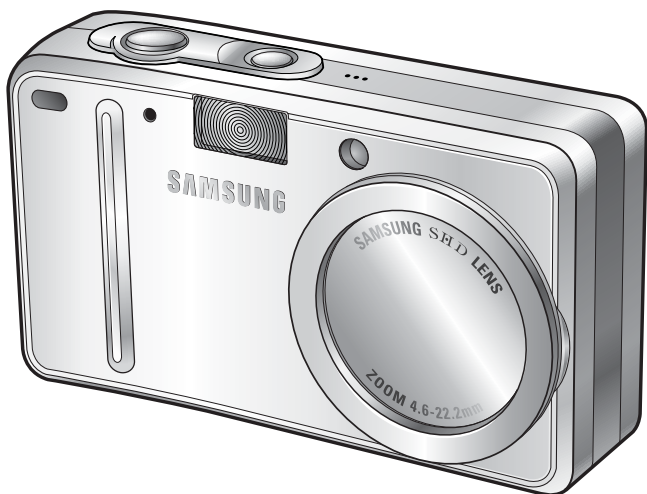SAMSUNG

Digimax *L55W*

User's Manual

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.

QuickTime

ENGLISH

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.118)

Take a picture

Take a picture. (p.26)

Insert the USB cable

Insert the supplied USB cable into the PC's USB port and the camera's USB connection terminal. (p.127)

Check the camera's power

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

Check [Removable Disk]

Open Window' s EXPLORER and search for [Removable Disk]. (p.128)

● 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 battery, 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.
＊ Apple, Mac and QuickTime logo are registered trademarks of Apple computer.
＊ All brand and product names appearing in this manual are registered trademarks of their respective companies.

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.

Correct Disposal of This Product (Waste Electrical & Electronic Equipment)
(Applicable in the European Union and other European countries with separate collection systems) This marking shown on the product or its literature, indicates that it should not be disposed with other household wastes at the end of its working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate this from other types of wastes and recycle it responsibly to promote the sustainable reuse of material resources. Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take this item for environmentally safe recycling. Business users should contact their supplier and check the terms and conditions of the purchase contract. This product should not be mixed with other commercial wastes for disposal.

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. 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.

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.
- For safety reasons keep this product and accessories out of reach of children or animals to prevent accidents e.g.:
  - Swallowing battery 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.
- battery 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 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 Charger. 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 battery could result in fire or injury.
  - Use battery with the correct specification for the camera.
  - Do not short circuit, heat or dispose of battery in fire.
  - Do not insert the battery with the reverse polarities.
- Remove the battery when not planning to use the camera for a long period of time.
  Battery 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 Charger.
  After use, always switch off the camera before unplugging the cable 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.
- Take care not to touch the lens and where the lens cover is to avoid taking an unclear image
  and possibly causing camera malfunction.
- Avoid obstructing the lens or the flash when you capture an image.

An FCC warning

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
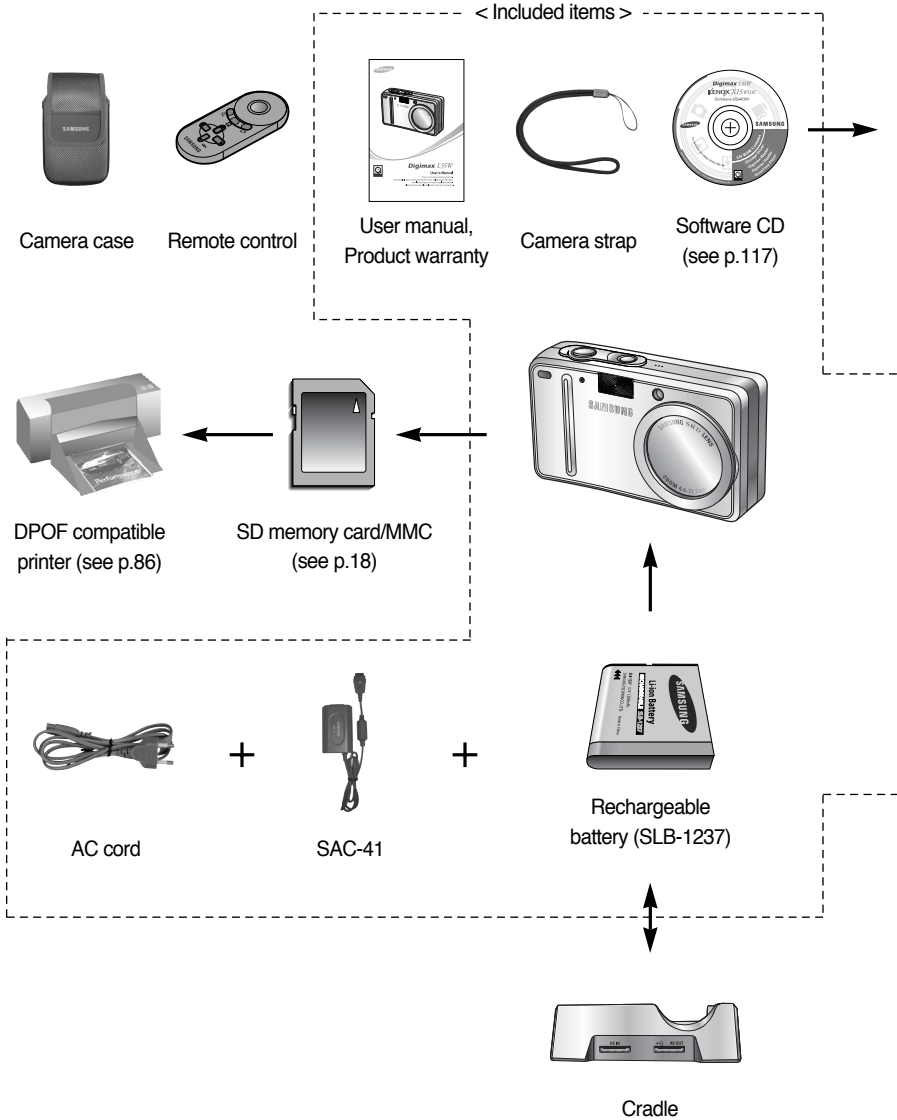interference in a residential installation.
This equipment generates, uses and can radiate radio frequency energy and,
if not installed and used in accordance with the instructions, may cause
harmful interference to radio communications. However, there is no
guarantee that interference will not occur 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
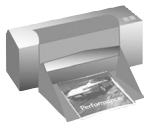equipment.

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 >

Camera case

Remote control

User manual, Product warranty

Camera strap

Software CD (see p.117)

DPOF compatible printer (see p.86)

SD memory card/MMC (see p.18)

AC cord + SAC-41 +

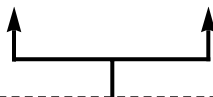Rechargeable battery (SLB-1237)

Cradle

System chart

Computer
(see p.127)

PictBridge compatible
printer(see p.91)

USB cable

AV cable

External monitor
Yellow colour - Video
White colour - Voice
(see p.103)

System Requirements

For Windows

- Windows 98/ 98SE/ 2000/ ME/ XP
- PC with processor better than Pentium II 450MHz (Pentium 700MHz or better is recommended)
- 200MB of available hard-disk space (Over 1GB is recommended)
- Minimum 64MB RAM (XP : 128MB)
- 1024x768 pixels, 16-bit colour display compatible monitor (24-bit colour display recommended)
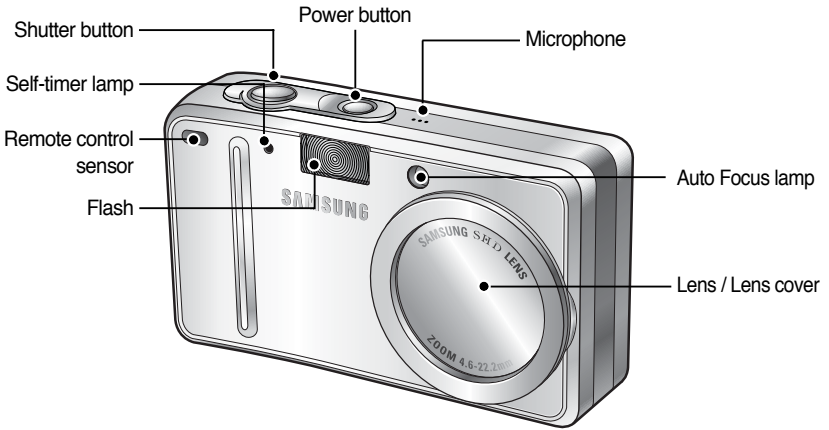- DirectX 9.0 or later
- USB port
- CD-ROM drive

