SAMSUNG
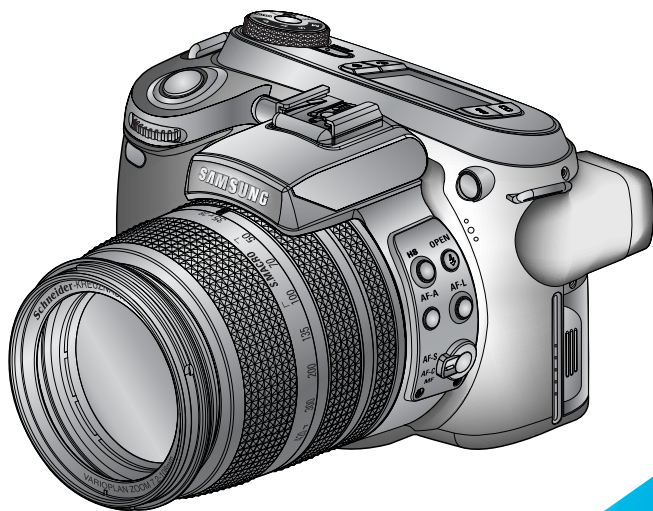
Pro 815
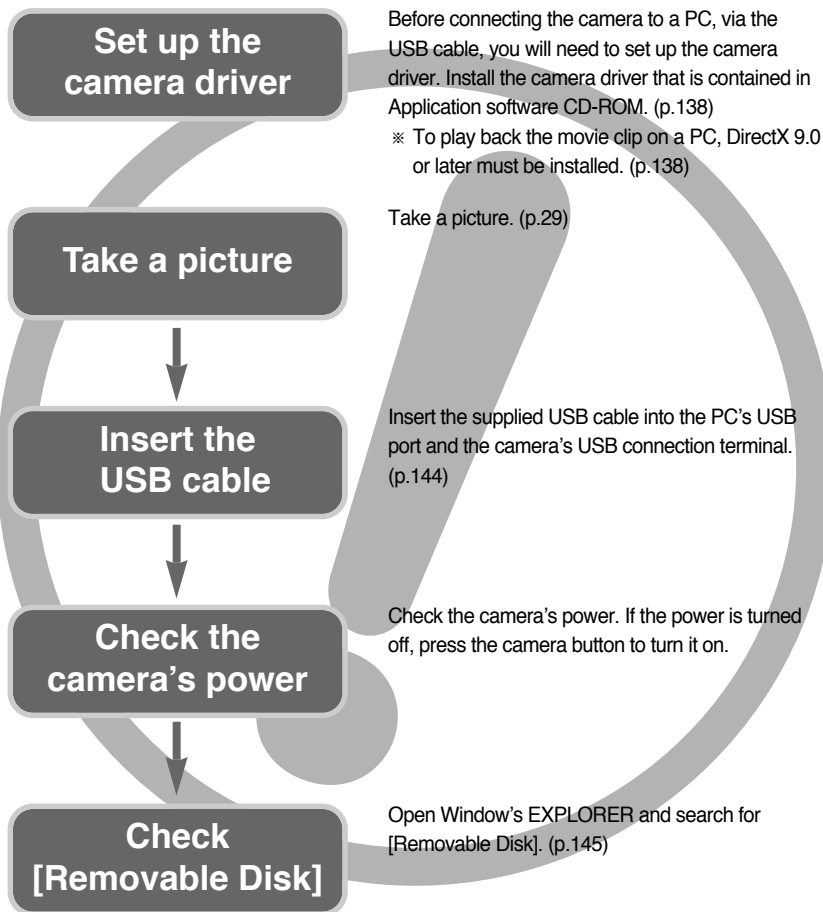
User's Manual

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.

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.138)

※ To play back the movie clip on a PC, DirectX 9.0 or later must be installed. (p.138)

Take a picture

Take a picture. (p.29)

Insert the USB cable

Insert the supplied USB cable into the PC's USB port and the camera's USB connection terminal. (p.144)

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.145)

● 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

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.

✴ CompactFlash logo is registered trademarks of SanDisk Corporation.

✴ 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

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.

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 (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.

DANGER

Warning

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

WARNING

Caution

■ Leaking, overheating, or burst batteries could result in fire or injury.
  • Use batteries with the correct specification for the camera.
  • Do not short circuit, heat or dispose of battery 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.
■ If you are using the AC power adaptor be careful when moving the camera.
  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.
■ The Lens is attached to the camera body. Do not drop or press the lens by force.
  It may cause a camera malfunction.
■ Do not pull the lens by hand or do not rotate the zoom ring quickly. It may cause a camera
  malfunction. Please be careful when using the lens.
■ Do not extract the external flash from the camera by force. It may cause damage to the top of
  the camera.

System chart

Please check that you have the correct contents before using this product. To buy the optional equipment, contact your nearest Samsung dealer or Samsung service centre.

< Included items >

Camera case   Remote control   User manual, Warranty card   Camera strap   Software (p.137)

DPOF compatible printer (see p.103)

CF (CompactFlash) card (p.20)

Flash plate   +   Exclusive bounce flash

Lens adapter   Lens hood   Lens cap

AC adapter   +   AC cord   +   Battery charger   +   Rechargeable battery (SLB-1974)

《8》
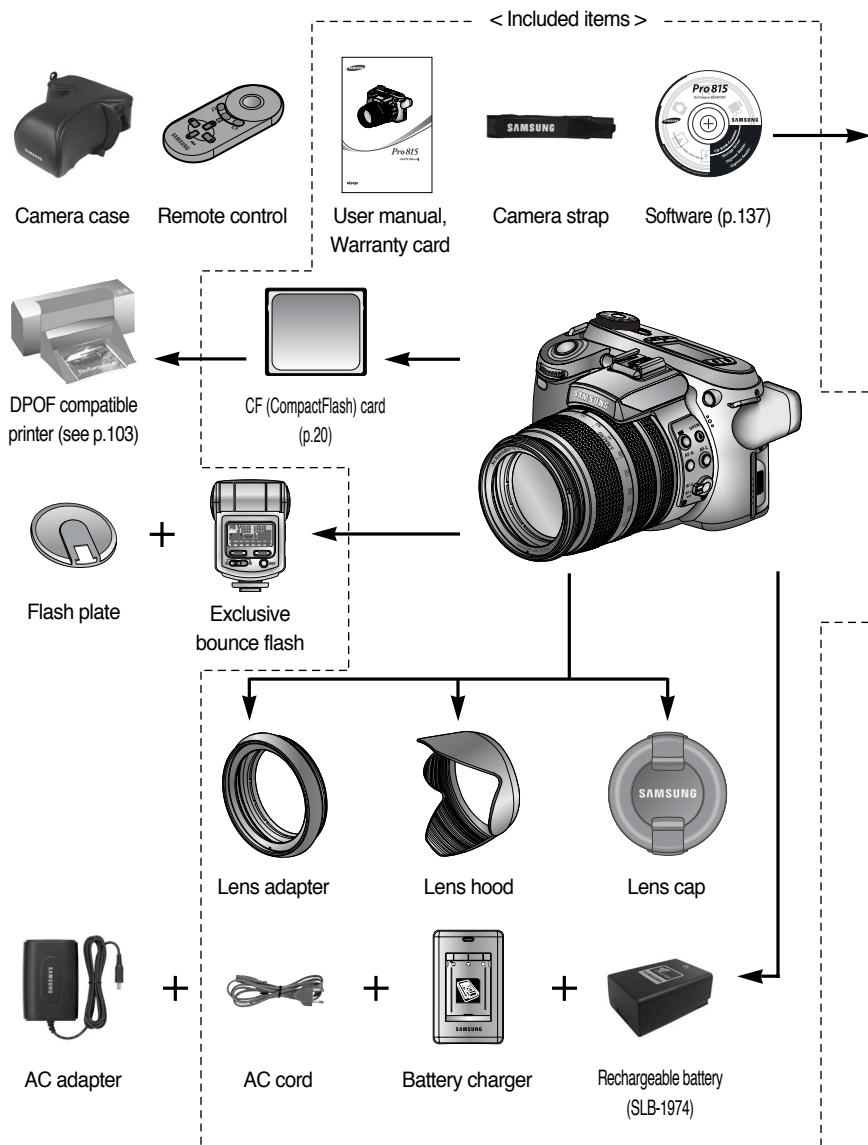
System chart
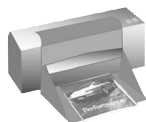
Computer (p.144)   PictBridge compatible
                      printer (see p.105)

USB cable   AV cable

External monitor
Yellow cable - Video,
White/ Red colour - Stereo
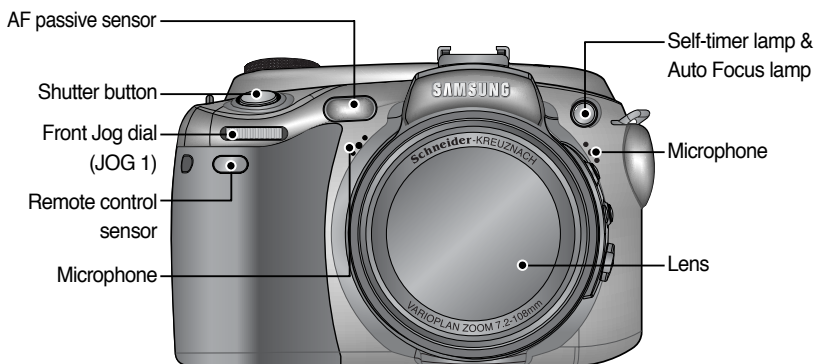voice (see p.121)

System Requirements

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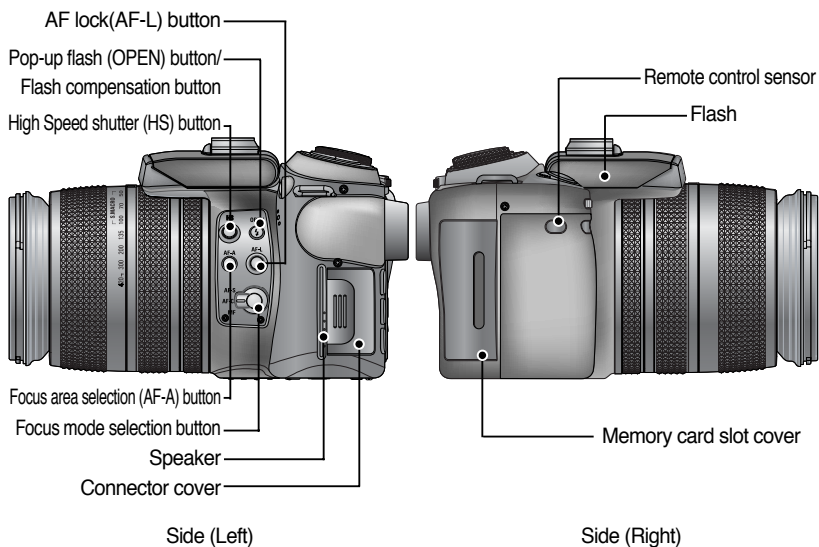- DirectX 9.0 or later

