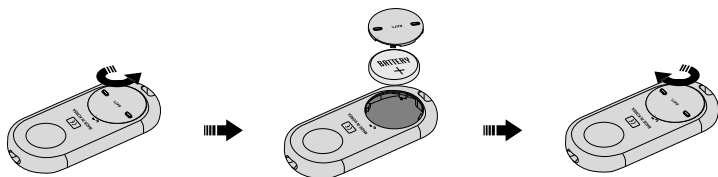
[Remote control
shutter button]

4m

30°
30°

4m

5m
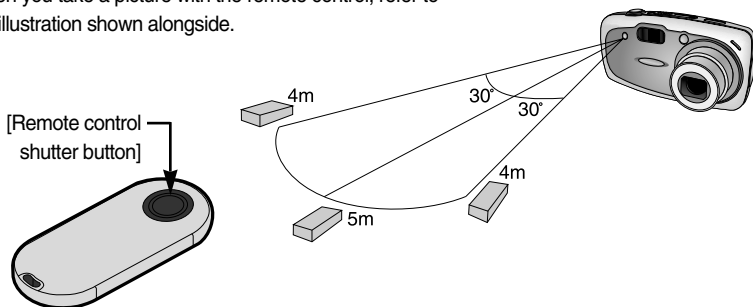
● Replacing batteries for the remote control

Make sure the + polarity is toward the top and the - polarity is toward the bottom while
installing batteries for the remote control.
Replace batteries for the remote control in the local service centre.
Use the CR 2025 3V batteries.

INFORMATION

● If you operate the Mode switch and Self-timer button during the self-timer operation, the
  self-timer function is canceled.
● Use a tripod to prevent the camera from shaking.
● While the remote control icon is selected, the self-timer lamp in front of the camera blinks
  in 1 second cycle.

MENU/ OK button

■ MENU button
  - When you press the MENU button, a menu related to each camera mode will be displayed on the LCD monitor. Pressing it again will return the LCD to the initial display.
  - A menu option can be displayed when the following are selected :
  MOVIE CLIP and STILL IMAGE mode. There is no menu available when the VOICE RECORDING mode is selected.

Pressing the MENU button

[Menu off]   [Menu on]
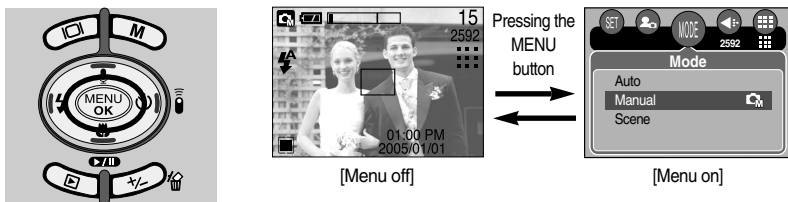
■ OK button
  - When the menu is displayed on the LCD monitor, this button is used for shifting the cursor to the sub menu or for confirming data.

M button : selecting preset scene modes

■ You can use the M button to select the AUTO, MANUAL and SCENE mode.

■ This button will operate only in the still image mode

● How to use the M button
   1. Press the M button in the still image mode, and a menu window will display shown alongside.
   2. Select a desired camera mode by pressing the Up/Down/Left/Right buttons.
      - Up/Down button   : Selecting a camera mode
      - Left/ Right button : Selecting a sub menu of the scene mode
   3. Press the OK button and the desired camera mode will be selected.
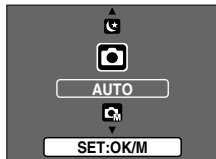
■ You can easily configure optimal settings for a variety of shooting situations by selecting the scene sub menus.
   1. Press the M button in the still image mode.
   2. Select the [Scene] menu by pressing the Up/Down button.
   3. Select a desired sub menu by pressing the Left/Right button.
   4. Press the OK button and the desired camera mode will be selected.

Sub menu	Icon	Description
Night	🌃	Use this for shooting still images at night or in other dark conditions.
Portrait	👤	To take a picture of a person.
Children	👧	To take a still picture of moving children.
Landscape	🏔	Scenery with green woods or blue sky.
Close up	🌷	Close-up shooting for small objects such as plants and insects.
Text	T	Use this mode to shoot a document.
Sunset	🌅	For taking pictures of sunsets.
Dawn	🌄	Daybreak scenes.
Backlight	🔆	Portrait without shadows caused by backlight.
Firework	🎆	Firework scenes.
Beach&Snow	🏖	For ocean, lake, beach and snowscape scenes.