For Macintosh

- Power Mac G3 or later
- Mac OS 10.0 or later
- Minimum 64MB RAM
- 110MB of available hard-disk space
- USB port
- CD-ROM drive
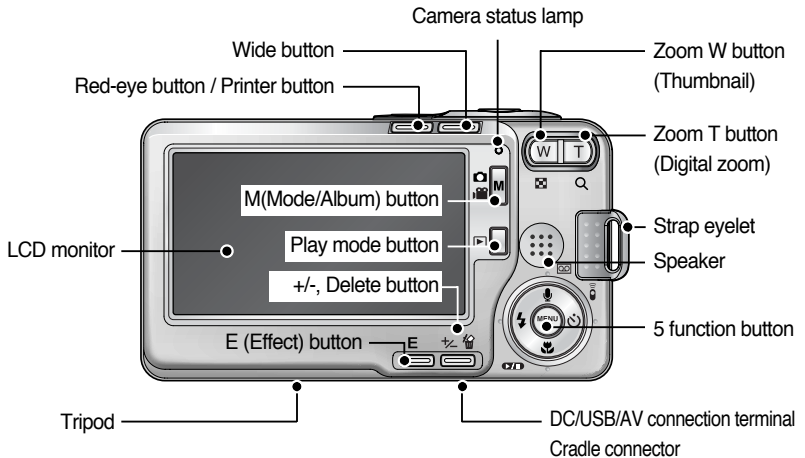- QuickTime Player

CAUTION

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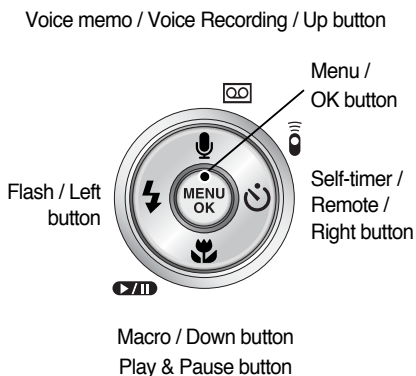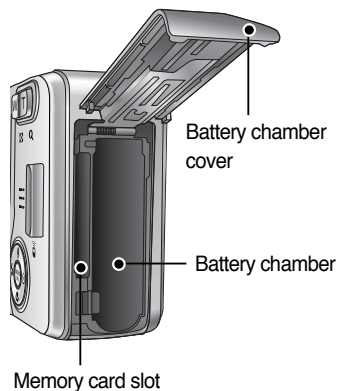
Identification of features

Front & Top

Shutter button

Power button

Microphone

Self-timer lamp

Remote control sensor

Flash

Auto Focus lamp

Lens / Lens cover

Back & Bottom

Camera status lamp

Wide button

Zoom W button (Thumbnail)

Red-eye button / Printer button

Zoom T button (Digital zoom)

M(Mode/Album) button

Play mode button

+/-, Delete button

Strap eyelet

Speaker

LCD monitor

E (Effect) button

5 function button

Tripod

DC/USB/AV connection terminal
Cradle connector

Identification of features

Side/ 5-function button

Battery chamber cover

Battery chamber

Memory card slot

Voice memo / Voice Recording / Up button

Menu / OK button

Flash / Left button

Self-timer / Remote / Right button

Macro / Down button
Play & Pause button
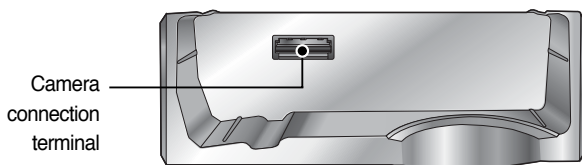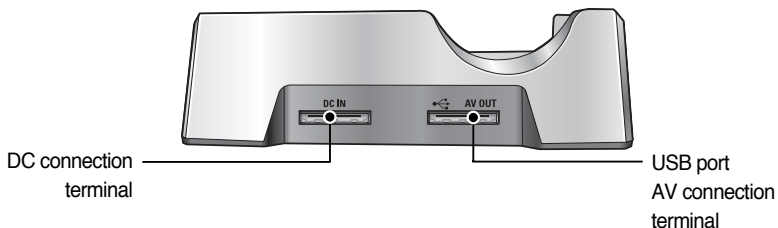
Cradle

■ You can recharge your rechargeable battery, transfer a captured image to print, and download images with the cradle. (Refer to page 14, 91~95, 125~127)

● Top

Camera connection terminal

● Back

DC IN   AV OUT

DC connection terminal

USB port
AV connection terminal

Identification of features

■ Self-timer lamp

Icon	Status	Description
↻²ˢ	Blinking	For the 2 seconds, the lamp blinks quickly at 0.25-second intervals.
↻	Blinking	For the first 8 seconds, the lamp blinks at 1 second intervals. For the final 2 seconds, the lamp blinks quickly at 0.25-second intervals.
↻	Blinking	A picture will be taken after about 10 seconds and 2 seconds later a second picture will be taken.

■ Camera Status Lamp

Status	Description
Power on	The lamp turns on and 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 voice memo recording	The lamp blinks at 1 second intervals
While voice recording	The lamp blinks at 1 second intervals
When the USB cable is inserted to a PC	The lamp lights up (LCD monitor turns off after initializing the device)
Transmitting Data with a PC	The lamp blinks (LCD monitor turns off)
When the USB cable is inserted to a printer	The lamp is off
When the printer is printing	The lamp blinks
When the AF activates	The lamp turns on (The camera focus on the subject)
	The lamp blinks (The camera doesn't focus on the subject)

■ Mode icon : Refer to page 23~25 for more information about the camera mode setting.

MODE	MOVIE	VOICE RECORDING	AUTO	PROGRAM	PLAY
Icon	🎥	🔊	📷	📷ₚ	▶

MODE	SCENE					
	NIGHT	PORTRAIT	CHILDREN	LANDSCAPE	TEXT	CLOSE UP
Icon	🌙	🌑	👤	🏔	T	🌷
MODE	DAWN	SUNSET	BACKLIGHT	FIREWORKS	BEACH & SNOW	-
Icon	💡	🍮	🌆	🎆	🏖	-

《12》

Connecting to a Power Source

■ You should use the rechargeable battery (SLB-1237) supplied with the camera.
Be sure to charge the battery before using the camera.

■ SLB-1237 rechargeable battery Specification

Model	SLB-1237
Type	Lithium Ion
Capacity	1280mAh
Voltage	3.7V
Charging time	Approx. 170 MIN (Using the SAC-41)

■ Number of images and battery life

Still image		Movie
Battery life	Number of images	Recording time
Approx. 180 MIN	Approx. 340	Approx.90 MIN
Based on the following shooting conditions	Using the fully charged battery Auto mode, 5M image size Fine image quality, Shot to shot interval : 30Sec. Changing the zoom position between the Wide and the Tele ends every 1 shot. Using the flash every two times.	Based on the following shooting conditions	Using the fully charged battery 640X480 image size 30fps frame rate

※ These figures are measured under Samsung's standard conditions and Shooting conditions and may vary depending on the way of user's usage.

INFORMATION

Important information about battery usage
● When the camera is not used, turn off the camera power.
● Please remove the battery if the camera will not be used for long periods.
Battery 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 battery and you may experience reduced battery life.
● Battery will usually recover at normal temperatures.
● During extended use of the camera, the camera body may become warm.
This is perfectly normal.

Connecting to a Power Source

Using the SAC-41

If you have access to a mains supply, using an SAC-41 allows the camera to be used for long periods of time.

Plug the SAC-41 into the DC connection terminal on the camera or cradle.

Before turning on the camera power with an SAC-41, insert the rechargeable battery that was charged for over 10 minutes with turning off the camera.

DANGER

- Always turn off the power before taking the SAC-41 out of the mains supply.
- As with all mains powered devices, safety is important. Ensure that neither the camera nor Charger comes into contact with water or metallic materials.
- Please ensure that you use the SAC-41 with the correct specification for the camera. Failure to do so may affect your warranty.

■ How to charge the rechargeable battery (SLB-1237) with the SAC-41.
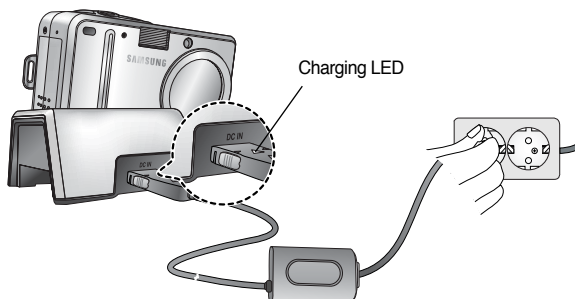- Charging with the cradle
1. Insert the rechargeable battery into the battery chamber.
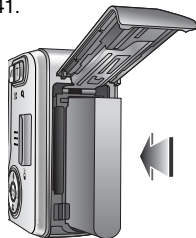
2. Place the camera correctly in the cradle.

3. Put the SAC-41 into your power socket and DC connection terminal of the cradle.
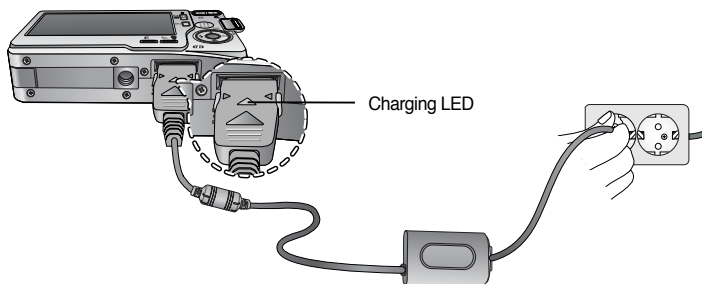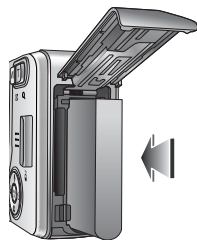
Charging LED

Connecting to a Power Source

■ How to charge the rechargeable battery (SLB-1237) with the SAC-41.
  ● Charging with the camera
  1. Insert the rechargeable battery into the battery
     chamber.