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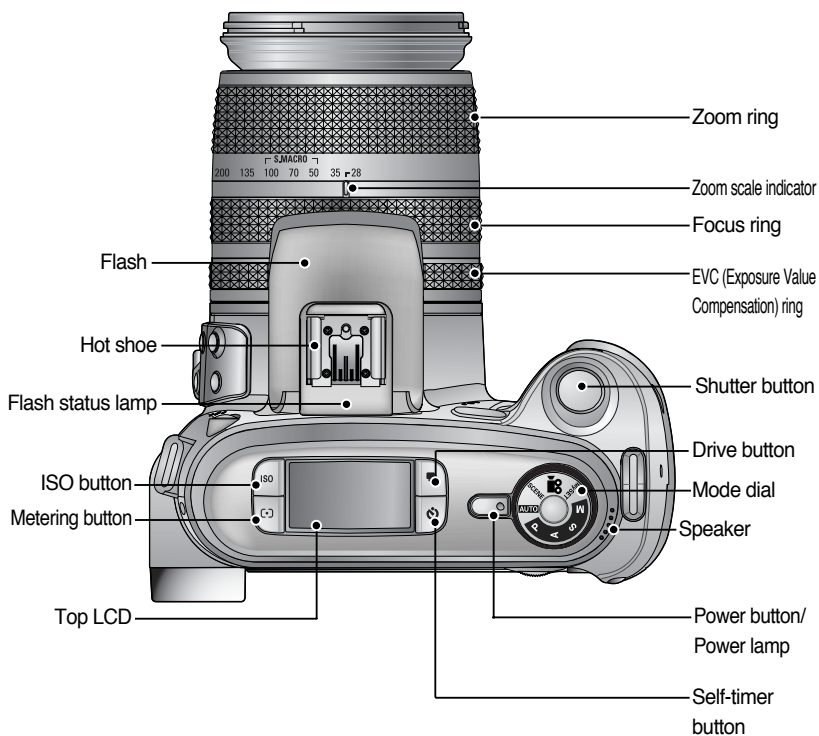- CD-ROM drive

Identification of features

Front

AF passive sensor

Shutter button

Front Jog dial (JOG 1)

Remote control sensor

Microphone

Self-timer lamp & Auto Focus lamp

Microphone

Lens

Side (Left/ Right)

AF lock(AF-L) button

Pop-up flash (OPEN) button/ Flash compensation button

High Speed shutter (HS) button

Focus area selection (AF-A) button

Focus mode selection button

Speaker

Connector cover

Remote control sensor

Flash

Memory card slot cover

Side (Left)

Side (Right)

Identification of features

Top

Zoom ring

Zoom scale indicator

Focus ring

EVC (Exposure Value Compensation) ring

Flash

Shutter button

Hot shoe

Flash status lamp

Drive button

ISO button

Mode dial

Metering button

Speaker

Top LCD

Power button/ Power lamp

Self-timer button

Hot shoe cap

Identification of features

Back

Rear Jog dial (JOG 2)

AE Lock (AE-L) button/
Thumbnail button

Back LCD

Strap eyelet

Strap eyelet

Finder LCD

Card in use lamp

Diopter adjustment ring

LCD button

Digital zoom/
Enlargement button

Display/ Information button

Memory card slot cover

Connector cover

5-function button

SCENE/
Delete button

Play mode button
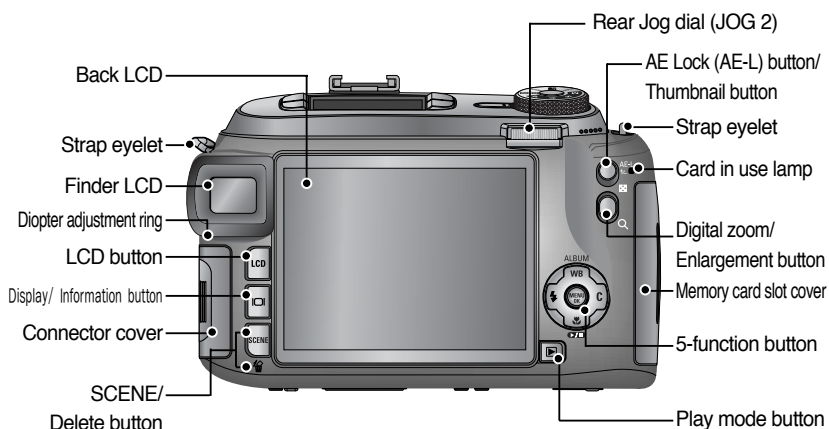
Connectors	Memory card slot

AV port

USB connector port

DC-in port

Memory card slot
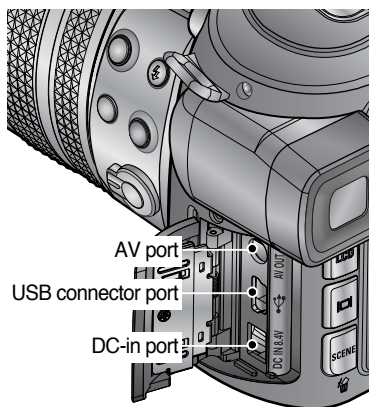
Memory card
eject lever
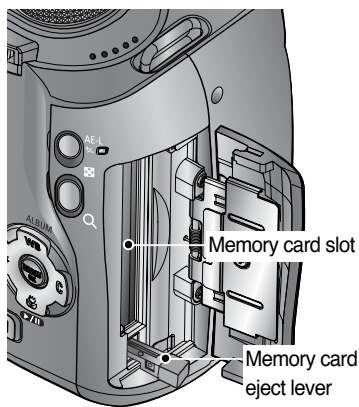
Identification of features

Bottom

Battery chamber cover & lock

Tripod socket

Diopter adjustment ring

Battery chamber

Battery chamber

Battery holder
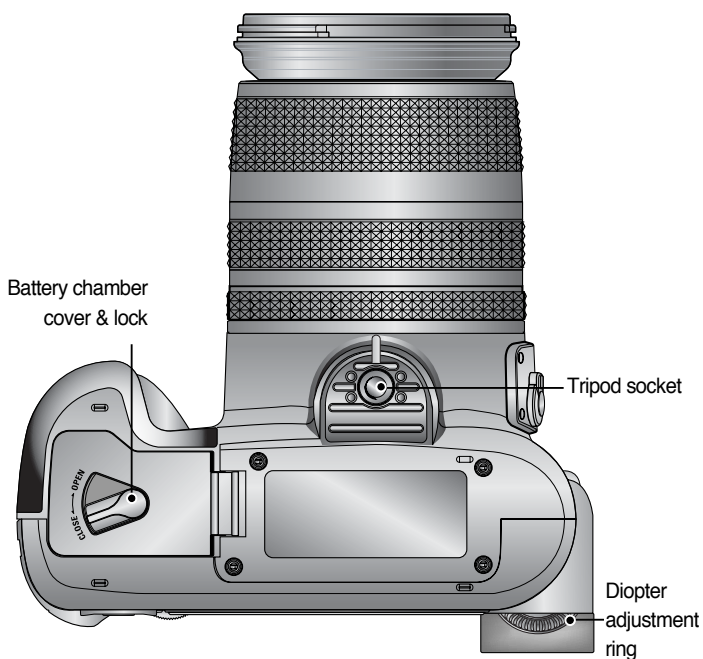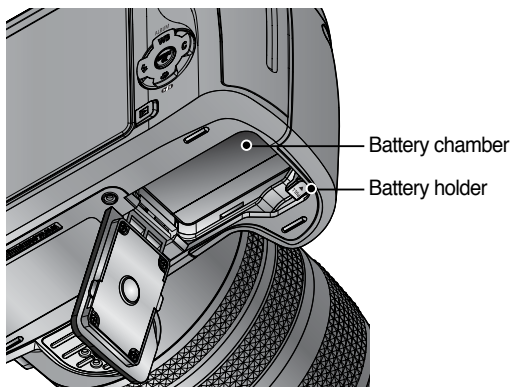
Identification of features

■ Self-timer lamp

Icon	Status	Description
⟳² ⓞ₂	Blinking	For 2 seconds, the lamp blinks quickly at 0.25-second intervals.
⟳¹⁰	Blinking	- 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.
⟳¹⁰₂	Blinking	A picture will be taken after about 10 seconds and 2 seconds later a second picture will be taken.

■ Camera Status Lamp

Lamp	Colour	Status	Description
Mode dial lamp	Green	On	Power on
		Blinking	When the LCD is turned off
Flash status lamp	Red	On	Charging is complete (Pressing the shutter button half way down)
		Blinking	The flash is being charged
Card in use lamp	Red	Blinking	When the memory card is being used PC mode - When the data is transmitting - When the USB cable is connected

■ Mode icon

Mode	AUTO	PROGRAM	A priority	S priority	MANUAL	MySET	MOVIE CLIP
Icon	📷	P	A	S	M	My	🎥

Mode	NIGHT	PORTRAIT	CHILDREN	LANDSCAPE	CLOSE-UP	TEXT	SUNSET	DAWN	BACKLIGHT	FIREWORKS	BEACH & SNOW
Icon	🌙	👤	👶	🏔	🌷	📄	🌅	🌄	🌆	✺	🏖

Before using the camera

Connecting to a Power Source

■ There are two ways in which to provide the camera with power. You can use battery or alternatively, you can use the AC adaptor.

■ Specification of SLB-1974 rechargeable battery

Model	SLB-1974
Type	Lithium Ion
Voltage, Capacity	7.4V, 1900mAh
Charging time	Approx. 180MIN (Using the SBC-L4)

※ To buy the exclusive AC adapter (SAC-81, DC 8.4V 1.5A), contact your nearest Samsung dealer or Samsung service centre.

CAUTION

● Please ensure that you use the exclusive battery with the correct specification for the camera. Failure to do may affect your warranty.
● When you disconnect the AC adapter or remove the battery, turn off the camera power first. The data can be damaged.

■ Number of images and battery life

Still image		Movie	
Battery life	Number of images	Recording time	
Approx. 225MIN	Approx. 450	Approx. 225MIN	
Based on the following shooting conditions	Using the fully charged battery Auto mode, 8M 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 15fps 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.

Before using the camera

Using the battery

: If the camera does not turn on after you have inserted battery, please check whether the battery is inserted with the correct polarity (+/-).
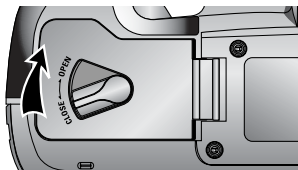
1. Turn the battery chamber lock in the direction of the arrow (OPEN) and open the battery chamber cover.
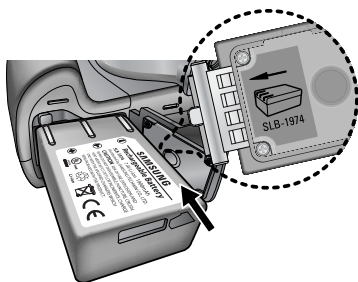
2. Insert the battery taking note of the polarity (+/-).
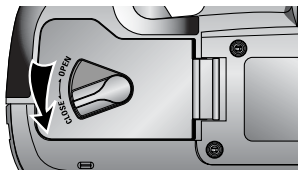
3. Close the battery chamber cover and turn the battery chamber lock in the direction of the arrow (CLOSE).