《38》

+/- button

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

Main menu	Sub menu	Available camera mode
RGB	R (Red), G (Green), B (Blue)	📷 🎥
ISO	AUTO, 100, 200, 400	📷
WHITE BALANCE	AUTO, DAYLIGHT, CLOUDY, FLUORESCENT H, FLUORESCENT L, TUNGSTEN, CUSTOM.	📷 🎥
Exposure compensation	-2.0 ~ 0.0 ~ +2.0 (0.5EV steps)	📷 🎥
LT	Shutter speed / Aperture Value (Changed by zoom rate)	🌙

■ RGB : Allows the user to adjust the R (Red), G (Green), and B (Blue) values of the images to be captured.

● Setting RGB Values
   1. Press the +/- button, and then use the UP and DOWN buttons to select the RGB icon (RGB).
     The RGB menu bar will appear as shown.
   2. Use the UP/ DOWN/ LEFT and RIGHT buttons to select the desired RGB value.
     - Up/Down Button : Navigates between R, G, and B icons.
     - Left/Right Button : Changes value of each icon.
   3. When you press the +/- button again, the value you set will be saved and RGB setup mode will end.
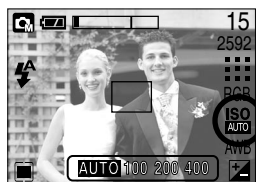
+/- button

■ ISO : You can select the ISO sensitivity when taking pictures.
       The speed or specific light-sensitivity of a camera is rated by ISO numbers.

● Selecting an ISO Sensitivity
  1. Press the +/- button, and then use the UP and DOWN buttons 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.

■ White balance : The white balance control allows you to adjust the colours to appear more natural looking.

● 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.
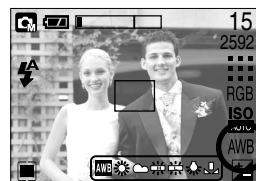
     AUTO   AWB   : The camera automatically selects the appropriate white balance settings, depending on the prevailing lighting conditions.

     DAYLIGHT   ☼   : For taking images outside.
     CLOUDY   ☁   : For taking images under a cloudy and overcast sky.
     Fluorescent H   ⇌   : For shooting under daylight fluorescent types of three-way fluorescent lighting.
     Fluorescent L   ⇌   : Shooting under white 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.

《40》

+/- 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 shows only white, and then press
   the SHUTTER button.
3. Your custom white balance value is stored.
   - The custom white balance value will be applied,
     starting with the next picture you take.
   - The user configured white balance will be remain
     effective until it is overwritten.

[White paper]
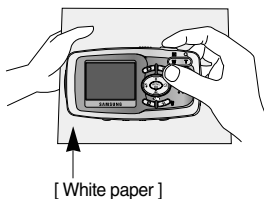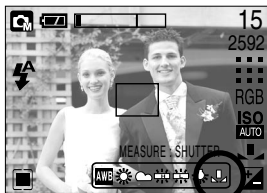
■ Exposure compensation : This camera automatically adjusts the exposure according to the
                          ambient lighting conditions.
                          You can also select the exposure value by using the +/- button.

● Compensating Exposure
  1. Press the +/- button, and then use the UP and DOWN
     buttons to select the exposure compensation icon
     (🔆). The exposure compensation menu bar will
     appear as shown.
  2. Use the LEFT and RIGHT buttons to set the desired
     exposure compensation factor.
  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.
  * A negative exposure compensation value reduces the exposure.
    Note that a positive exposure compensation value increases the exposure and the LCD
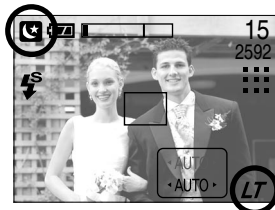   monitor will appear white or you may not get good pictures.

+/- button

■ Long Time shutter : This camera automatically adjusts the shutter speed and aperture values to the shooting environment. However, in NIGHT SCENE mode, you can set the shutter speed and aperture values to your preference.