  2. Put the SAC-41 into your power socket and DC
     connection terminal of the camera.

Charging LED

■ Important information about battery (SLB-1237) charging with the SAC-41
  ● If the charging LED of the SAC-41 does not turn on or
    blink after inserting the rechargeable battery, please
    check whether the battery are inserted correctly.
  ● Please check the battery charging status with the
    charging LED of SAC-41.
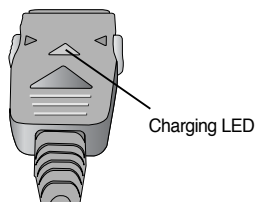
Charging LED

※ If you connect the SAC-41 to camera without inserting the rechargeable battery, the charging
  LED will brink or be off. In this case, insert the battery and connect the SAC-41 again.

Connecting to a Power Source

■ Charging LED of the SAC-41

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.

● A USB cable for transmitting data can't be used for charging the rechargeable battery.

■ Charging time (When the camera is turned off)

   - Using the cradle   : About 150MIN
   - Using the SAC-41   : About 150MIN

INFORMATION

Important information about the rechargeable battery.
● If you charge the battery with the camera power on, the battery can't charge fully.
To charge the battery fully, turn the camera off when you charge it.
● If you insert the fully discharged battery to charge it, do not turn on the camera at the same time. The camera may not be turned on because of the low battery capacity. Charge the battery for over 10 minutes to use the camera.
● Do not use the flash frequently or take a movie clip with the fully discharged 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.
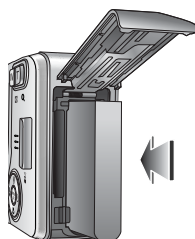
Connecting to a Power Source

Using the battery : If the camera does not turn on after you have inserted battery, please check whether the battery are inserted with the correct polarity(+/-).

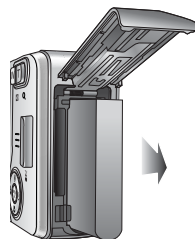1. Open the battery chamber cover by pushing in the direction of the arrow.

2. Insert the battery 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 4 indicators for battery condition that are displayed on the LCD monitor.

Battery indicator	⊏▪▪▪	⊏▪▪	⊏▪	⊏
Battery status	The battery is fully charged	Low battery capacity (Prepare to recharge or use spare battery)	Low battery capacity (Prepare to recharge or use spare battery)	Low battery capacity (Prepare to recharge or use spare battery)

Instructions on how to use the memory card
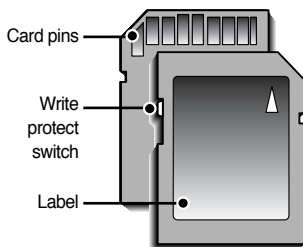
● Be sure to format the memory card (see p.99) if you are using a newly purchased memory for the first time, if it contains data that the camera cannot recognise, or if it contains images captured with a different camera.

● 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 the memory card using this camera.

● Do not use a memory card formatted by another digital camera or memory card reader.

● 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
  : A [CARD FULL! / MEMORY 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 camera status 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 24MB internal memory, the specified shooting capacity will be as follows.
  These figures are approximate as image capacities can be affected by variables such as
  subject matter and memory card type.

Recorded image size		TIFF	S. FINE	FINE	NORMAL	30FPS	15FPS
Still image	5M	1(1)	9(9)	18(19)	27(27)	-	-
	4M	2(1)	12(11)	23(22)	34(33)	-	-
	3M	2(2)	14(15)	28(29)	41(43)	-	-
	2M	4(4)	23(25)	45(46)	64(67)	-	-
	1M	10(8)	47(41)	74(64)	106(99)	-	-
	VGA	24(22)	99(92)	148(135)	185(185)	-	-
* Movie clip	640	-	-	-	-	About 1min 26sec	About 2min 06sec
	320	-	-	-	-	About 3min 25sec	About 4min 38sec
	160	-	-	-	-	About 6min 04sec	About 7min 10sec

※ Figures in the ( ) are shooting capacity taken in the Wide angle mode.
※ The recording times can be changed by the zoom operation.
  The zoom button doesn't use during the movie recording.

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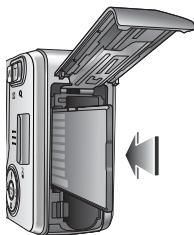
3. To close, push the battery chamber cover until you hear a click. If the memory card does not slide in smoothly, do not attempt to insert it by force. Check the direction of insertion, and then insert it correctly. Do not insert the memory card the wrong way round. Doing so may damage the memory card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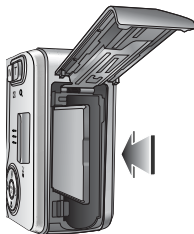
INFORMATION

● When the camera is turned on, inserting or removing the memory card turns the camera power off.

When Using the Camera for the First Time

- Charge the rechargeable battery fully before using the camera for the first time.

- When 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.
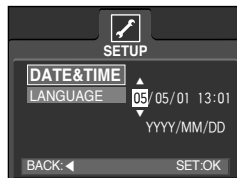
● Setting up the date, time and date type
  1. Select the [DATE&TIME] menu by pressing the UP/DOWN button and press the RIGHT button.
  2. Select the desired sub menu by pressing the UP/ DOWN/ LEFT/ RIGHT button and press the OK button.
     RIGHT button   : selects YEAR/ MONTH/ DAY/ HOUR/ MINUTE/ DATE 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.

```
            ┌──────┐
            │  🔧  │
            │ SETUP │
    ┌───────────────────────┐
    │ DATE&TIME  ▲          │
    │ LANGUAGE  05/05/01 13:01│
    │            ▼          │
    │            YYYY/MM/DD │
    ├───────────────────────┤
    │ BACK:◄        SET:OK  │
    └───────────────────────┘
```

● 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.

```
            ┌──────┐
            │  🔧  │
            │ SETUP │
    ┌───────────────────────┐
    │ DATE&TIME  ENGLISH    │
    │ LANGUAGE   한국어       │
    │            FRANÇAIS   │
    │            DEUTSCH    │
    │            ESPAÑOL    │
    ├───────────────────────┤
    │ BACK:◄        SET:OK  │
    └───────────────────────┘
```

INFORMATION

● You can select 21 languages. These are listed below :
  English, Korean, French, German, Spanish, Italian, S.Chinese, T.Chinese, Japanese, Russian, Portuguese, Dutch, Danish, Swedish, Finnish, Thai, BAHASA(MALAY/ INDONESIAN), Arabic, Hungarian, Czech and Polish.
● 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.
- You can see the wider angle of subject by using the Wide button (p.54). The illustrations of this manual are based on the normal angle mode.

[Image & Full Status]
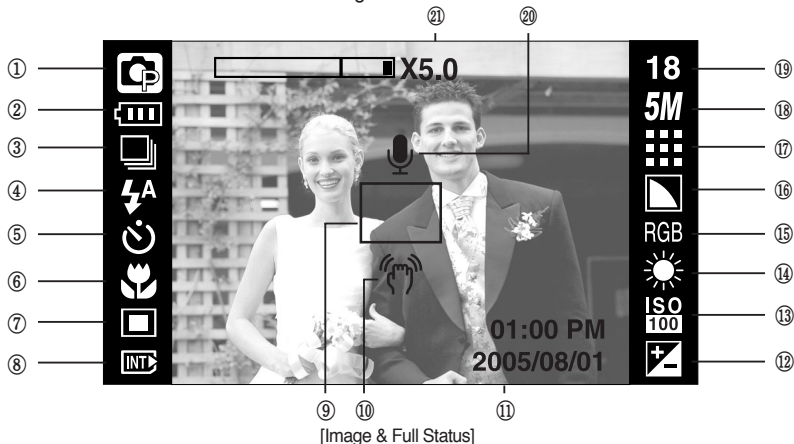
No.	Description	Icons	Page
1	Recording mode		p.58
2	Battery		p.17
3	Continuous shot/ Stabiliser		p.61
4	Flash		p.37
5	Self-timer		p.39
6	Macro		p.35
7	Metering		p.61
8	Card inserted indicator		-
9	Auto focus frame		-
10	Camera shake warning		p.30
11	Date/ Time	2005/08/01 01:00 PM	p.100
12	Exposure compensation		p.52
13	ISO	ISO AUTO ISO 50 ISO 100 ISO 200 ISO 400	p.51
14	White Balance	AWB	p.51
15	RGB	**RGB**	p.50
16	Sharpness		p.62

LCD monitor indicator

17	Image quality / Frame rate	TIFF ▦ ▦ ⠿ 30 15	p.60
18	Image size	*5M 4M 3M 2M 1M* VGA *640 384 320 256 160*	p.59
19	Number of available shots remaining	15	p.19
	Remaining time (Movie clip/ Voice recording)	00:01:30/ 01:00:00	p.19
20	Voice memo/ Mic. off	🎤 🚫	p.29/27
21	Optical/ Digital Zoom bar/ Digital Zoom rate	▭▭▭▭▭▭ X5.0	p.32

Changing the recording mode

■ You can select the desired working mode by the M (mode) button located on the back of the camera and [MODE], [MODE SET] menu. Auto, Program, Movie clip, Scene (Night, Portrait, Children, Landscape, Text, Close-up, Dawn, Sunset, Backlight, Fireworks, Beach & Snow) camera modes are available.