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Before using the camera
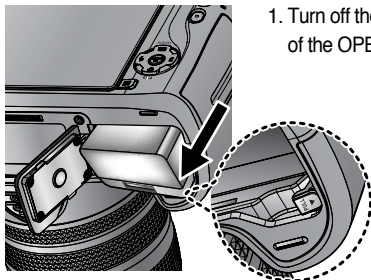
1. Turn off the camera. Turn the battery chamber lock in the direction of the OPEN mark and open the battery chamber cover.

2. Move the battery holder aside and the battery will be released.

3. Take out the battery and close the battery chamber cover. Turn the battery chamber lock in the direction of the CLOSE mark.

■ There are 4 indicators for battery condition that are displayed on the LCD monitor.

Battery indicator	▉▉▉	▉▉	▉	
Battery status	The battery is fully charged	Prepare new battery	There is low battery capacity (Warning indicator will display).	There is no battery capacity (Red colour : Change the battery).

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.
  The 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.
● The battery will usually recover at normal temperatures.
● During extended use of the camera, the camera body may become warm.
  This is perfectly normal.
● If the battery has low capacity, the camera power will not be turned on.
  In this case, change the battery with a new one.

Before using the camera

■ How to charge the rechargeable battery

1. Plug the AC cord's power plug into the wall outlet and insert the AC cord into the charger.
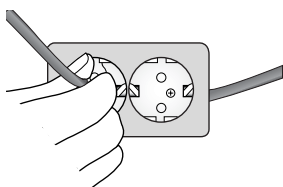
2. Place the battery in the charger as shown.
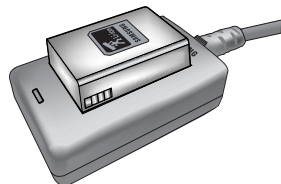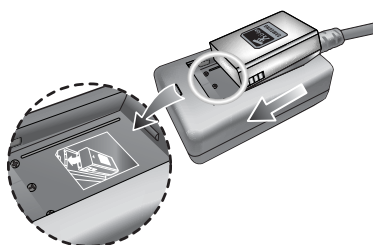
※ If the charging LED doesn't blink as red or blinks as yellow, please check whether the battery is inserted with the correct polarity (+/-).

※ Check the battery charging status with the Charging LED of the charger.
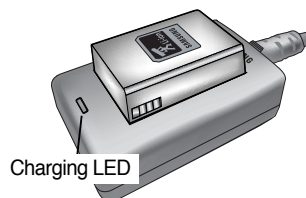
Charging LED

Status	LED
Being charged	Red LED is on
Charging is complete	Green LED is on
Charging is paused	Yellow LED is on
Charging error	Yellow LED is blinking

Before using the camera

INFORMATION

- The proper operating temperature of the charger is 0°C ~ 40°C. When you charge the battery under/over the proper operating temperature, the charger may not operate (Yellow LED is on). Charging will restart at the operating temperature and this is not camera malfunction.
- Samsung warrants the charger for a period of one year and the Lithium Ion battery for a period of six months from the original date of purchase of the product.
- Wear and tear on the lithium battery is not covered by the Samsung warranty. If the battery duration shortens considerably, you should purchase a new battery.
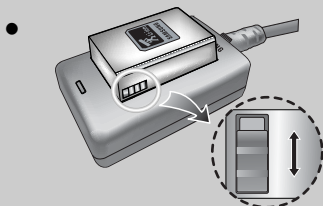
-     Slide the switch as you please to indicate something like flash charging status. This switch has yellow and black mark.

AC adapter (SAC-81, DC 8.4V)
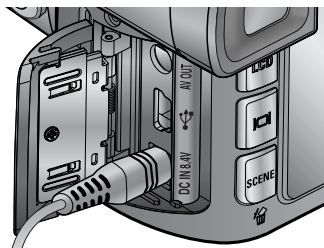
If you have access to a mains supply, using an AC Adapter (SAC-81, DC 8.4V) allows the camera to be used for long periods of time.
Remove the battery from the camera when using an AC adapter. Plug the adapter into the DC-IN port on the camera before using an AC adaptor.

DANGER

- Always turn off the power before taking the AC adapter out of the mains supply.
- As with all mains powered devices, safety is important. Ensure that neither the camera nor adapter comes into contact with water or metallic materials.
- Please ensure that you use an AC adapter (SAC-81, DC 8.4V) with the correct specification for the camera. Failure to do so may affect your warranty.

Before using the camera

● Be sure to format the memory card (see p.116) 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.

● 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, first format the memory card by using the 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/ formattting 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!] 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.

● If you use a low writing speed memory card, the movie clip may be stopped while recording. We recommend a high writing speed memory card (over 40X writing speed).

Before using the camera

INFORMATION

● When the memory card slot cover opens, the camera can't be turned on by pressing the power button.
● Don't remove the memory card when the Card in use lamp is blinking as this may cause damage to data in the memory card.
● If the memory card slot cover is opened while data is being saved, a warning alarm sounds and the camera power is turned off after saving the data.

■ The camera can use CF (CompactFlash) I and II type card.
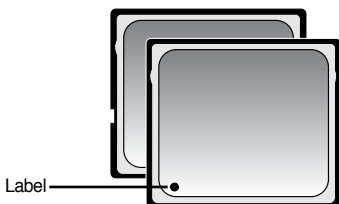
Some CF I and II type cards are not compatible with this camera. We recommend a same kind of CF I and II type card provided with this camera.

Label

【 CF (CompactFlash) I and II type memory card 】

■ When using a 64MB 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.

Recorded image size		RAW	TIFF	S.FINE	FINE	NORMAL	25FPS	15FPS
Still image	3264X2448	3	2	15	29	42	-	-
	3264X2176	-	-	17	32	46	-	-
	3264X1840	-	-	20	38	54	-	-
	2400X1800	-	-	27	50	71	-	-
	1632X1224	-	-	54	94	124	-	-
	1027X768	-	-	111	169	205	-	-
	640X480	-	-	292	450	548	-	-
Movie clip	640X480	-	-	-	-	-	1Min. 10Sec.	1Min. 57Sec.
	320X240	-	-	-	-	-	3Min. 31Sec.	5Min. 51Sec.
	160X120	-	-	-	-	-	8Min. 12Sec.	13Min. 41Sec.

Before using the camera

1. Ensure the camera is off and pull the memory card slot
   cover in the direction of the arrow to open.
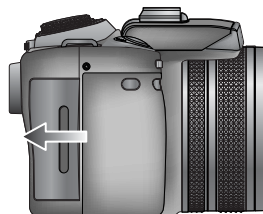
2. Insert the memory card as shown on the
   memory slot cover.

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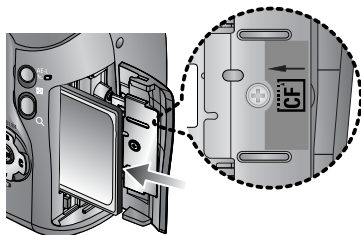   If the memory card does not slide in smoothly, do not
   attempt to insert it by force. Check the direction of
   insertion, and then insert it correctly. Do not insert the
   memory card the wrong way round. Doing so may
   damage the memory card slot.
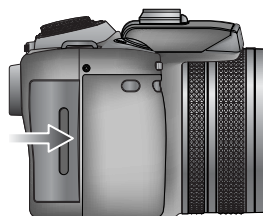
Removing the memory card

1. Turn off the camera power by using the power
   button. Open the memory card slot cover.
   Press the memory card eject lever and the lever will
   pop up. Press the lever again and then the memory
   card will be released.

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

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Before using the camera

1. Thread the strap through the strap eyelet on the
   camera as shown alongside.

2. Thread the strap back through the strap ring as shown alongside.
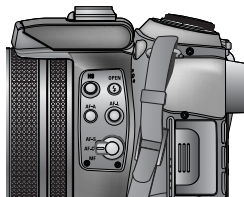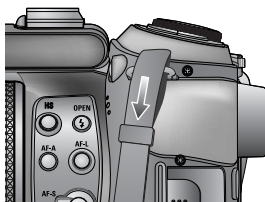
3. Fasten the strap as shown.

4. Repeat steps 1 ~ 3 to attach the other end of the strap to the other eyelet.

Before using the camera

■ When you shoot in direct or bright lighting conditions, the image quality may be deteriorated caused by unnecessary light. In this case, use the lens hood.

1. Attach the lens adapter to the camera by turning the lens adapter clockwise as shown alongside.

   ※ You can use a general purpose filter (φ72mm) after attaching the lens adapter.

2. Attach the lens hood by turning it clockwise.

[Using the lens hood]   [Carrying the lens hood]

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Before using the camera

Attaching the lens cap

■ When you don't use the camera, attach the lens cap.
You can attach the lens cap as show below.
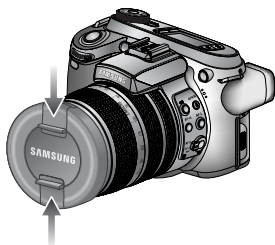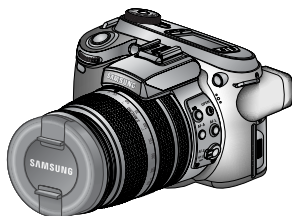
LCD indicator

■ The LCD displays information about the shooting functions and selections.

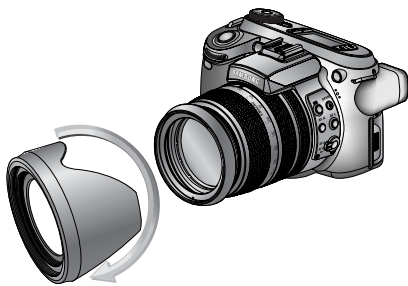■ Refer to page 63 for more information about selecting the LCD.
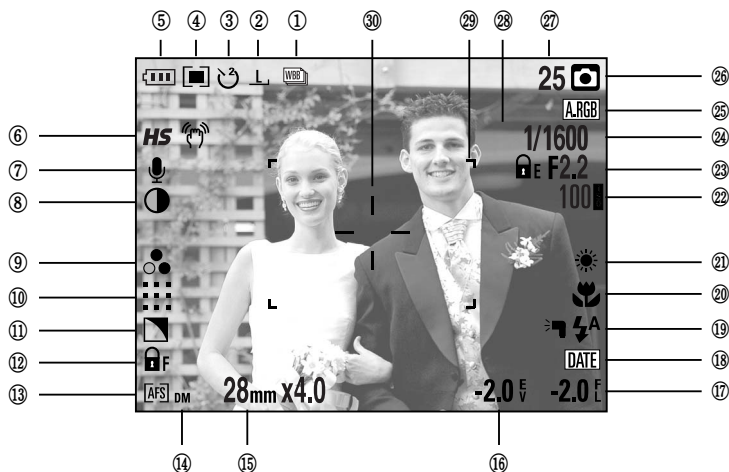
[Image & Full status]