● Adjusting the shutter speed and aperture values
  1. Select the [Night] scene mode.
     (M button → [Scene] → [Night])
  2. Press +/- button and Long Time shutter menu
     (LT, For selecting shutter speed and aperture value) will
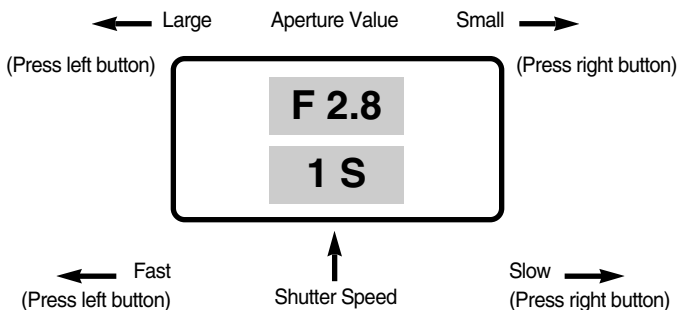   be displayed.
  3. Configure the Long Time shutter value with the up/
     down/ left/ right button.
     Up/ Down Button : Select the iris / shutter speed
     Left/ Right Button : Change the value. Available iris value options, depending on zoom step
                         will be displayed on the menu.
  4. Press the +/- button again. The value you set will be saved and the mode will switch to
     NIGHT SCENE mode. Press the SHUTTER button to take the picture.

■ Aperture values and shutter speeds changed by zoom scale are listed below.

  Supported Aperture Values : AUTO, WIDE : F2.8 ~ F5.8, TELE : F4.8 ~ F10.0
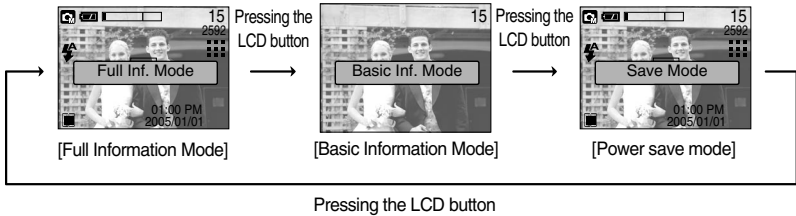 Supported Shutter Speeds : AUTO, 1 ~ 16S

◄──── Large   Aperture Value   Small ────►

(Press left button)   (Press right button)

F 2.8

1 S

◄──── Fast   Slow ────►
(Press left button)   Shutter Speed   (Press right button)

LCD button

■ You can check the recording status in the LCD monitor. In any mode with the exception of VOICE RECORDING mode, pressing the LCD button will change the display as shown below.
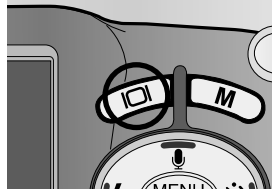
● Idle mode
  - After selecting Save mode by pressing the LCD button, and if the camera isn't operated during the specified time(about 30 SEC.), the camera power will be idle (LCD monitor : OFF, Button lamp : Blinking) automatically.
  - To use the camera again, press any of the camera buttons except the power button.
  - If there is no operation during the specified time, the camera power will be turned off automatically to save battery life. Refer to page 70 for more information about the auto power off function.

15	Pressing the LCD button	15	Pressing the LCD button	15
Full Inf. Mode		Basic Inf. Mode		Save Mode
01:00 PM 2005/01/01				01:00 PM 2005/01/01
[Full Information Mode]		[Basic Information Mode]		[Power save mode]

Pressing the LCD button

Using the LCD monitor to adjust the camera settings

■ You can use the menu on the LCD monitor to set up recording functions. In any mode with the exception of VOICE RECORDING 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 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	Page
MODE	Mode		Auto		
			Manual	⬛ 🔲 SCENE	p.36
		S c e n e	Night, Portrait, Children, Landscape, Close up, Text, Sunset, Dawn, Backlight, Firework, Beach&Snow		
	Size		2592X1944		
			2272X1704		
			2048X1536	⬛ 🔲 SCENE	
			1600X1200		p.37
			1024X768		
			640X480		
			640X480		
			320X240	🎥	
			160X128		
	Quality		S. Fine		
			Fine	⬛ 🔲 SCENE	
			Normal		p.38
			30FPS	🎥	
			15FPS		