● Selecting the [MODE] menu
  1. Insert the battery (p.17).
  2. Insert the memory card (p.20). As this camera has a 24MB internal memory, you do not need to insert the memory card. If the memory card is not inserted, an image will be stored in the internal memory. If the memory card is inserted, an image will be stored on the memory card.
  3. Close the battery chamber cover.
  4. Press the power button to turn on the camera.
  5. Press the menu button and a menu will display.
  6. Use the Left/ Right button to select the [MODE] menu.
  7. Select [STILL & MOVIE], [FULL] or [CUSTOM] sub menu by pressing the UP/ DOWN button.
   - [STILL & MOVIE] : A still image mode that was selected on the [MODE SET] menu and movie clip mode can be selected.
    Refer to page 58 for more information about using the [MODE SET] menu.
   - [FULL] : Auto, Program, Movie clip and Scene modes can be selected.
   - [CUSTOM] : Modes set as on in the [MODE SET] menu can be selected.
  8. Press the MENU button and the menu will disappear.
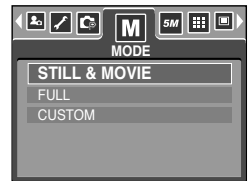
Changing the recording mode

● Changing the recording mode : If the [STILL & MOVIE] menu was selected
   Steps from 1-4 are the same as those for selecting the [MODE] menu.
   5. The recording mode used just before will display.
   6. Press the M (Mode) button located on the back of the camera and the recording mode will change to the movie clip mode.
   7. Press the M (Mode) button again and a still image mode selected on the [MODE SET] menu will be selected.

Pressing the M (Mode) button

[AUTO mode]   [MOVIE CLIP mode]
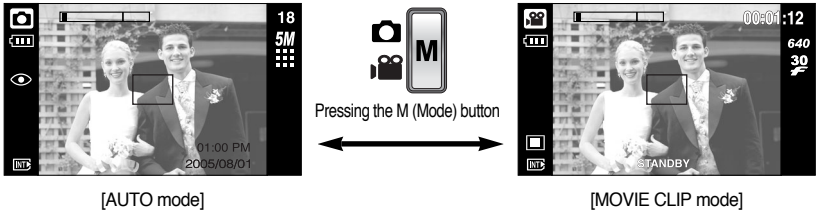
● Changing the recording mode : If the [FULL] menu was selected
   Steps from 1-4 are the same as those for selecting the [MODE] menu.
   5. The recording mode used just before will display.
   6. Press the M (Mode) button located on the back of the camera and the mode selection menu will display.
   7. To select the Auto, Program, Movie clip or Scene modes, press the Left/ Right button.
      To move between the Auto, Manual, Movie clip menu line and Scene menu line, press the Up/ Down button.
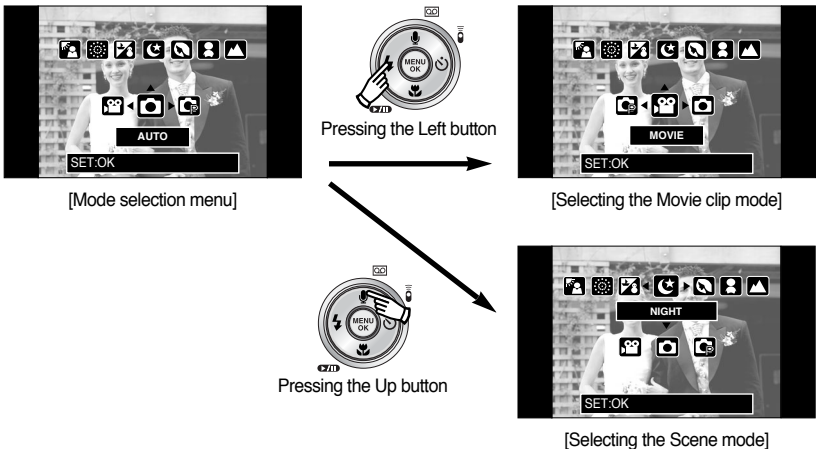
Pressing the Left button

[Mode selection menu]   [Selecting the Movie clip mode]

Pressing the Up button

[Selecting the Scene mode]

   8. Press the M (Mode) button and the mode selection menu will disappear.

Changing the recording mode

● Changing the recording mode : If the [CUSTOM] menu was selected
  Steps from 1-4 are the same as those for selecting the [MODE] menu.
  5. The recording mode used just before will display.
  6. Press the M (Mode) button located on the back of the camera and the mode selection
     menu will display.
  7. You can select modes set as on in the [MODE SET] menu by pressing the Up/ Down/ Left/
     Right buttons. Refer to page 58 for more information about using the [MODE SET] menu.

[Mode selection menu]

Pressing the Left button

[Selecting the Movie clip mode]

Pressing the Up button

[Selecting the Scene mode]
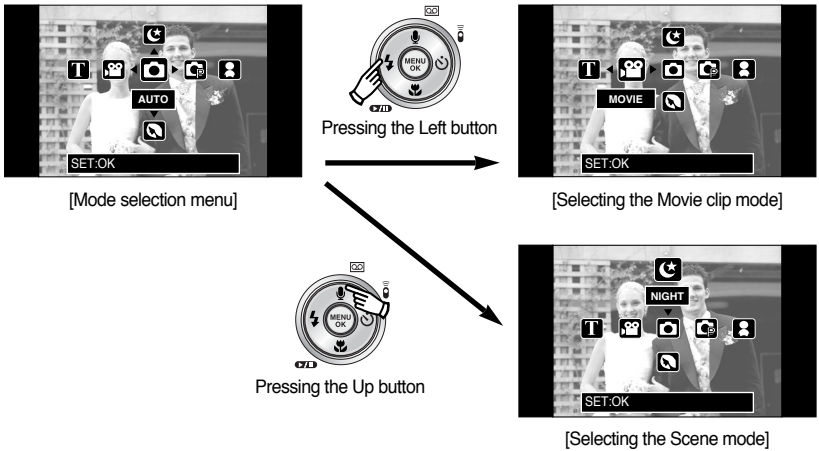
  8. Press the M (Mode) button and the mode selection menu will disappear.

Starting the recording mode

■ How to use the Auto mode

Use this for shooting basic still images.

1. Select the [FULL] sub menu on the [MODE] menu (p.23).
2. Select the Auto mode by pressing the M (Mode) button (p.24).
3. Point the camera towards the subject and compose the image by using the LCD monitor.
4. Press the shutter button to capture an image.

[AUTO 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 less likely to capture an image clearly.

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

■ How to use the Movie clip mode

A movie clip can be recorded for as long as the available recording time of the memory capacity allows.

1. Select the [FULL] sub menu on the [MODE] menu (p.23).
2. Select the Movie clip mode by pressing the M (Mode) button (p.24).
3. Point the camera towards the subject and compose the image by using the LCD monitor.
4. 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.

[MOVIE CLIP mode]

If you wish to stop recording, press the shutter button again.

※ Image size and type are listed below.
- Image size : Normal angle mode - 640X480, 320X240, 160X120 (user selectable)
　　　　　　　Wide angle mode - 640X360, 384X216, 256X144 (user selectable)
- Movie clip file type : MP4 (MPEG-4)
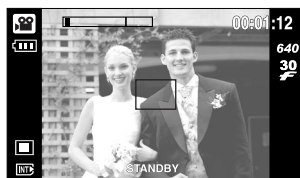
Starting the recording mode

■ Recording the movie clip without voice
You can record the movie clip without voice.
Steps from 1-3 are the same as those for MOVIE CLIP mode.
  4. Press the Up button and the (🎤) icon will display on the LCD monitor.
  5. Press the shutter button and movie clip is recorded for as long as the available recording time without voice.
  6. To stop the recording, press the shutter button again.
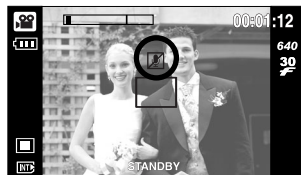
■ Pausing while recording a movie clip (Successive Recording)
This camera allows you to temporarily stop during unwanted scenes, while recording a movie clip. Using this function, you can record your favourite scenes into a movie clip without having to create multiple movie clips.

● Using Successive Recording
Steps from 1-2 are the same as those for MOVIE CLIP mode.
  3. 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.
  4. Press the Pause button(▶/❚❚) to pause recording.

[Successive recording of a movie clip]

  5. Press the Pause button(▶/❚❚) again to resume the recording.
 6. If you wish to stop recording, press the shutter button again.

■ How to use the Program mode
Selecting the automatic mode will configure the camera with optimal settings and you can manually configure various functions.
  1. Select the [FULL] sub menu on the [MODE] menu (p.23).
  2. Select the Program mode by pressing the M (Mode) button (p.24).
  3. Point the camera towards the subject and compose the image by using the LCD monitor.
  4. Press the shutter button to capture an image.