No.	Description	Icons	Page
1	Drive modes	[ ] [C] [H] [U] [AEB] [AFB] [WBB] [I]	p.36~39
2	Image size	L , 3:2, 16:9, M1, M2, S1, S2, 640, 320, 160,	p.70
3	Self-timer/ Remote control	☉² ☉¹⁰ ☉¹⁰ ⓞ₀ ⓞ₂	p.40~41
4	Metering	[■] [⊙] [•]	p.43
5	Battery status	⊞ ⊞ ⊡ ⊡	p.17
6	High speed shutter mode/Camera shake warning	HS 〔ᵐ〕	p.49, 34
7	Voice memo	🎤	p.76
8	Contrast	◖	p.73
9	Saturation	⦁○⦁	p.74
10	Image quality	RAW TIFF ⣿ ⣏ ⠇	p.71
11	Sharpness	◣ ◻ ◥	p.75
12	Focus Lock	🔒F	p.47
13	Focus mode	[AFS] [AFC] [MF]	p.47~48

《26》

LCD indicator

14	Direct MF	**DM**	p.48
15	Focal length/Digital zoom	28mmX4.0	p.44~45
16	Exposure compensation	**-2.0** ᴱᵥ	p.50
17	Flash power compensation	**-2.0** ꜰʟ	p.58
18	Date imprint	DATE	p.119
19	Flash	⚡ 🔦ᴬ 👁 ⚡ ⚡ˢ ⚡ᴿ ⚡	p.57~60
20	Macro	🌷 🌷ₛ 🌷ₐ	p.55~56
21	White balance	AUTO ☀ ☁ 🔲 🔲 💡 K 📷¹ 📷²	p.53~54
22	ISO	AUTO 50 100 200 400	p.42
23	Aperture value	F2.2	p.30~31
24	Shutter speed	1/1600	p.30~31
25	Colour space	A.RGB	p.77
26	Recording mode	📷 P A S M 🎬 My¹ My² My³ 🌙 🌃 👤 🏔 🍴 📋 🎆 🎇 🎯 ⚙ 🎬	p.29~33
27	Number of available shots remaining	25	p.21
28	Exposure lock	🔒ᴱ	p.51
29	Auto focus frame	⌐ ¬	-
30	Spot zone	⊣⊢	p.79

LCD indicator
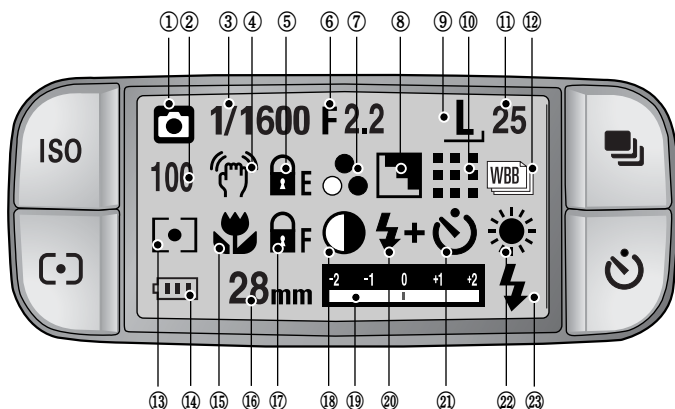
No.	Description	Icons	Page
1	Recording mode	◙ P A S M 🎬 My¹ My² My³ 🌙 🌃 👤 ⛰ 🌅 📋 🎆 🎇 🐾 🎆 📷	p.29~33
2	ISO	AUTO 50 100 200 400	p.42
3	Shutter speed	1/1600	p.30~31
4	Camera shake warning	⌔	p.34
5	Exposure lock	🔒E	p.51
6	Aperture value	F2.2	p.30~31
7	Saturation	◦●	p.74
8	Sharpness	◣ ◻ ◥	p.75
9	Image size	L, 3:2, 16:9, M1, M2, S1, S2, 640, 320, 160,	p.70
10	Image quality	RAW TIFF ⠿ ⠿ ⠿	p.71
11	Number of shots remaining	25	p.21
12	Drive mode	☐ C H U AEB AFB WBB I	p.36~39
13	Metering	▣ ◉ •	p.43
14	Battery status	🔋 🔋 🔋 🔋	p.17
15	Macro	🌷 🌷IS 🌷IA	p.55~56
16	Focal length	28mm	-

《28》

LCD indicator

17	Focus lock/ Focus mode	⬛F [AFS] [AFC] [MF] [DMF]	p.47~48
18	Contrast	◐	p.73
19	Compensation indicator	$_{-2}$ $_{-1}$ 0 $_{+1}$ $_{+2}$	p.50
20	Flash power compensation	$\frac{1}{2}$+ $\frac{1}{2}$–	p.58
21	Self-timer	⟳² ⟳¹⁰ ⟳¹⁰ 🎞₀ 🎞₂	p.40~41
22	White balance	AUTO ☀ ☁ ☼ ☼ ⚡ K 🔲¹ 🔲²	p.53~54
23	Flash	⚡ $\frac{1}{2}$ᴬ ⊙ ⚡ $\frac{1}{2}$ˢ ⚡ ⊘	p.57~60

Recording mode

■ How to use the AUTO (**AUTO**) mode

Please select this mode for quick and easy picture taking with minimal user interaction.
1. Insert the battery and memory card. (p.16, 22).
2. Press the power button to turn on the camera.
   (Date & Time will display for about 3 Sec. and
   disappear.)
3. Select the AUTO mode by rotating the mode dial.
4. Point the camera towards the subject and compose the
   image by using the LCD.
5. Press the shutter button to capture an image.
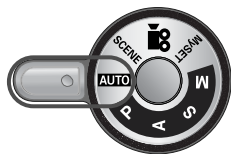
[AUTO mode]

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 unable to capture an image clearly.

Recording mode

■ How to use the PROGRAM mode (**P**)

Selecting the program mode will configure the camera with
optimal settings. You can still manually configure all
functions except the aperture value and shutter speed.
Step 1~2 are the same as those for AUTO mode.
3. Select the PROGRAM mode by rotating the mode dial.
4. Press the menu button to configure advanced functions
   (p.67).
5. Point the camera towards the subject and compose
   the image by using the LCD.
6. Press the shutter button to capture an image.

[PROGRAM mode]

■ How to use the APERTURE PRIORITY mode (**A**)

This mode will set the aperture value for automatic
exposure depends on the brightness of the object by
automatic shutter speed setting in the camera.
Steps 1~2 are the same as those for AUTO mode.
3. Select the APERTURE PRIORITY mode by rotating
   the mode dial.
4. Select the desired aperture value by rotating the Rear
   jog dial (JOG2).
5. Point the camera towards the subject and compose
   the image by using the LCD.
6. Press the shutter button to capture an image.
 * Smaller Aperture values make the object sharp but blur
   the background. Larger Aperture values make both
   the object and background sharp.

[Aperture priority mode]

《30》
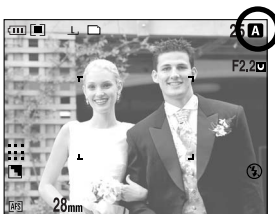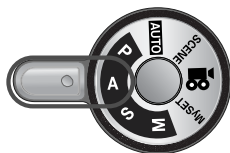
Recording mode

■ How to use the SHUTTER PRIORITY mode (**S**)

This mode will set the shutter speed for automatic exposure depends on the brightness of the object by automatic aperture value setting in the camera.
Steps 1~2 are the same as those for AUTO mode.
3. Select the SHUTTER PRIORITY mode by rotating the mode dial.
4. Select the desired shutter speed by rotating the Front jog dial (JOG1).
5. Point the camera towards the subject and compose image by using the LCD.
6. Press the shutter button to capture an image.
 * High Shutter speeds can capture a moving object in a still image as if the object is not moving. Low Shutter speeds can capture a moving object with an 'active' effect.
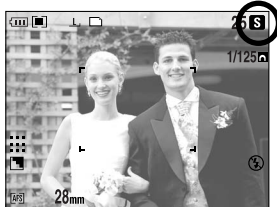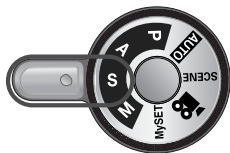
[Shutter Priority mode]

■ How to use the MANUAL mode (**M**)

The user can manually set both the aperture value and the shutter speed.
Steps 1~2 are the same as those for AUTO mode.
3. Select the MANUAL mode by rotating the mode dial.
4. Select the desired shutter speed or aperture value by rotating a jog dial.
   - Front jog dial (JOG1) : Selecting the shutter speed
   - Rear jog dial (JOG2) : Selecting the aperture value
5. Point the camera towards the subject and compose the image by using the LCD.
6. Press the shutter button to capture an image.
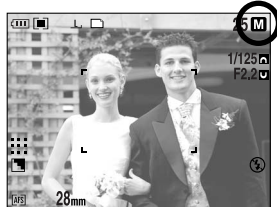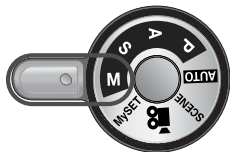
[Manual mode]

INFORMATION

● In the manual mode, you can change the aperture value and shutter speed after fixing the Exposure value by rotating the EVC ring.
● Available shutter speed, by the aperture value
   - Over F2.2 : 15.0 ~ 1/1600 Sec.
   - Over F3.2 : 15.0 ~ 1/2000 Sec.
   - Over F4.0 : 15.0 ~ 1/2500 Sec.
   - Over F5.0 : 15.0 ~ 1/3200 Sec.
   - Over F7.1 : 15.0 ~ 1/4000 Sec.

Recording mode

■ How to use the MySET mode ([My])

This mode allows users to save frequently used shooting settings for later use.
Steps 1~2 are the same as those for AUTO mode.
3. Select the MySET mode by rotating the mode dial.
4. Press the menu button and select the [My^1] menu tab.
5. Press the Right button and select the [Load Myset] menu by pressing the Up/ Down button.
6. Press the Right button and select a desired MySET number by pressing the Up/ Down button.
7. Press the OK button and a confirmation window will display. Select the [Yes] menu and press the OK button to load the camera configuration saved in the MySET number and close the menu screen.
8. Point the camera towards the subject and compose the image by using the LCD.
9. Press the shutter button to capture an image.
   Please see page 78 for details of the MySET shooting mode and menus.