Using the LCD monitor to adjust the camera settings

Menu tab	Main menu	Sub menu		Camera working mode	Page
	Metering	Multi			p.39
		Spot			
	Shooting	Single			p.40
		Continuous			
	Sharpness	Soft			p.41
		Normal			
		Vivid			
	Effect	Normal			p.53
		B&W			
		Sepia			
		Negative			
	Special Effect	HighLight	Off		p.42
			Range 1		
			Range 2		
			Range 3		
		Composite	Off		p.43
			2 Parts		
			3 Parts		
			4 Parts		
		Photo Frame	Off		p.43
			Frame 1		
			Frame 2		
			Frame 3		
	Stabilizer	Off			p.53
		On			

* Menus are subject to change without prior notice.

《45》

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
Auto
Manual
Scene

Press the LEFT or RIGHT button.

Size
2592X1944   **2592**
2272X1704
2048X1536
1600X1200

Press the LEFT or RIGHT button.

Quality
S.Fine
Fine
Normal
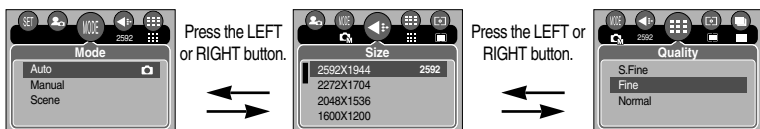
3. Use the UP and DOWN buttons to select a sub menu.

Mode
Auto
Manual
Scene

Press the UP or DOWN button.

Mode
Auto
Manual
Scene

Press the UP or DOWN button.

Mode
Auto
Manual
Scene
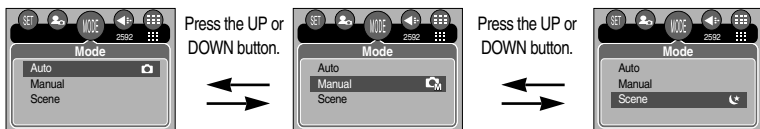
4. Select a sub menu, and then the value you set will be saved. Press the MENU button and the menu will disappear.

Mode

■ You can select the desired Still Image mode.

[Auto]   : Use this for shooting basic still images.

[Manual] : Selecting the automatic mode will configure the camera with optimal settings. You can still manually configure all functions except the aperture value and shutter speed.

[Scene]   : Use the menu to easily configure optimal settings for a variety of shooting situations
- The selected [Scene] sub menu will be displayed on the LCD monitor.

To change the sub menu or to get more information about the scene menus, refer to page 70.

Mode
Auto
Manual
Scene
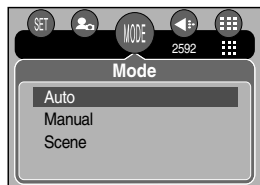
[STILL IMAGE mode]

INFORMATION

● When [Night], [Close up], [Sunset], [Dawn] and [Firework] scene mode are selected, it is possible that camera shake will occur. If you think this will happen, use a tripod.

Size

■ You can select the image size appropriate for your application.

Mode	STILL IMAGE mode						MOVIE CLIP mode		
Icon	2592	2272	2048	1600	1024	640	640	320	160
Size	2592X1944	2272X1704	2048X1536	1600X1200	1024X768	640X480	640X480	320X240	160X128

Size

2592X1944   2592
2272X1704
2048X1536
1600X1200

[STILL IMAGE mode]

Size

640X480   640
320X240
160X128
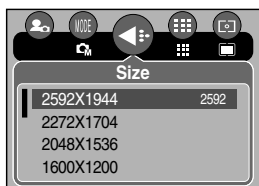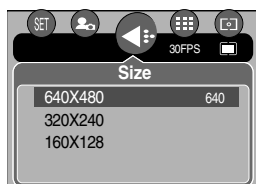
[MOVIE CLIP mode]

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.

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.

Mode	STILL IMAGE mode			MOVIE CLIP mode	
Icon	▦	⦂⦂⦂	⸪	30FPS	15FPS
Sub menu	S. Fine	Fine	Normal	30FPS	15FPS
File Format	jpeg	jpeg	jpeg	avi	avi
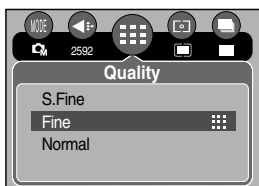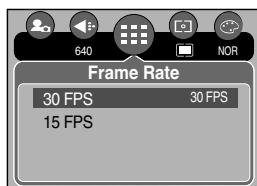
[STILL IMAGE mode]   [MOVIE CLIP mode]

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).
● 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.