[PROGRAM mode]

《27》
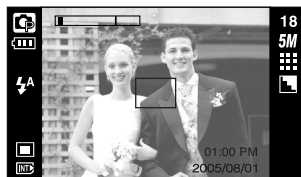
Starting the recording mode

■ How to use the Scene modes
Use the menu to easily configure optimal settings for a variety of shooting situations.
1. Select the [FULL] sub menu on the [MODE] menu (p.23).
2. Select the Scene mode by pressing the M (Mode) button (p.24).
3. Point the camera towards the subject and compose the image by using the LCD monitor.
4. Press the shutter button to capture an image.

[SCENE mode]

　※ The scene modes are listed below.
　　[NIGHT]　　　(🌃)　: Use this for shooting still images at night or in other dark conditions.
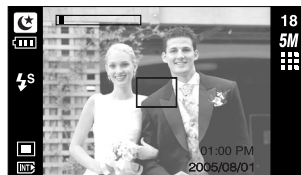
　　[PORTRAIT]　(👤)　: To take a picture of a person.

　　[CHILDREN]　(🧒)　: To take a picture of fast moving objects, for example, children.

　　[LANDSCAPE] (🏔)　: To take pictures of distant scenery.

　　[TEXT]　　　(T)　: Use this mode to shoot a document.

　　[CLOSE UP]　(🌷)　: Close-up shooting for small objects such as plants and insects.

　　[DAWN]　　　(🌄)　: Daybreak scenes.

　　[SUNSET]　　(🌅)　: For taking pictures of sunsets.

　　[BACKLIGHT]　(🔆)　: Portrait without shadows caused by backlight.

　　[FIREWORKS]　(🎆)　: Firework scenes.

　　[BEACH&SNOW](🏖)　: For ocean, lake, beach and snowscape scenes.

Starting the recording mode

■ How to use the 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)

1. In any mode with the exception of the Movie clip, select the VOICE RECORDING mode by pressing the Voice recording button twice.

2. 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]

● Pausing while recording a voice recording

This camera allows you to temporarily stop during unwanted recording, while recording a voice. Using this function, you can record your favorite voices into a voice recording file without having to create multiple voice recording files.

1. Press the shutter button and voice is recorded for as long as the available recording time. Voice will still be recorded if the shutter button is released.

2. Press the Pause button(▶/❚❚) to pause recording.

3. Press the Pause button(▶/❚❚) again to resume the recording.

4. If you wish to stop recording, press the shutter button again.
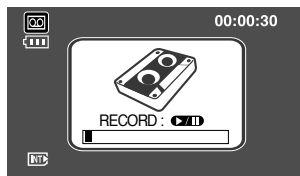
[Pausing the voice recording]

INFORMATION

- A distance of 40cm between you and the camera (microphone) is the best distance to record sound.
- If the camera power is turned off while the voice recording is paused, the voice recording is cancelled.

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.
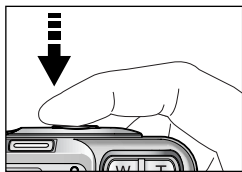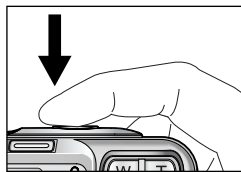
[Lightly press the shutter button]   [Press the shutter button]

■ 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 28),
                                Fill-in flash (see page 37), Spot metering (see page 61), or
                                Exposure compensation (see page 52).
■ Avoid obstructing the lens or the flash when you capture an image.
■ 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.

Using the camera buttons to adjust the camera

■ The recording mode function can be set up by using the camera buttons.

POWER button   : When the camera is turned on, the power lamp turns on and off.

● 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 98 for more information about the auto power off function.
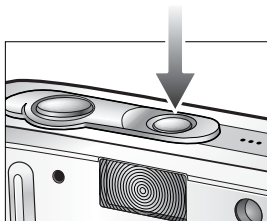
SHUTTER button

● Used for taking an image or recording voice in the recording 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 for 10 seconds.
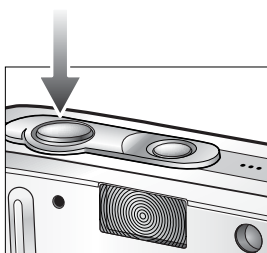
ZOOM W / T button

● If the menu is not displayed, this button works as the OPTICAL ZOOM or DIGITAL ZOOM button.

ZOOM W / T button

- This camera has a 4.8X optical zoom and a 5X digital zoom function. Using both will offer a total zoom ratio of 24X.
- ※ The illustrations as shown below are for your information about using the W/ T button.
  The pre-view images are can be different with the illustrations.

● 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 (4.8X) optical zoom is selected, pressing the ZOOM T button activates the digital zoom software. Releasing ZOOM T button stops the digital zoom at the required setting. Once the maximum digital zoom (5X) is achieved, pressing the ZOOM T button will have no effect.

Pressing the ZOOM T button →   Pressing the ZOOM T button →

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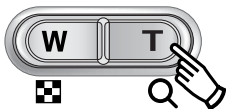
● WIDE Zoom

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.

Pressing the ZOOM W button →   Pressing the ZOOM W button →

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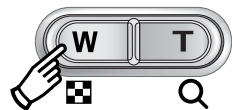
Digital zoom WIDE : When the digital zoom is in operation, pressing the ZOOM W button will reduce the digital zooming in steps. Releasing ZOOM W button stops digital zooming. Pressing the ZOOM W button will reduce the digital zoom and then it will continue to reduce the optical zoom until the minimum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

Optical zoom

X5.0

Digital zoom

Pressing the ZOOM W button →   Pressing the ZOOM W button →

[Digital zoom 5.0X]   [TELE zoom]   [WIDE zoom]
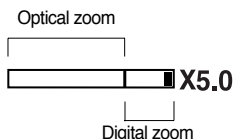
ZOOM W / T button

INFORMATION

● Images taken using the digital zoom may take a little longer for the camera to process. Allow time for this to take place.
● You may notice a decrease in image quality when using the digital zoom.
● To view more clear digital zoom image, press the shutter button halfway at the maximum (4.8X) optical zoom position and press the zoom T button again.
● The digital zoom can't be activated in the [NIGHT], [CHILDREN], [CLOSE UP], [TEXT] and [FIREWORKS] scene modes.
● Take care not to press the lens, lens cover and camera by force. This may cause the camera malfunction.

Voice recording(◌◌) / 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 recording or voice memo button. You can record your voice or add your voice-over to a stored still image. Refer to page 29 for more information about the voice recording.

● Recording a voice memo
  1. Press the M (Mode) button to select a Recording mode with the exception of Movie clip mode.
  2. Press the Voice memo (🎤) button. If the voice memo indicator is displayed on the LCD monitor, the setting is completed.

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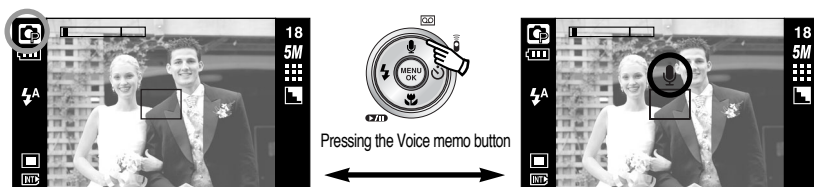
  3. Press the shutter button and take a picture. The picture is stored on the memory.
  4. Voice memo will be recorded for ten seconds from the moment the picture is stored. In the middle of the voice recording, pressing the shutter button will stop the voice memo.
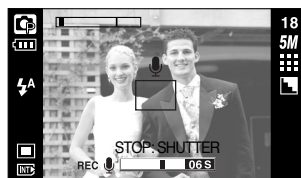
[Recording Voice Memo]

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. The distance ranges are shown below. Press the Macro button until the desired macro mode indicator displays on the LCD monitor.
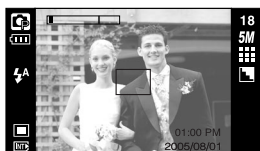
[Auto focus - No icon]
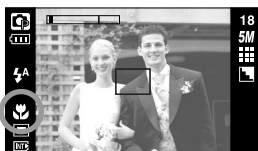
[Macro (🌷)]

[Auto macro (🌷)]

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

Mode	Auto (▢)		Program (▣)	
Focus Type	Auto macro (🌷)	Normal	Macro (🌷)	Normal
Focus range	W : 5~Infinity T : 14~Infinity	W : 80~Infinity T : 80~Infinity	W : 2~80 T : 14~80	W : 80~Infinity T : 80~Infinity

※ See the next page for the available focusing method, by recording mode.

INFORMATION

● When the macro mode is selected, it is possible that camera shake will occur. Take care not to shake the camera.

● When you take a picture within 30cm in the Macro mode, select the FLASH OFF mode.

Macro(🌷) / Down button

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

Mode	🎥	📷	📷ₚ
Normal	O	O	O
Macro	O	X	O
Auto macro	X	O	X

Mode	SCENE										
	🌃	🌑	👤	🏔	🅣	🌺	🎆	🍃	🏞	🎇	📷
Normal	O	O	O	∞	X	X	∞	∞	O	∞	O
Macro	X	X	X	X	X	O	X	X	X	X	X
Auto macro	X	X	X	X	O	X	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 is 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.