[MySET mode]
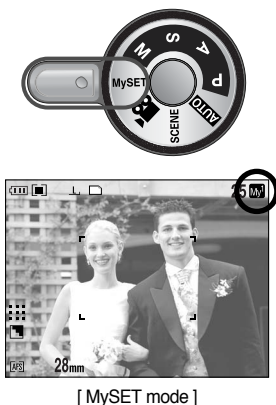
■ How to use the MOVIE CLIP mode ([movie icon])

A movie clip can be recorded for as long as the available recording time of the memory capacity allows.
(A movie clip sets as 640X480 movie size and 25fps frame rate can be taken up to 30 seconds.)
Steps 1~2 are the same as those for AUTO mode.
3. Select the MOVIE CLIP mode by rotating the mode dial.
4. The MOVIE CLIP mode icon and available recording time will display on the LCD.
5. Point the camera towards the subject and compose the image by using the LCD. 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. If you wish to stop recording, press the shutter button again.
   * Image size and type are listed below.
   - Image size : 640X480, 320X240, 160X120(Selectable)
   - File type : *.avi(MJPEG)

[MOVIE CLIP mode]

Recording mode

■ How to use the SCENE mode (**SCENE**)

Use the menu to easily configure optimal settings for a variety of shooting situations. These include NIGHT, PORTRAIT, CHILDREN, LANDSCAPE, CLOSE UP, TEXT, SUNSET, DAWN, BACKLIGHT, FIREWORKS and BEACH & SNOW scenes.
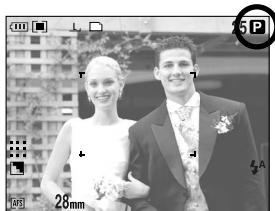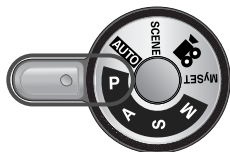
Steps 1~2 are the same as those for AUTO mode.

3. Select the SCENE mode by rotating the mode dial.
4. Press the SCENE button and scene menu will display as shown alongside.
5. Select the desired Scene sub menu by rotating the Rear jog dial (JOG2) and press the OK button.
   Please see page 65 for detailed descriptions for each scene.
6. The current scene icon is displayed at the top left of the LCD.
7. Point the camera towards the subject and compose the image by using the LCD.
8. Press the shutter button to capture an image.
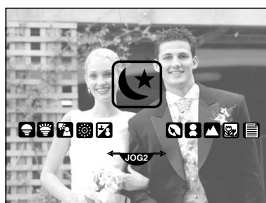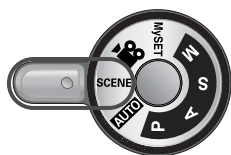
[SCENE mode]
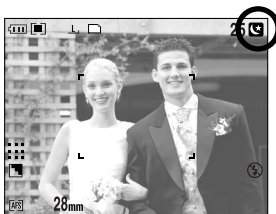
[Night scene mode]

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 (p.14).
  - When the green auto focus frame lights up, it means the camera is focused on the subject
    and a beep will sound.
  - When the flash is charged, the flash status lamp (Red) will illuminate. Press the shutter
    button all way down to take the picture.
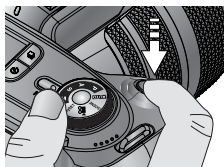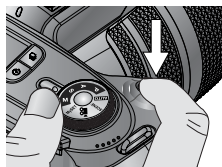
[Lightly press the shutter button]   [Press the shutter button]

■ The available recording time may vary depending on shooting conditions and camera settings.
■ When the Flash Off or Slow synchro mode is selected in low lighting conditions, the camera
  shake warning indicator (〔"〕) may appear on the LCD. In this case, use a tripod, support
  the camera on a solid surface or change the flash mode to flash shot mode.
■ Compensate for shooting into light:
  It is advisable not to take pictures into direct sunlight as this can make the foreground very
  dark. However, should your desired shot require this please use the [Backlight] from the
  scene shooting mode (see page 65), fill-in flash (see page 59), spot metering (see page 43),
  or exposure compensation (see page 50).
■ Avoid obstructing the lens or the flash when you capture an image.
■ Using the Rear LCD extensively will drain the battery.
  We recommend turning off the Rear LCD and using the Finder LCD and Top LCD as often as
  possible in order to extend battery life.
■ Under certain conditions the auto focus system may not perform as expected, for example;
  - 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 very dark.
■ If the camera is not turned off by the Power button, the changed menu settings may not be
  saved.
■ If there is no operation during the specified time, the LCD will be turned off automatically to
  save battery life. Refer to the [LCD Off] menu (p.114) for more information.

Using the camera buttons to adjust the camera

■ The RECORDING (AUTO, PROGRAM, APERTURE PRIORITY, SHUTTER PRIORITY, MANUAL, MySET, MOVIE CLIP, SCENE) mode can be set up by using the camera buttons.

POWER button

● Used for turning the camera's power on or 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 113 for more information about the auto power off function.
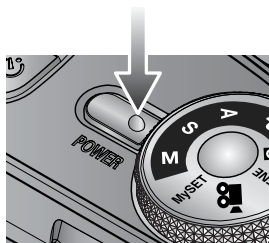
SHUTTER button

● 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 auto focus and checks the settings of the flash.
  - Pressing the shutter button 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.
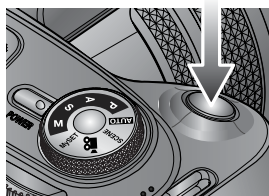
Jog dial (Front, Rear)

● Used for selecting a desired value.
● Used for moving Up/ Down/ Left/ Right in a menu.
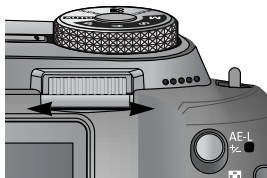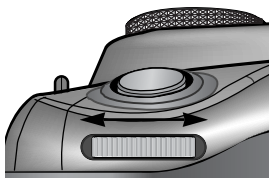
Drive button
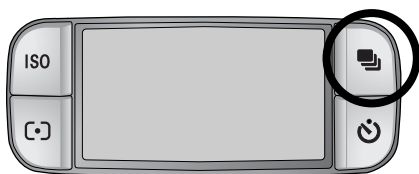
■ You can select various shooting modes.

■ Drive mode

● Single shooting (☐) : Takes one picture only.
● Continuous shooting (☐) : Images will be taken continuously until the shutter button is released.
● High speed continuous shooting (H) : This takes 2.5 shots per second when the shutter is pressed down and held.
● Ultra High speed continuous shooting (U) : This takes 10 shots per second, when the shutter is pressed down and held. After completing the continuous shooting, images are saved and the images play back on the Rear LCD. The maximum number of shots is 30 and the image size is fixed as 1024X768 ($S1$).
● Auto Exposure Bracket (AEB) : Use this menu if it is hard to decide exposure of the object. The camera will take 3 or 5 shots with settings at, below and above the set exposure.
● Auto Focus Bracket (AFB) : Use this menu if it is hard to decide distance of the object. The camera will take 3 or 5 shots at different focal points.
● White Balance Bracket (WBB) : Use this menu if it is hard to decide white balance of the object. The camera will take 3 or 5 shots at different white balance settings.
● Interval shooting (☐) : You can set predetermined intervals for the camera to take pictures over a period of time.

INFORMATION

● If you change the camera mode, a drive mode set in the Scene mode is changed to single shooting automatically.
● When you select RAW or TIFF file format, you can' t select Continuous shooting, Bracket shooting, Interval shooting.

《36》

Drive button

■ How to set the drive mode

● Selecting the various modes available
  1. Press the Drive button and drive mode icon will display on the LCD.
  2. Select a desired drive mode by rotating the Rear jog dial (JOG 2).
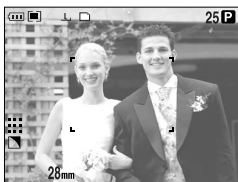
[Still image mode]
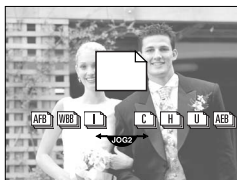
[Drive mode menu]

● How to set the AEB
  1. Select the AEB icon by rotating the Rear jog dial (JOG2)

  2. Select a desired exposure value by rotating the Front jog dial (JOG1).
     - The pre-view image will display on the Rear LCD as the exposure value is changed.

  3. Press the OK or Shutter button to set the exposure value.
  4. Press the shutter button to capture an image.
     You can take 3 or 5 shots according to the selected exposure value.

※

Number of shots	Selectable exposure values
3	$\pm$0.3, $\pm$0.7, $\pm$1.0, $\pm$1.3, $\pm$1.7, $\pm$2.0
5	$\pm$0.3&$\pm$0.7, $\pm$0.7&$\pm$1.3, $\pm$1.0&$\pm$2.0

※ You can't select the AEB icon in the Auto recording mode and movie clip mode.

● How to set the AFB
  1. Select the AFB icon by rotating the Rear jog dial (JOG2)

《37》
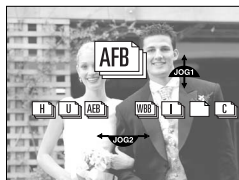
Drive button

2. Select a desired focus value by rotating the Front jog dial (JOG1).
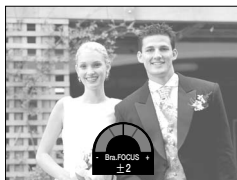
3. Press the OK or Shutter button to set the focus value.
4. Press the shutter button to capture an image.
   You can take 3 or 5 shots according to the selected focus value.

※

Number of shots	Selectable focus value
3	±1, ±2, ±3, ±4, ±5, ±6
5	±1&±2, ±2&±4, ±3&±6

※ You can't select the AFB icon in the Auto recording mode and movie clip mode.

● How to set the WBB

1. Select the WBB icon by rotating the Rear jog dial (JOG2)
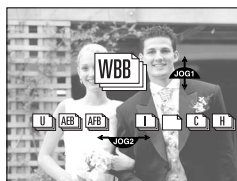
2. Select a desired white balance value by rotating the Front jog dial (JOG1).
   - The pre-view image will display on the Rear LCD as the white balance value is changed.
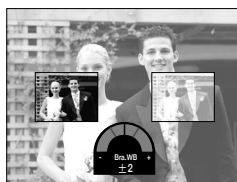
3. Press the OK or Shutter button to set the white balance value.
4. Press the shutter button to capture an image.
   You can take 3 or 5 shots depending on the selected white balance value.

※

Number of shots	Selectable white balance value
3	±1, ±2, ±3, ±4, ±5, ±6
5	±1&±2, ±2&±4, ±3&±6

※ You can't select the WBB icon in the Auto recording mode and movie clip mode.

《38》

Drive button

● How to use the interval shooting

1. Select the Interval shooting icon [ ] by rotating the Rear jog dial (JOG2).
2. Press the shutter button to capture an image. Images are taken at a set interval.
   - After taking a picture, the camera power is turned off automatically.
   - After a set time, the camera power is turned on automatically and the second image is taken.
   - Images are taken up to a set number of shots at fixed intervals.
3. After completing the interval shooting, the camera power is turned off automatically.
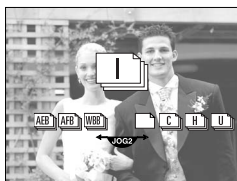
● How to set the interval shooting

1. Press the Menu button and select the [P] menu tab.
2. Press the Right button and select the [Interval/Time] menu by pressing the Up/ Down button.
3. Press the Right button and select a desired menu by pressing the Up/ Down button.
   - Interval time : 1 ~ 60 Min. (per interval)
4. Press the OK button to set the setting.
5. Select the [Interval/Number] menu.
6. Press the Right button and select a desired menu by pressing the Up/ Down button.
   - the interval can be set to any number of shots between 2 and 99.
7. Press the OK button to set the setting.
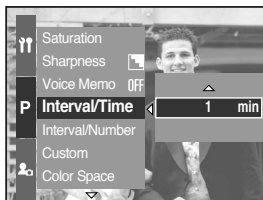
[Selecting the interval time]
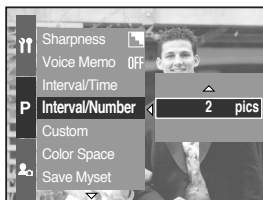
[Selecting the number of interval shots]

INFORMATION

● If you press the power button during the interval shooting (camera power is off), the interval shooting is cancelled.
● You can't select the interval shooting in the Auto recording mode and movie clip mode.
● If you select RAW, TIFF file format, you can't select the interval shooting.
● You can set the number of interval shots over number of shots remaining but the images are taken to the number of shots remaining.
● We recommend that you use a fully charged battery or AC adapter when you take the interval shots.