[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 centre of the LCD monitor will be metered for light. This is suitable when the subject in the centre is exposed correctly, regardless of the back lighting.
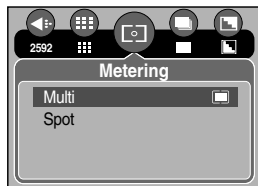
INFORMATION

● 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, It is better to use exposure compensation.

Continuous shot

■ Select the number of pictures in continuous shooting.

- [Single]   : Take one picture only
- [Continuous]   : Images will be taken continuously until the shutter button is released. The shooting capacity depends on the memory.

[MANUAL mode]

* High resolution and picture quality increases file saving time, which increases stand-by time.
* If the [Continuous] sub menu is selected, the flash will be off automatically.

《49》

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.
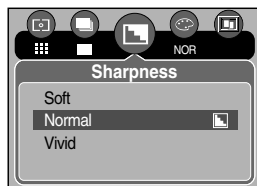
[MANUAL mode]

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.

Effect

■ By using the camera's digital processor, it is possible to add special effects to your images.
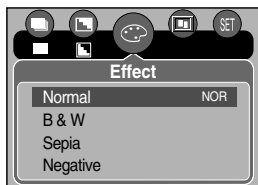
[MANUAL mode]
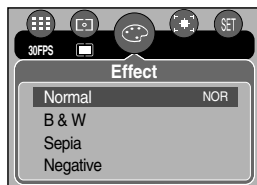
[MOVIE CLIP mode]

[Normal]   : No effect is added to the image.
[B & W]   : Converts the image to black and white.
[Sepia]   : Captured images will be stored in a sepia tone
            (a gradient of yellowish brown colours).
[Negative]   : Save the image in negative mode.

《50》

Special Effect

■ By using the camera's digital processor, it is possible to add special effects to your images. You can select this menu only in the MANUAL mode.

■ You can select the preset focus frame, Composite shots and Photo frame function. If a special effect is selected, the rest special functions set before are cancelled automatically.

Special Effect : Preset focus frames

■ You can make the subject stand out from its surroundings.
The subject will be sharp and in focus while making the rest out of focus.

1. Select the MANUAL mode, and press the menu button.
2. Press the LEFT/ RIGHT button and select the [Special Effect] menu tab.
3. Select the [HighLight] menu by pressing the UP/ DOWN button and press the Right button.
4. Select a desired sub menu by pressing the UP/ DOWN button and press the OK button.
   - [Off] : The preset focus frame will not be added.

NOR

Special Effect

Highlight	Off
Composite	Off
Photo Frame	Off

Move : ‡   Set : OK
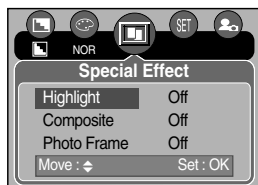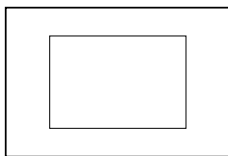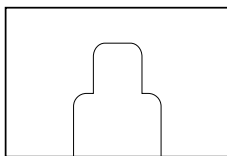
[Range 1]   [Range 2]   [Range 3]
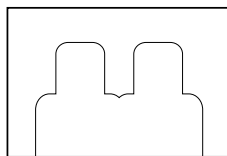
5. Press the menu button twice and the menu will disappear. If you select the [Range 1~3] menu, the preset focus frame area will appear.

15
2592

01:00 PM
2005/01/01

《51》
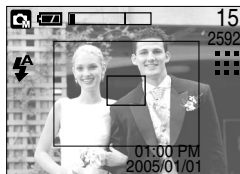
Special Effect : Composite shots

■ You can combine 2 ~ 4 different shots in a still image.