《36》

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. Press the M (Mode) button to select a Recording
     mode with the exception of Movie clip mode (p.24).
  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.
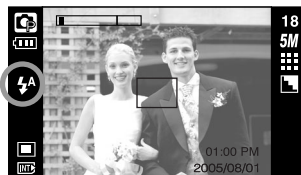
[Selecting the Auto flash]

● Flash range   (Unit : m)

ISO	Normal		Macro		Auto macro	
	WIDE	TELE	WIDE	TELE	WIDE	TELE
AUTO	0.8 ~ 3.0	0.8 ~ 2.0	0.3 ~ 0.8	0.3 ~ 0.8	0.3 ~ 3.0	0.3 ~ 2.0

INFORMATION

● If you press the shutter button after selecting the Auto, Fill-in, Slow sychro flash, the first
  flash fires to check the shooting condition (Flash range and Power ratio of flash).
  Do not move until the second flash fires.
● Using the flash frequently will reduce the life of the battery.
● Under normal operating conditions the charging time for the flash is normally within 5
  seconds. If the battery is weak, the charging time will be longer.
● During the continuous shot, AEB and 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.

# Flash (⚡) / Left button

● Flash mode indicator

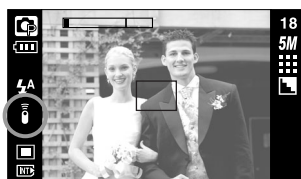| Menu tab	Flash mode	Description
⚡A	Auto flash	If the subject or background is dark, the camera flash will operate automatically.
👁	Auto & Red eye reduction	If a subject or background is dark, the camera flash will work automatically and will reduce the red-eye effect by using the red-eye reduction 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. When you take an image in a condition with poor light, the camera shake warning indicator (〔m〕) will display on the LCD monitor. We recommend using a tripod for this function.
⚡⊘	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 (〔m〕) will display on the LCD monitor. We recommend using a tripod for this function.

● Available flash mode, by recording mode

	🎥	📷	🇬	🌙	🔍	👤	🏔	T	🌊	🏖	🍴	🏞	🎆	📷
⚡A	X	X	O	X	X	X	X	X	X	X	X	X	X	O
👁	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	X

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. Press the M (Mode) button to select a still image mode or movie clip mode (p.24).
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.
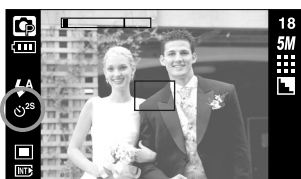
[Selecting the 2 SEC self-timer]   [Selecting the remote control]

- 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 canceled.
- 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, Mode button, Play mode button and Self-timer button 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.
⟳ᶜ	Double	A picture will be taken after about 10 seconds and 2 seconds later a second picture will be taken.
📱	Remote	You can take a picture by remote control instead of using the shutter button of the camera.

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# Self-timer(⟳) / Remote (🔲) / Right button

● Remote control range

When you take a picture by using the remote control, refer to the illustrations shown alongside about the remote control range.

[Shutter button on the remote control]

4m   30°   30°

4m

5m
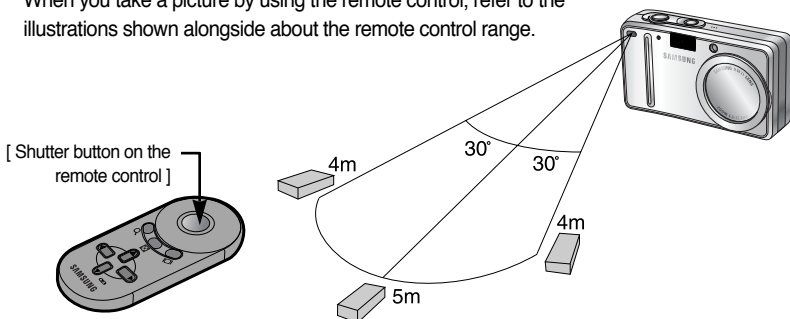
● Replacing battery for the remote control

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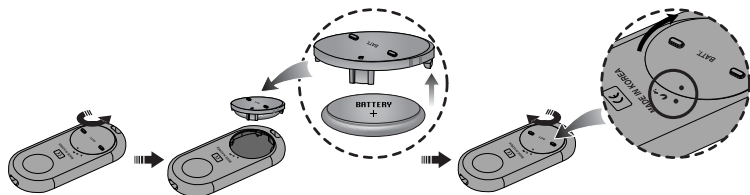
INFORMATION

● When taking a picture using the self-timer, the self-timer lamp works as follows:

2 second self-timer setting : The self-timer lamp blinks at 0.25 second interval for 2 seconds.

10 second self-timer setting : The self-timer lamp blinks at 1 second interval for the first 8 seconds. It blinks at 0.25 second interval for the remaining 2 seconds.

● If you operate the Self-timer button and Play mode button during the self-timer operation, the self-timer function is canceled.
● Use a tripod to prevent the camera from shaking.
● In Movie Clip mode, only the 10s self-timer and remote will work.

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
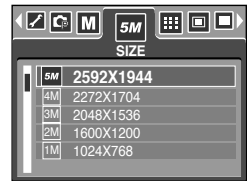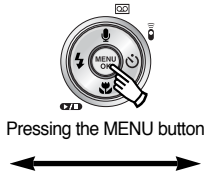
[Menu off]   [Menu on]

- 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 (Mode) button

- You can turn on the camera with this button.
- You can select the desired recording mode. The selectable recording modes are different from what you selected sub menu in the [MODE] menu.
  - [STILL & MOVIE] : A recording mode selected in the [MODE SET] menu, Movie clip mode
  - [FULL]   : Auto, Movie clip, Program, Scene modes
  - [CUSTOM]   : Modes set as on in the [MODE SET] menu

● How to use the mode button : In case of [STILL & MOVIE] sub menu and Auto mode

[Pressing the M button]
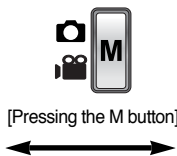
[Auto mode]   [Movie clip mode]

M (Mode) button

● How to use the mode button : In case of [FULL] sub menu and Auto mode
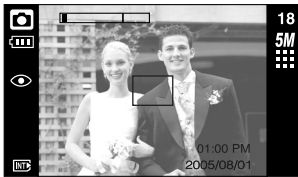
[Auto mode]

[Pressing the Mode button]
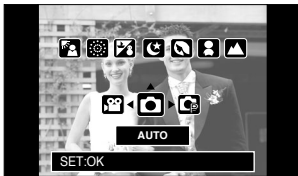
[Mode selection menu]

[Pressing the Up button]
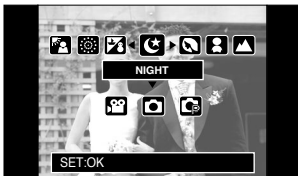
[Scene mode]

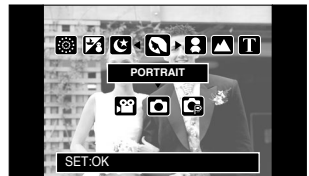
[Pressing the Right button]
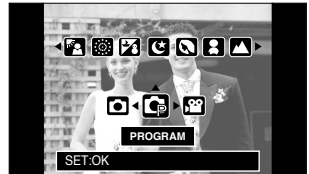
[Program mode]

[Pressing the Left button]
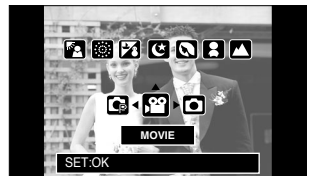
[Movie cliip mode]

[Pressing the Left/ Right button]

[Selecting a scene mode]

※ Press the Mode button and the mode selection menu will disappear.

M (Mode) button

● How to use the mode button : In case of [CUSTOM] sub menu and Auto mode

[Auto mode]

※ The illustrated images and modes are for your information.
They can be changed as the [MODE SET] menu setting.

[Pressing the Mode button]

[Mode selection menu]

[Pressing the Up button]

[Night scene mode]

[Pressing the Down button]

[Portrait scene mode]

[Pressing the Right button]
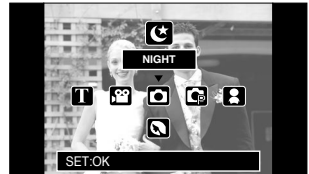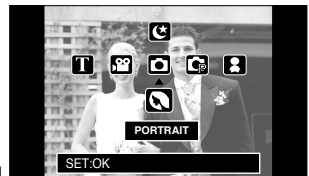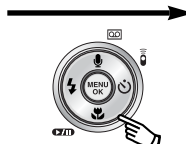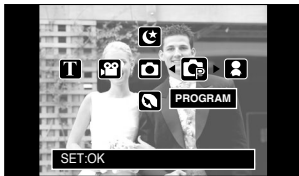
[Program mode]

※ Press the Mode button and the mode selection menu will disappear.