《39》

Self-timer/ Remote button
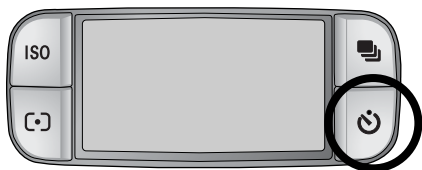
■ This function is often used when the photographer would also like to be in the image.

■ Self-timer/ Remote mode

- Off (OFF)   : Self-timer function is off.
- 2 Sec. Self-timer (⟳²)   : Pressing the shutter button will allow an interval of 2 seconds before the image is taken.
- 10 Sec. Self-timer (⟳¹⁰)   : Pressing the shutter button will allow an interval of 10 seconds before the image is taken.
- Double Self-timer (⟳¹⁰)   : A picture will be taken after about 10 seconds and 2 seconds later a second picture will be taken.
- Remote control (📷₀)   : The image is taken by Pressing the shutter button of the remote control.
- 2 Sec. Remote control (📷₂)   : Pressing the shutter button of remote control will allow an interval of 2 seconds before the image is taken.

■ How to use the Self-timer/ Remote button

1. Press the self-timer button and a self-timer icon will display on the LCD.
2. Select a desired self-timer by rotating the Rear jog dial (JOG2).
3. Press the OK button to set the setting.
 - Selecting a self-timer :
   An image will be taken after the specified time has elapsed and the self-timer function will be maintained.
 - Selecting a remote control function :
   An image is taken by the shutter button of the remote control instead of the shutter button of the camera.
 - Cancelling the self-timer :
   Though the self-timer function will be maintained after taking an image, rotating the mode or pressing the play mode button cancels the self-timer function.

[Self-timer/ Remote control icon]
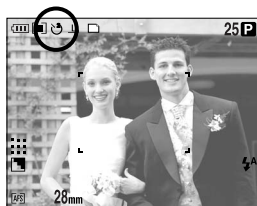
[Selecting the 2 Sec. self-timer]

Self-timer/ Remote button

INFORMATION

- Though you select a remote control icon, you can still take an image by using the shutter button of the camera.
- If you select the 2 Sec. remote control icon and press the shutter button of the camera, the image will be taken after 2 seconds.
- When you select RAW and TIFF file types, you can't select the double self-timer.

- Remote control range
  When you take an image by using the remote control, refer to the illustrations shown alongside about the remote control range.

[Shutter button on the remote control]

1m

4m

25°

15°

4m

5m
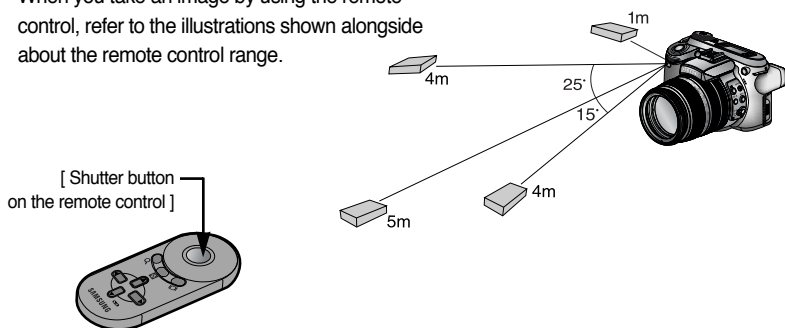
- Replacing batteries for the remote control
  Make sure the + polarity is toward the top and the - polarity is toward the bottom while installing batteries for the remote control. Assemble the cover into the remote control as the direction of remote control. Rotate the cover as shown. The remote control takes a CR 2025 3V battery.
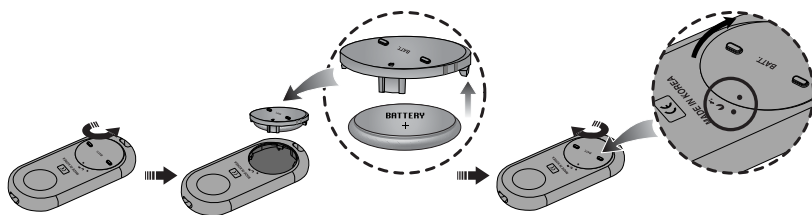
INFORMATION

- If you operate the Mode dial and Self-timer button during the self-timer operation, the self-timer function is cancelled.
- Use a tripod to prevent the camera from shaking.

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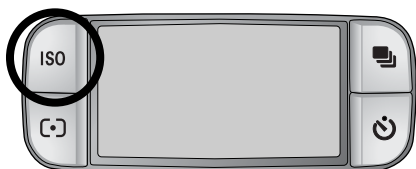
■ You can select the ISO sensitivity when taking pictures.
The speed or specific light-sensitivity of a camera is rated by ISO numbers.

■ ISO
- AUTO (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.

■ How to set the ISO

  1. Press the ISO button and an ISO icon will display on the LCD.
  2. Select a desired icon by rotating the Rear jog dial (JOG2).
  3. Press the OK button to set the setting.
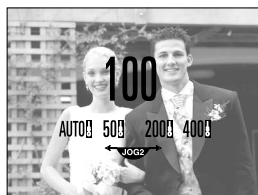
[ISO icons]

[Selecting ISO 100]

※ You can select the ISO sensitivity up to 100 in the High speed continuous mode and Ultra high speed continuous mode.

Metering button
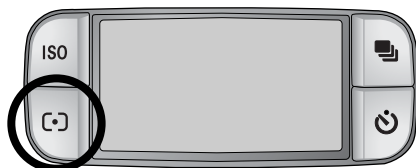
■ If you cannot obtain suitable exposure conditions, you can change the metering method to take better pictures.

■ Metering methods
  - Multi metering ($\boxed{\blacksquare}$) :
    Exposure will be calculated based on each parts of the LCD divided into several parts.
    This is suitable for general use.
  - CWA (Centre Weighted Average) metering ($\boxed{\odot}$) :
    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 taking a picture of small object like a flower or insects.
  - Spot metering ($\boxed{\bullet}$) :
    Only the cross marked area in the centre of the LCD will be metered for light.
    This is suitable when the subject in the centre is exposed correctly, regardless of the back lighting.
※ The + mark will be displayed when spot metering has been selected.

■ How to set the metering mode

  1. Press the metering button and a metering icon will display on the LCD.
  2. Select a desired icon by rotating the Rear jog dial (JOG2).
  3. Press the OK button to set the setting.
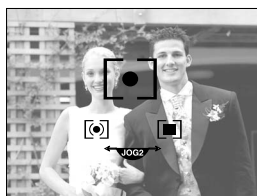
[Metering icons]
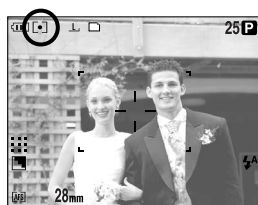
[Selecting the spot metering]

Zoom operation

■ You can change the zoom rate by rotating the Zoom ring.

● This camera has a 15X optical zoom and a 2X and 4X digital zoom function. Using both will offer a total zoom ratio of 30X or 60X.
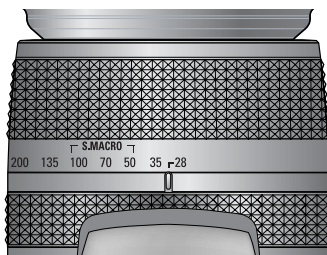
● Optical Zoom TELE
Rotate the Zoom ring to the right. This will zoom into the subject i.e. the subject will appear nearer.
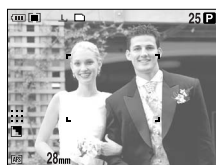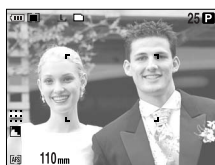
[Wide]   [Tele]

● Optical Zoom WIDE
Rotate the Zoom ring to left. This will zoom out from the subject i.e. the subject will appear further away.
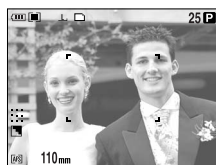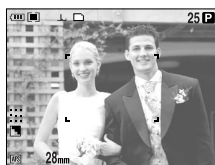
[Tele]   [Wide]

Zoom operation

● Digital zoom

Pressing the Digital zoom button for over 1 second will enlarge the subject as shown below.

[Off]

Pressing the Zoom button →

[Digital zoom 2X]

Pressing the Zoom button →

[Digital zoom 4X]

Pressing the Zoom button
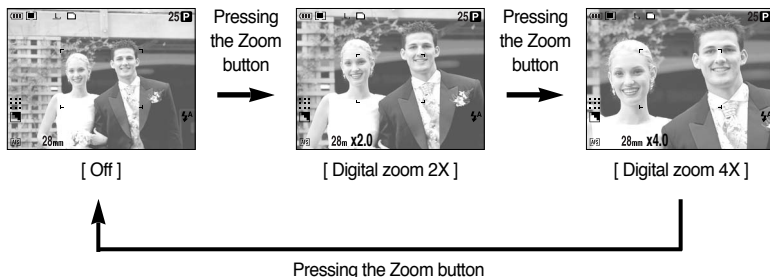
INFORMATION

● Images taken using the digital zoom may take a little longer for the camera to process. Allow time for this to take place.
● The digital zoom cannot be used in RAW, TIFF and movie clip shots.
● You may notice a decrease in image quality when using the digital zoom.
● The higher optical and digital zoom, the more camera shake can be take place. If the focal length is over 200mm, the camera shake warning indicator will display.
When you select a higher optical or digital zoom, we recommend using the Finder LCD and the tripod.
● Take care not to press the lens as this may cause a camera malfunction.
● Do not pull the lens by hand and do not rotate the zoom ring quickly.
It may cause a camera malfunction. Please be careful when using the lens.

Focusing

■ You can select the proper focus mode by switching
the focus switch.

● AF-A : Changing the focus frame ([¯])
You can change the focus frame size and position according to the subject size and position
by pressing the AF-A button. This function is available in the AF-S, AF-C mode.
- Wide AF : This is useful when taking wide range of frame.
- Fixed spot AF : The frame (White) will be fixed at the centre of the LCD.
- Modifying the Spot AF position : The frame will be yellowed and blink. The frame position
    can be changed its position.
- Setting the Spot AF position : The frame turns yellow and the frame position will be set.