1. Select the Still image mode, and press the menu button.
2. Press the LEFT/ RIGHT button and select the
   [Special Effect] menu tab.
3. Select the [Composite] menu by pressing the UP/ DOWN
   button and press the Right button.
4. Select a desired sub menu by pressing the UP/ DOWN
   button and press the OK button.
   - [Off]   : cancels the composite shots
   - [2 Parts] : 2 different shots are combined in a still image.
   - [3 Parts] : 3 different shots are combined in a still image.
   - [4 Parts] : 4 different shots are combined in a still image.
5. Press the menu button twice and the menu will disappear.
6. The number of frames you selected in step 4 is displayed on the LCD monitor.
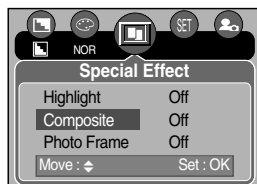   Press the shutter button to start the composite shots

	Special Effect	
Highlight	Off	
Composite	Off	
Photo Frame	Off	
Move : ◆	Set : OK	

※ Selecting 2 composite shots

[1/2]	Pressing the shutter button	[2/2]	Pressing the shutter button	[The result image]

INFORMATION

● You can use the flash button, self-timer button, macro button, +/- button and the Zoom W/T button during the composite shots.
● If you press the camera buttons (Menu button, Play mode button and M button) or rotate the mode switch during the composite shots, the captured images aren't saved and the first step of the composite shot will display on the LCD monitor. Do not press the camera buttons or rotate the mode switch during the composite shots.
● To insert the voice memo, press the voice memo button before starting the composite shot. The voice memo will start after taking the last composite shot.
● If you select [Cancel] in the [Composite] menu, the composite shot will be cancelled.

Special Effect : Photo Frame

■ You can add 3 types of frame-like borders to a still image you want to capture.

1. Select the Still image mode, and press the menu button.
2. Press the LEFT/ RIGHT button and select the [Special Effect] menu tab.
3. Select the [Photo Frame] menu by pressing the UP/ DOWN button and press the Right button.
4. Select a desired sub menu by pressing the UP/ DOWN button and press the OK button.
   - [Off] : The photo frame will not be added.

			SET	
	NOR			
Special Effect				
Highlight		OFF		
Part Shot		OFF		
Photo Frame		OFF		
Move : ⬍			Set : OK	
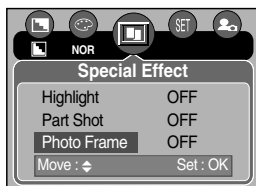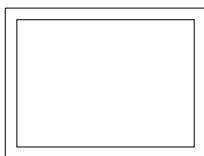
[Frame1]   [Frame2]   [Frame3]

5. Press the menu button twice and the menu will disappear. If you select the [Frame 1~3] menu, the preset focus frame area will appear.
   * You can check the photo frame you added to pictures in Quick View or Play mode.

Movie Clip frame stabiliser

■ This function helps stabilize images captured during movie recording.
   You can select this menu only in the MOVIE CLIP mode.

● How to use this function
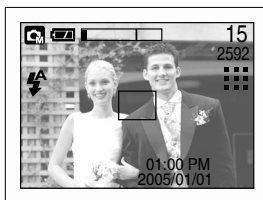   1. Select the MOVIE CLIP mode by sliding the mode
      switch and press the menu button. Select the [Stabilizer]
      menu and press the right button.
   2. Select a desired sub menu by pressing the Up/Down
      button and press the OK button.
      - [Off] : Movie clip frame stabilizer function becomes
                 disable.
      - [On] : Prevents camera shake during movie
               recording. The recording frame range will become narrower than when you select
               the [Off] menu. Pre-view frames may not display smoothly on the LCD monitor,
               but stored movie clips have no problems.
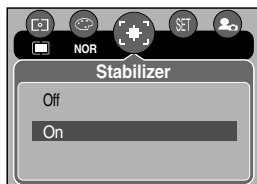
Starting play mode

■ 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
MODE button once to switch to Play mode and press it again to switch to Recording mode.

■ You can turn the power on with the play mode button. The camera is turned on in play mode.
Press the play mode button again to turn off the camera.

■ You can set up the PLAY mode function by using the camera buttons and LCD monitor.

■ If you press the PLAY button to switch to Play mode, the camera lens will retract into the
camera body for protection of the lens after about 10 seconds.

● 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.
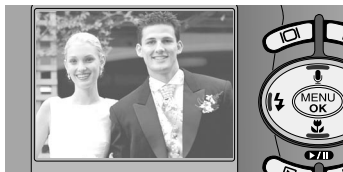
3. Select an image that you want to view by
pressing the LEFT / RIGHT button.
※ Press and hold the LEFT or RIGHT button to
play back the images quickly.