E (Effect) button

■ It is possible to add special effects to your images by using this button
■ Still image mode   : You can select the colour, focus, composite and frame menus.
   Movie clip mode   : You can select the colour and stabiliser menus.

■ Available Effects, by recording mode (O : Selectable X : Not selectable)

|	📹	📷	📷	🌙	👤	🏔	🌷
🎨	O	O	O	O	O	O	O
🔲	X	X	O	X	X	X	X
🖼	X	X	O	X	X	X	X
🅰	X	X	O	X	X	X	X
💥	O	X	X	X	X	X	X

※ This button will not operate in the Voice recording mode and some scene modes (Night, Text, Sunset, Dawn, Backlight, Fireworks and Beach & Snow)
   If a special effect is selected, the rest special effect (FOCUS, COMP. FRAME) functions set before are cancelled automatically.

※ If you select a TIFF file format, only the COLOR menu can be selected.

■ Even if the camera is turned off, the special effect setting will be preserved.
   To cancel the special effect, select the [OFF] sub menu of each menu.

Special Effect : Colour

■ By using the camera's digital processor, it is possible to add special effects to your images
   1. Press the E button in the still image mode or Movie clip mode.
   2. Select the COLOR menu by pressing the Left/ Right button.
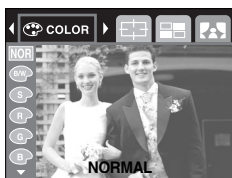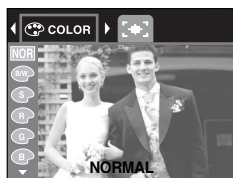
[Still image mode]   [Movie clip mode]

Special Effect : Colour

3. Select a desired sub menu by pressing the Up/Down button and press the OK button.

NOR : No effect is added to the image

B/W : Captured images will be stored in black and white.

S : Captured images will be stored in a sepia tone (a gradient of yellowish brown colours).

R : Captured images will be stored in a red tone.

G : Captured images will be stored in a green tone.

B : Captured images will be stored in a blue tone.

N : Save the image in negative mode.

4. Press the shutter button to capture an image.

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. Press the E button in the program mode.
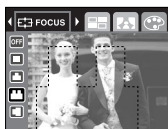2. Select the FOCUS menu by pressing the Left/ Right button.
3. Select a desired sub menu by pressing the Up/ Down button and press the OK button.
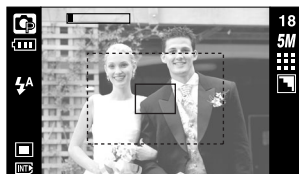
[Range 1] [Range 2] [Range 3] [Range 4]

4. The preset focus frame will appear. Press the shutter button to capture an image

Special Effect : Composite shooting

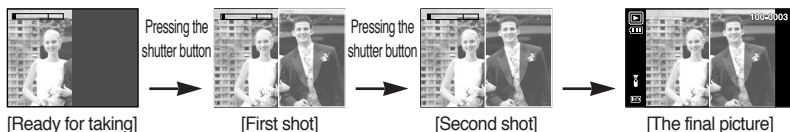■ You can combine 2 ~ 4 different shots in a still image.
   1. Press the E button in the program mode.
   2. Select the COMP. menu by pressing the Left/ Right button.
   3. Select a desired sub menu by pressing the Up/ Down
      button and press the OK button.

   - [OFF] : cancels the composite shooting
   - [ ] : 2 different shots are combined in a still image.
   - [ ] : 3 different shots are combined in a still image.
   - [ ] : 4 different shots are combined in a still image.
   - [ ] : 2 different panorama shots are combined in a still image.

   4. The number of frames you selected in step 3 is displayed on the LCD monitor.
      Press the shutter button to start the composite shooting

   ※ Selecting 2 composite shooting

   | | Pressing the shutter button | | Pressing the shutter button | | |
   [Ready for taking]   [First shot]   [Second shot]   [The final picture]

   5. After taking the last shot, the image will be saved.

※ You can use the flash button, self-timer button, macro button, voice memo button and the
   Zoom W/T button during the composite shooting.
※ If you press the camera buttons (Play mode button, M button, E button, Menu button and
   Wide button) during the composite shots or press the voice recording button twice, each
   mode of the camera buttons is executed. The images captured before will be deleted.
※ The voice memo will start after taking the last composite shooting.

Special Effect : Composite shooting

● Changing a part of composite shot before taking the last shot

Before taking the last composite shot, you can change a part of composite shot.

1. During the composite shots, press the +/- button.
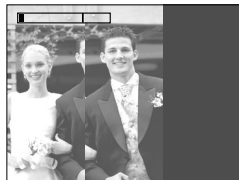2. A previous image will be deleted and new frame will display.

If there is an image taken before, press the +/- button again and a previous image will be deleted again.

[Before taking the 3rd shot]

Pressing the +/- button

[Moving backward to the 2nd shot]

3. Press the shutter button to capture a new image.
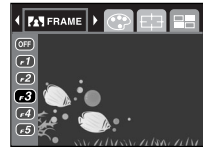
Special Effect : Photo Frame

■ You can add 5 types of frame-like borders to a still image you want to capture.

1. Press the E button in the program mode.
2. Select the FRAME menu by pressing the Left/ Right button.
3. Select a desired sub menu by pressing the Up/ Down button and press the OK button.

- OFF : The photo frame will not be added.
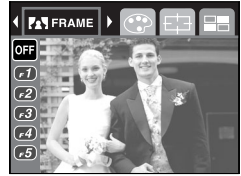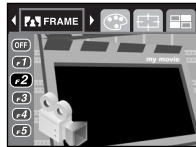
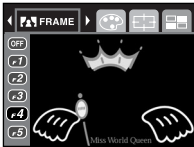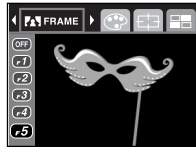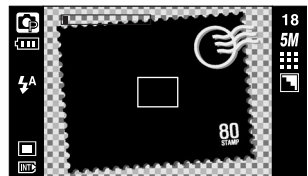[Frame 1]   [Frame 2]   [Frame 3]

[Frame 4]   [Frame 5]

4. The photo frame will appear.
   Press the shutter button to capture an image

Movie Clip frame stabiliser

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

● How to use this function
  1. Press the E button in the Movie clip mode.
  2. Select the STABIL. menu by pressing the Left/ Right button.
  3. Select a desired sub menu by pressing the Up/ Down button and press the OK button.
    - OFF : Movie clip frame stabiliser function becomes disabled.
    - 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.

INFORMATION

● When you select the ON sub menu, the movie clip frame range will be narrow depending on the movie clip size.

+/- 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, 50, 100, 200, 400	📷
WHITE BALANCE	AUTO, DAYLIGHT, CLOUDY, FLUORESCENT H, FLUORESCENT L, TUNGSTEN, CUSTOM.	📷 🎥
Exposure compensation	-2.0 ~ 0.0 ~ +2.0 (0.3EV 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).
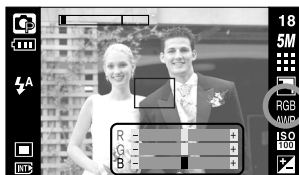   The RGB menu bar will appear as shown.
  2. Use the UP/ DOWN/ LEFT and RIGHT buttons to select the desired RGB value.
     - Up/ Down Button : Navigates between R, G, and B icons.
     - Left/ Right Button : Changes value of each icon.
  3. When you press the +/- button again, the value you set will 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.
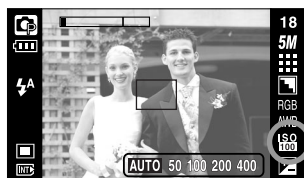
● Selecting an ISO Sensitivity
   1. Press the +/- button, and then use the UP and DOWN buttons to select the ISO icon(![ISO AUTO]). The ISO menu bar will appear as shown.
   2. Use the LEFT and RIGHT buttons to select the desired ISO sensitivity value.
      - AUTO : The camera's sensitivity is automatically changed by variables such as lighting value or subject brightness.
   - 50, 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.

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+/- 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.
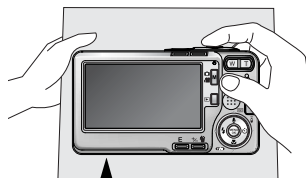
[White paper]

■ 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.
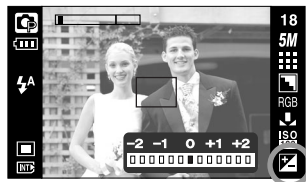
+/- button

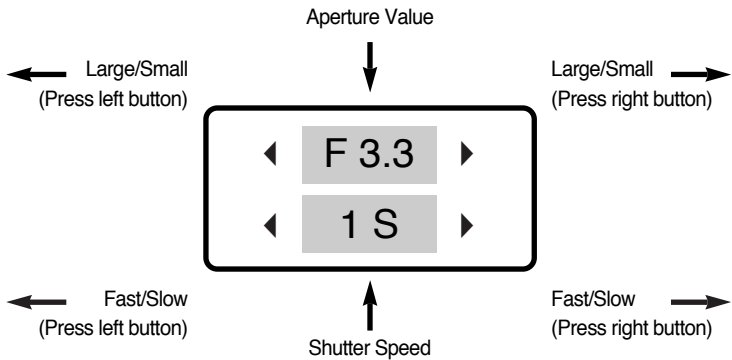- Long Time shutter : This camera automatically adjusts the shutter speed and aperture values to the shooting environment. However, in NIGHT SCENE mode, you can set the shutter speed and aperture values to your preference.
- Adjusting the shutter speed and aperture values
  1. Select the [NIGHT] scene mode. (p.24)
  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 Aperture/ Shutter speed
     Left/ Right Button : Change the value. Available aperture 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.
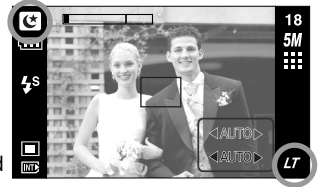
- Aperture values and shutter speeds changed by zoom scale are listed below.