[Wide AF]

AF-A button

[Moving Up/ Down the frame]

Front jog dial (JOG1)

[Fixed spot AF : White]

AF-A
button
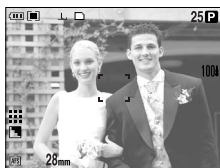
[Setting Spot AF]

OK
button

AF-A
button
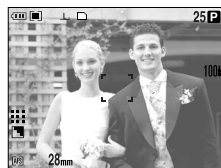
[Spot AF : Yellow]

Rear jog dial (JOG2)
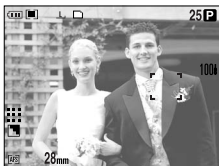
[Moving the frame to the left or right]

Focusing

● AF-L : Focus lock

To focus on the subject positioned outside of the centre, use this button. This function is available in the AF-S mode.

- How to use the focus lock
  1. Ensure the subject is in the centre of the auto focus frame.
  2. Press the AF-L button. The frame turns green and Focus lock icon (🔒F) will display.
     It means the camera is focused on the subject.
  3. Recompose the picture and press the shutter button.
     After taking an image, the Focus lock function will be cancelled.
  ※ This function will not be available in the [Children] and [Close-up] scene mode.
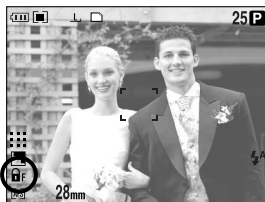
● AF-S : Single Auto Focus
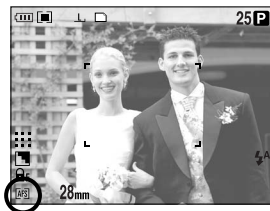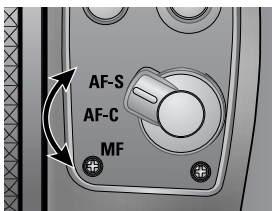
This is suitable for taking a still image. Whenever the shutter button is pressed, the camera is focused on the subject automatically.

● AF-C : Continuous Auto Focus

This is suitable for taking moving subject. The camera keeps focusing the subject when the shutter button is pressed halfway down.
  ※ Note that using the Continuous Auto Focus uses more battery than the Single Auto Focus.
  ※ This function will not be available in the Auto recording mode and Scene mode except for the [Children] and [Close-up] scene mode.

Focusing

● MF : Manual Focus

Where the automatic focusing is not available, for example, in very dark conditions, use the manual focus. Please be careful when using the manual focus as the picture can be blurred easily.

   ※ Ensure the subject is in the centre of the auto focus frame.

   ※ This function will not be available in the auto recording and scene modes.

● How to set Manual focus in the Program mode

You can change the focus even though the camera is focused on a subject by rotating the focus ring. This function is available in the AF-S mode.

   1. Press the Menu button and select [P] menu tab.
   2. Press the Right button and select [Direct MF] menu by pressing the Up/ Down button.
   3. Press the Right button and select a desired sub menu by pressing the Up/ Down button.
    - [Off] : You can't change the focus manually.
    - [On] : You can change the focus manually.
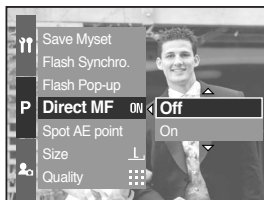
[Direct MF menu]

   4. Select the [On] sub menu. Press the OK button to set the change and the [DM] icon will display on the Rear LCD.
   5. Pressing the shutter button half way down, change the focus by rotating the Focus ring.
    - To move the focus closer, rotate the Focus ring to the right.
    - To move the focus farther, rotate the Focus ring to the left.

[Selecting Direct MF]

High speed shutter mode

■ You can reduce camera shake without using the flash in this mode.

● How to set the High speed shutter mode
  1. Press the HS (High Speed) button for over 1 second to set the High speed shutter mode.

  2. The HS icon will display on the Rear LCD as shown alongside.

  3. Press the shutter button to capture an image.
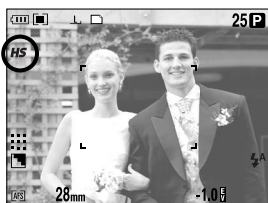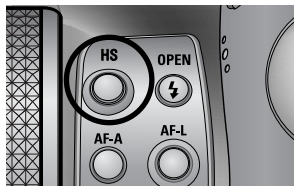
INFORMATION

● Note that the noise level in the image will increase when you use the high speed shutter as the high speed shutter use higher ISO value.
● If you select the high speed continuous mode or ultra high speed continuous mode, the high speed shutter mode will be cancelled.
● This function will be available in the Shutter priority, Manual and Movie clip mode.
● If you change the camera mode, a high speed shutter mode set in the Scene mode is changed to normal shutter speed automatically.

Exposure control

■ Exposure compensation
  This camera automatically adjusts the exposure according
  to the ambient lighting conditions.
  You can also select the exposure value by using the EVC
  (Exposure Value Compensation) ring.
  This function is available in the PROGRAM, APERTURE
  PRIORITY, SHUTTER PRIORITY, SCENE, MySET,
  MOVIE CLIP mode.
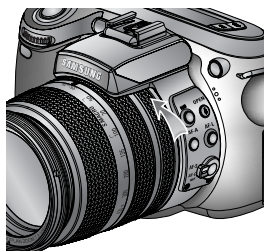
● How to set the Exposure Value Compensation

  1. The exposure Compensation menu will display on the
     Rear LCD by rotating the EVC ring.
   - Rotating to right : 0 ~ -2EV (1/3 EV step)
   - Rotating to left   : 0 ~ +2EV (1/3 EV step)
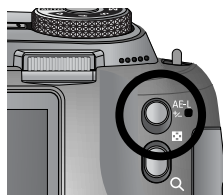
[Normal shooting mode]   [Histogram display]

  2. Press the shutter button half way down and the selected
     exposure value will be set. The changed Exposure
     value will display on the LCD.
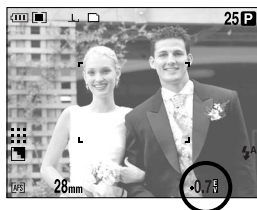
* A negative exposure compensation value reduces the exposure. Note that a positive exposure
  compensation value increases the exposure and the LCD will appear white or you may not get
  good pictures.

Exposure control

■ Exposure lock

This camera automatically adjusts the exposure
according to the ambient lighting conditions.
You can change the exposure value manually by using
the AE-L (Auto Exposure Lock) button in a lighting
situation where there are exposure differences
between a subject and background.

● How to set the Exposure Value Compensation

1. Ensure the subject is in the centre of the auto focus frame.
2. Move the focus frame to a subject that has the desired exposure value.
3. Press the AE-L button and the exposure value will be fixed. An exposure lock icon (🔒E)
   will display on the LCD.
4. Recompose the picture and press the shutter button. After taking an image, the Focus lock
   function will be cancelled.

[Scene for shooting]

[Focus to the object and
press the AE-L button]

[Refocus and fully press
the shutter button]

5-function button

■ The 5 function button activates the following;
  - Up button : While the menu is showing, press the Up button to move up the cursor up the
                  sub menu. When the menu is not displayed on the LCD monitor, the UP button
                  operates as the white balance button.
  - Down button : While the menu is showing, press the Down button to move the cursor down
                    the submenu. When the menu is not showing, you can use the Down button
                    to take macro pictures.
  - 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.
  - Right button : When the menu is displayed on the LCD monitor, pressing the Right button
                   makes the cursor shift to the right tab.
                   When the menu is not displayed on the LCD monitor, you can execute a
                   function that was set in the [Custom] menu by pressing this button.
  - MENU/ OK button : If the menu is displayed, use the 5-Function buttons to change the data
                       values and for your changes to be accepted.
                       If the menu is not displayed, press the MENU/ OK button to display a
                       menu for the current camera mode on the LCD. Press the button again
                       to return to the previous state.

White balance

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

● How to set the white balance

1. Press the WB (Up) button and a white balance icon will display on the LCD monitor.

2. Select a desired white balance by rotating the Rear jog dial (JOG2).
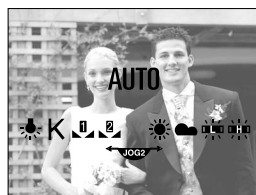
[White balance icons]

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. (CUSTOM 1, CUSTOM 2)

Colour temperature   K : You can set a proper colour temperature.

Different lighting conditions may cause a colour cast on your images.

White balance

● How to set 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.
   You can select CUSTOM 1 or CUSTOM 2 white
   balance.
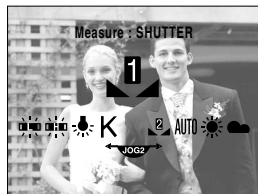
2. Place a sheet of white paper in front of the camera
   so that the LCD shows only white, and then press
   the SHUTTER button. The flash may fire according to
   the shooting condition.
3. The value you set will be saved.
 - The custom white balance value will be applied, starting
   with the next picture you take.
 - The user configured white balance will remain effective
   until it is overwritten.

White paper
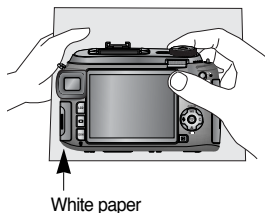
● How to set the colour temperature

Colour temperature is a simplified way to characterize the
light source. Low colour temperature implies warmer light
(more red) while high colour temperature implies a colder
light (more blue).
1. Select the colour temperature (K) by rotating the Rear
   jog dial (JOG2).
2. Select a desired colour temperature (K) by rotating
   the Front jog dial (JOG1).
 - Approx. 3000 K   : Incandescent lamp
 - Approx. 4000 K   : Out door shooting around
                      the morning or evening
 - Approx. 5000 K   : Sunny daylight shooting
 - Approx. 6000 K   : Electronic photo flash
 - Approx. 10000 K : Blue sky
3. Press the WB button to set the setting.
 - After pressing the WB button, the colour temperature
   icon will display.
 - The user configured white balance will remain effective
   until it is overwritten.
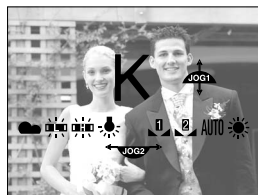
[Colour temperature icon]
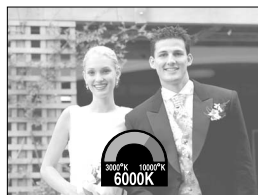
[Selecting a colour temperature]

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Macro

■ When the menu is not showing, you can use the MACRO/ DOWN button to take macro pictures.

ALBUM
WB
C
MENU OK
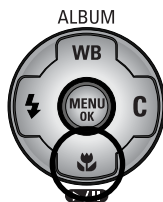
■ Types of focus modes and focus ranges

Unit : cm

Focus type	Auto		Macro		Super macro		Auto macro	
	Wide	Tele	Wide	Tele	Wide	Tele	Wide	Tele
Focus range	50~∞	400~∞	10~70	150~430	3~70 (Focus range : 50 ~ 100m)		10~∞	150~∞

● How to set the macro

1. Press the Macro (Down) button and the macro icon will display on the LCD.
2. Select a desired macro icon by rotating the Rear jog dial (JOG2).
3. Press the Macro (Down) button to set the setting.
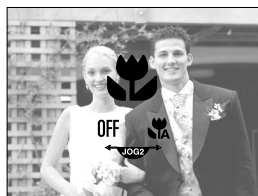
[Macro icons]

● How to set the super macro

1. Rotate the Zoom ring and place the zoom ring at the S.MACRO of the Zoom bar.
2. Press the Macro (Down) button and the macro icon will display on the LCD.