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.
● 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.

■ Movie clip capture function: capture still images from the movie clip.

● How to capture the movie clip

Steps 1-2 are the same as those for playing back a still image.

3. Select the recorded movie clip that you want to play back by using the LEFT/RIGHT button.

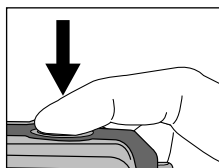4. Press the Play/Pause button to play the movie clip

5. Press the Play/Pause button while playing the movie clip. Then press the Shutter button.

6. The paused movie clip is saved in a new file name.

* The captured movie clip file has same size as the original movie clip (640X480, 320X240, 160X128).
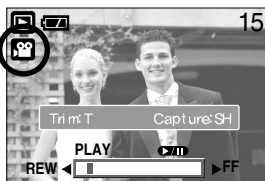
[Paused]

[Press the shutter button]

Starting play mode

■ On camera movie trimming : You can extract desired frames of movie clip during the movie clip play back.

1. Select a desired movie clip in the play mode.
2. Play back the movie clip by pressing the Play & Pause button.
3. Press the Pause button at the point of the movie clip that you want to start extracting.
4. Press the T button. (The start point doesn't display on the status bar, but the start point will be marked.)
5. Press the Play button and the extracted range will be displayed on the status bar.
6. At the point of movie clip that you want to stop extracting, press the Pause button.
7. Press the T button and a confirmation window will display.
8. Select a desired sub menu by pressing the UP/ DOWN button and press the OK button.
   [Trim]   : The extracted frames are saved as a new file name.
   [Cancel] : The movie trimming will cancel.
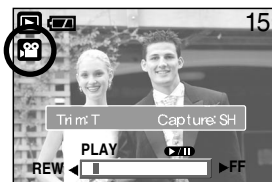
INFORMATION

● If the running time is under 10 seconds, the movie clip can't be trimmed.
● If you want to extract the movie clip at the beginning of the frame, press the Zoom T button before starting the movie clip.
● If the time line bar passes by the start point by pressing the REW(▶) button, the first frame of the movie clip will display.
● If you doesn't specify the ending point of the movie clip, the trimming confirmation window will display at the point of the last frame.

■ 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.
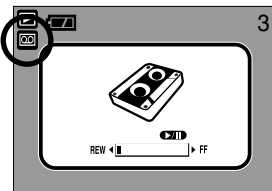
LCD monitor indicator
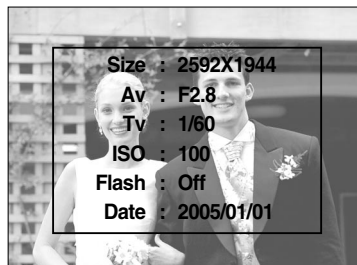
■ The LCD monitor displays information about the shooting conditions.

No.	Description	Icon	Page
1	Battery	▭ ▭ ▭	p.15
2	Play mode	▶	
3	File Type	◻ ◻	
4	Voice memo	♪	p.58
5	Protect indicator	○┳	p.65
6	DPOF indicator	◻	p.68
7	Stored image number	9	

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

Size	: 2592X1944	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	: 2005/01/01	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.
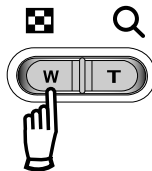
[Normal display mode]

10/10

Pressing the thumbnail button (▦)
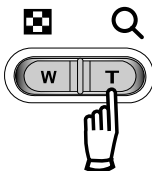
Pressing the enlargement button (🔍)

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.

X2.1

Thumbnail(▦) / Enlargement(⌕) button

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

Image size	2592	2272	2048	1600	1024	640
Maximum enlargement rate	X10.1	X8.8	X8.0	X6.2	X4.0	X2.5

● 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 a desired sub menu by pressing the UP/ DOWN button and press the OK button.
      - [Trimming] : The trimmed image will save as a new file name, and display on the LCD
                     monitor.
      - [Cancel]   : The trimming menu will disappear.

   * If there is little memory space to save the trimmed image, the image can't be trimmed.
   * To delete the enlarged image during the trimming function, press the delete button.

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 voice 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.