  Supported Aperture Values : AUTO, WIDE : F3.3 ~ F5.4, TELE : F4.8 ~ F9.3
  Supported Shutter Speeds : AUTO, 1 ~ 16S

Aperture Value

Large/Small
(Press left button)

Large/Small
(Press right button)

◀   F 3.3   ▶

◀   1 S   ▶

Fast/Slow
(Press left button)

Fast/Slow
(Press right button)

Shutter Speed

Wide button

■ You can select the wide angle mode or normal angle mode by using this button. When you select the wide angle mode the LCD monitor size will change from 4:3 to 16:9 screen size.

[Normal angle mode]

Pressing the Wide button
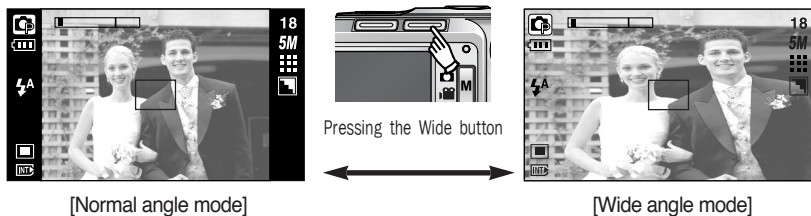
[Wide angle mode]

※ When you select the wide angle mode, sub menus of [SIZE] menu are changed. For detail sub menu, refer to below table.

Size	Normal angle mode	Wide angle mode
5M	2592 × 1944	2944 × 1656
4M	2272 × 1704	2688 × 1512
3M	2048 × 1536	2304 × 1296
2M	1600 × 1200	1792 × 1008
1M	1024 × 768	1280 × 720
VGA	640 × 480	768 × 432

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.

■ 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
M	MODE	STILL&MOVIE		▢ ◉ ⊡ ◐ ◎ ◙ ▣ ⛰ �🅣 ⬚ ⚏ ⊟ ⬛ ⊞ 🎆 🖼	p.57
		FULL			
		CUSTOM			
◉	MODE SET	AUTO	PROGRAM	▢ ◉ ⊡ ◐ ◎ ◙ ▣ ⛰ ⛰ ⬚ ⚏ ⊟ ⬛ ⊞ 🎆 🖼	p.58
		MOVIE	NIGHT		
		PORTRAIT	CHILDREN		
		LANDSCAPE	TEXT		
		CLOSE UP	DAWN		
		SUNSET	BACKLIGHT		
		FIREWORKS	BEACH&SNOW		
5M	SIZE (Still image) (Normal angle)	2592X1944	2272X1704	▢ ◉ ◐ ◎ ▣ ⛰ ⛰ ⬚ ⚏ ⊟ ⬛ ⊞ 🖼	p.59
		2048X1536	1600X1200		
		1024X768	640X480		
	SIZE (Still image) (Wide angle)	2944X1656	2688X1512	▢ ◉ ◐ ◎ ▣ ⛰ ⛰ ⬚ ⚏ ⊟ ⬛ ⊞ 🖼	
		2304X1296	1792X1008		
		1280X720	768X432		

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Using the LCD monitor to adjust the camera settings

Menu tab	Main menu	Sub menu		Camera working mode	Page
640	SIZE (Movie clip) (Normal angle mode)	640X480	320X240	🎥	p.59
		160X120	-		
	SIZE (Movie clip) (Wide angle mode)	640X360	384X216	🎥	
		256X144			
▦	QUALITY	TIFF	SUPER FINE	📷 📷 📷 📷 🔅 📷 📷 📷 📷 📷 📷 📷 📷 📷	p.60
		FINE	NORMAL		
30	FRAME RATE	30 FPS	15 FPS	🎥	
▣	METERING	MULTI	CENTER-WEIGHTED	📷 🎥	p.61
		SPOT	-		
▢	SHOOTING	SINGLE	CONTINUOUS	📷	p.61
		AEB	-		
◩	SHARPNESS	SOFT	NORMAL	📷	p.62
		VIVID	-		
▨	OSD INFORMATION	FULL OSD	BASIC OSD	📷 📷 🎥 📷 📷 🔅 📷 📷 📷 📷 📷 📷 📷 📷 📷 📷	p.62
		SAVE MODE	-		
🔧My	SAVE (MYSET)	MYSET1	MYSET2	📷	p.63
		MYSET3	-		
🔧My	LOAD (MYSET)	MYSET1	MYSET2	📷	
		MYSET3	-		

※ Menus are subject to change without prior notice.
※ The TIFF file format can't be selected in the Auto mode.

《56》

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 ([OO]).
2. Use the LEFT and RIGHT buttons to navigate through the menus.

Press the LEFT or RIGHT button.

Press the LEFT or RIGHT button.

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

Press the UP or DOWN button.

Press the UP or DOWN button.

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 working mode by the M (Mode) button located on the back of the camera and [MODE] menu. Auto, Program, Movie clip, Scene (Night, Portrait, Children, Landscape, Text, Close-up, Dawn, Sunset, Backlight, Fireworks, Beach & Snow) camera modes are available.

- [STILL & MOVIE] : A still image mode that was selected on the [MODE SET] menu and movie clip mode can be selected.
- [FULL] : Auto, Program, Movie clip and Scene modes can be selected.
- [CUSTOM] : You can select modes set as on in the [MODE SET] menu

《57》
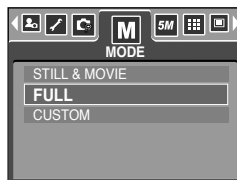
Mode set

■ You can select the desired recording mode.
■ If you select the [CUSTOM] sub menu in the
  [MODE] menu, you can select modes set as on in this menu
  by pressing the M button.
  - The maximum custom modes you can select are 7 and the
    minimum custom modes are 3.
  - If you select over 7 custom modes, the menus are set as
    off automatically from the lower placed sub menu.


```
                    MODE SET
  ▮ 🄰 AUTO          ON
    🄲 PROGRAM       ON
    🄼 MOVIE         ON
    🄲 NIGHT         ON
    🄺 PORTRAIT      ON
  EXIT:MENU        MOVE: ↕
```

|		
[AUTO]	:	For shooting basic still image
[PROGRAM]	:	You can manually configure all functions.
[MOVIE]	:	For taking a movie clip
[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.
[TEXT]	:	Use this mode to shoot a document.
[CLOSE UP]	:	Close-up shooting for small objects such as plants and insects.
[DAWN]	:	Daybreak scenes.
[SUNSET]	:	For taking pictures of sunsets.
[BACKLIGHT]	:	Portrait without shadows caused by backlight.
[FIREWORKS]	:	Firework scenes.
[BEACH&SNOW]	:	For ocean, lake, beach and snowscape scenes.

INFORMATION

● When [NIGHT], [LANDSCAPE], [CLOSE UP], [TEXT], [SUNSET], [DAWN] and
  [FIREWORKS] scene mode are selected, it is possible that camera shake will occur. In
  this case, you should use a tripod.

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Size

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

Mode	Still image mode						Movie clip mode		
Icon	5M	4M	3M	2M	1M	VGA	640	320	120
Size (Normal angle)	2592X 1944	2272X 1704	2048X 1536	1600X 1200	1024X 768	640X 480	640X 480	320X 240	160X 120
Size (Wide angle)	2944X 1656	2688X 1512	2304X 1296	1792X 1008	1280X 720	768X 432	640X 360	384X 216	256X 144
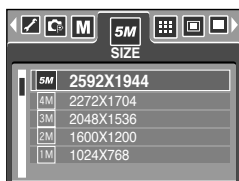
[STILL IMAGE mode]

[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.
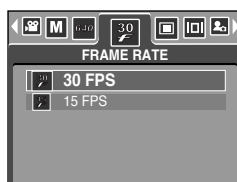
Quality / Frame rate

■ 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	TIFF	▦	⸬	⸫	30	15
Sub menu	TIFF	SUPER FINE	FINE	NORMAL	30FPS	15FPS
File Format	tif	jpeg	jpeg	jpeg	mp4	mp4

[STILL IMAGE mode]

[MOVIE CLIP mode]

INFORMATION

- The TIFF file can't be rotated, resized and trimmed.
- The TIFF file format is for professionals and provides the best quality.
  However, large file size reduces number of available pictures to take and increases
  saving time to the memory card.
- [PROCESSING!] message is displayed while saving a TIFF file to the memory card.
- The TIFF file format can't be selected in the Auto mode.
- 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.