Zoom ring
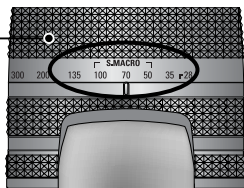
3. Select the super macro icon ( ) by rotating the Rear jog dial (JOG2).
4. Press the Macro (Down) button to set the setting.
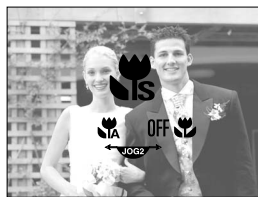
[Selecting the super macro]

Macro

INFORMATION

- If you rotate the Zoom ring and place the zoom ring at the S.MACRO of the Zoom bar, the macro mode will be changed to the Auto macro automatically.
- 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 10cm(MACRO focus), select the FLASH OFF mode.
- When you take a picture within 5cm, the AF may take a time to get exact focus range.

■ Available focusing method, by recording mode. The items indicated by [　　] are default settings. (O: Selectable, X: Not selectable)

Mode	📷	P	A	S	M	My	🎥
Auto	O	O	O	O	O	O	O
Macro	O	O	O	O	O	O	O
Super macro	O	O	O	O	O	O	X
Auto macro	O	O	O	O	O	O	O

Mode	🌙	◐	👤	⛰	🌷	📄	🌅	🎆	🏖	❄	📶
Auto	O	O	O	O	O	O	O	O	O	O	O
Macro	O	O	O	O	O	O	O	O	O	O	O
Super macro	O	O	O	O	O	O	O	O	O	O	O
Auto macro	O	O	O	O	O	O	O	O	O	O	O

Flash

■ You can select a flash according to the shooting conditions.
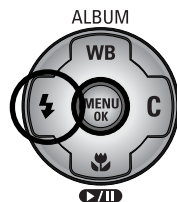
● How to set the flash mode

1. Press the Flash button (Left) and flash mode icons display on the LCD.
2. Select a desired flash icon by rotating the Rear jog dial (JOG2).
3. Press the Flash button to set the setting.
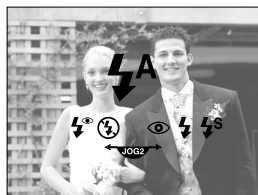
[Flash mode icons]

● How to set the pop-up flash

1. Press the Menu button and select the [P] menu tab.
2. Press the Right button and select [Pop-up] menu by pressing the Up/ Down button.
3. Press the Right button and select a desired menu by pressing the Up/ Down button.
   - [Auto] : The flash will pop-up by pressing the shutter button half way down in accordance with the lighting condition.
   - [Manual] : The flash off mode will be selected and the flash will not pop-up automatically. To use lthe flash, press the Pop-up flash button.
4. Press the OK button to set the setting.
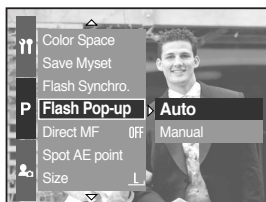
※ When you select the [Manual] menu, press the Pop-up flash button to use the flash.

※ Do not open the pop-up flash by force. It may cause breakdown of the flash. Press the Pop-up button to open the flash.
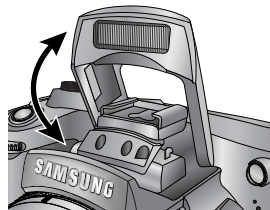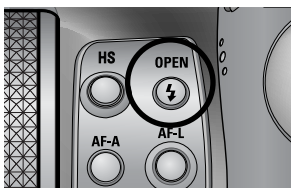
Flash

● Flash compensation : The intensity of the flash will be
controlled, according to the lighting
conditions.

1. Press the Pop-up flash button and the flash will pop up.
2. Press the Pop-up flash button again and a gauge will
display as shown alongside.
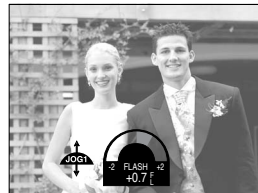
3. Rotate the Front jog dial (JOG1) to select a desired
intensity of flash.
4. Press the shutter button half way down to set the setting.
The intensity of flash will display on the LCD.
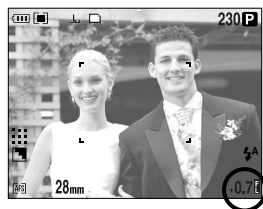
● Flash synchronization : You can select a flash timing to take a desired image
(In case of the Program mode)

1. Press the Menu button and select the [P] menu tab.
2. Press the Right button and select the [Flash Synchronization]
menu by pressing the Up/ Down button.
3. Press the Right button and select a desired menu by
pressing the Up/ Down button.
 - [1st curtain]   : The flash fires right after the shutter fully
opens.
 - [2nd curtain]   : The flash fires just before the shutter
closes.
4. Press the OK button to set the setting.
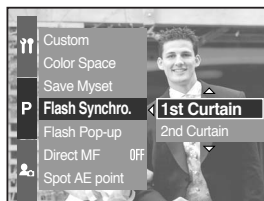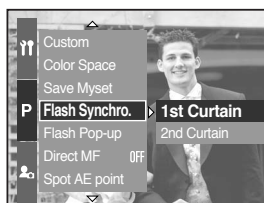
Flash

■ Flash range (Internal flash)   (Unit : cm, ISO 100)

Camera mode	Wide	Tele
Flash range	7 ~ 600	150 ~ 300

※ We recommend using the flash off mode in the macro and super macro mode.

■ Flash mode indicator

Icon	Flash mode	Description
$\boldsymbol{\sharp}^A$	Auto Flash	If the subject or background is dark, the camera flash will operate automatically. The Fill in flash icon will display in dark condition and the Flash off icon will display in bright condition.
⊙	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 firing the pre-flash.
$\boldsymbol{\sharp}$	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.
$\boldsymbol{\sharp}^S$	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. We recommend using the tripod.
$\boldsymbol{\sharp}^{\circledcirc}$	Fill in & Red eye reduction	The flash fires regardless of available light. The intensity of the flash will be controlled, according to the prevailing conditions and it will reduce the red-eye effect by firing the pre-flash.
⊛	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 poorly lit conditions, the camera shake warning indicator (《'm'》) will display on the LCD. We recommend using the tripod.
📺	External flash	You can mount an external flash (optional) in accordance with the shooting conditions.

Flash

■ Available flash mode, by recording mode. The items indicated by ☐ are default settings.

	▣	▣	Ⓐ	Ⓢ	Ⓜ	My	🎬	🅒	🚫	👤	⛰	🌄	📄	🍴	🎆	🏖	🔆	🔅
⚡A	0	0	X	X	X	0	X	0	0	0	0	0	0	0	0	0	0	0
◉	0	0	X	X	X	0	X	0	0	0	0	0	0	0	0	0	0	0
⚡	0	0	0	0	0	0	X	0	0	0	0	0	0	0	0	0	0	0
⚡S	X	0	0	X	X	0	X	0	0	0	0	0	0	0	0	0	0	0
⚡◉	0	0	0	0	0	0	X	0	0	0	0	0	0	0	0	0	0	0
🚫	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
⚡▮	0	0	0	0	0	0	X	0	0	0	0	0	0	0	0	0	0	0

INFORMATION

● If the pop up flash doesn't open fully, do not press the shutter button. It may damage the flash.
● Keep the flash clearly or the flash power ratio can be decreased.
● When you press the shutter button after selecting the Auto, Fill in, Slow synchro flash, the flash will fire to check the shooting conditions like the subject's distance and intensity of the 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 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.
● If you attach the supplied lens hood, it may block the flash.
● When you select the Fill-in flash, the shutter speed can be selected between 15.0 ~ 1/1,000 sec.

External flash (optional)

- You can mount an external flash in accordance with the shooting conditions.

- If the external flash is mounted, you can't use the internal flash.

- When the external flash is mounted, it is possible that camera shake will occur.
  We recommend using a tripod to reduce this.

- Refer to the user manual of the external flash (optional) for more information.

● How to use the external flash

1. Turn off the flash power and mount it to the hot shoe.
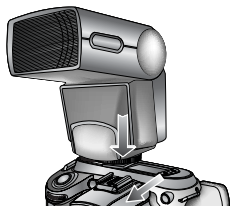
2. Settle the flash by rotating the rigged wheel of flash as shown alongside.
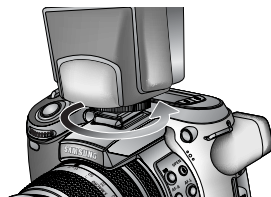
3. The external flash icon will display on the LCD as shown alongside.
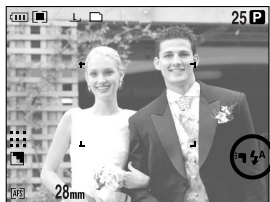
* When using the external flash, check the flash range displayed on the LCD panel of the flash before taking a picture.
* With attaching the external flash, you can change the intensity of the flash by pressing the Flash compensation button.
* The camera may not function properly when using a flash manufactured by another company.
* We recommend using the exclusive external flash (SEF-42A) and using a flash manufactured by another company is not covered by the Samsung warranty.

Custom settings

■ You can save your preferences in the [Custom] menu and load it by pressing the Custom button.

● How to set the Custom settings in the Program mode
1. Press the Menu button and select the [P] menu tab.
2. Press the Right button and select the [Custom] menu by pressing the Up/ Down button.
3. Press the Right button and select a desired sub menu by pressing the Up/ Down button.
   - Size
   - Quality
   - Effect
   - Sharpness
   - Voice memo
   - LCD brightness
※ The sharpness and effect can't be saved in the Auto mode and Scene mode. The sharpness and voice memo can't be saved in the Movie clip mode.

4. Press the OK button to set the setting.

		Voice Memo OFF		Voice Memo
Interval/Time		LCD Brightness
Interval/Number		
P	**Custom**	**Size**
Color Space		Quality
Save Myset		Effect
Flash Synchro.		

[Program mode]

● How to use the Custom button
1. After selecting a desired sub menu in the [Custom] menu, press the Custom button.
2. The selected menu will display on the LCD.
3. Select a desired sub menu by rotating the Rear jog dial (JOG2) and press the OK button to set the setting.
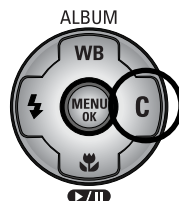
[Size sub menu]

LCD button

- You can change the display of the Rear LCD, Finder LCD and Top LCD.

- Refer to page 26 for more information about each LCD.

● How to change the display status

- Rear LCD is on
- Top LCD is on (Icon)
- Finder LCD is off

Pressing the
LCD button

Pressing
the LCD
button

- Rear LCD is off
- Top LCD is on (Icon)
- Finder LCD is on

Pressing the
LCD button

- Rear LCD is off
- Top LCD is on (Icon, Pre-view)
- Finder LCD is off
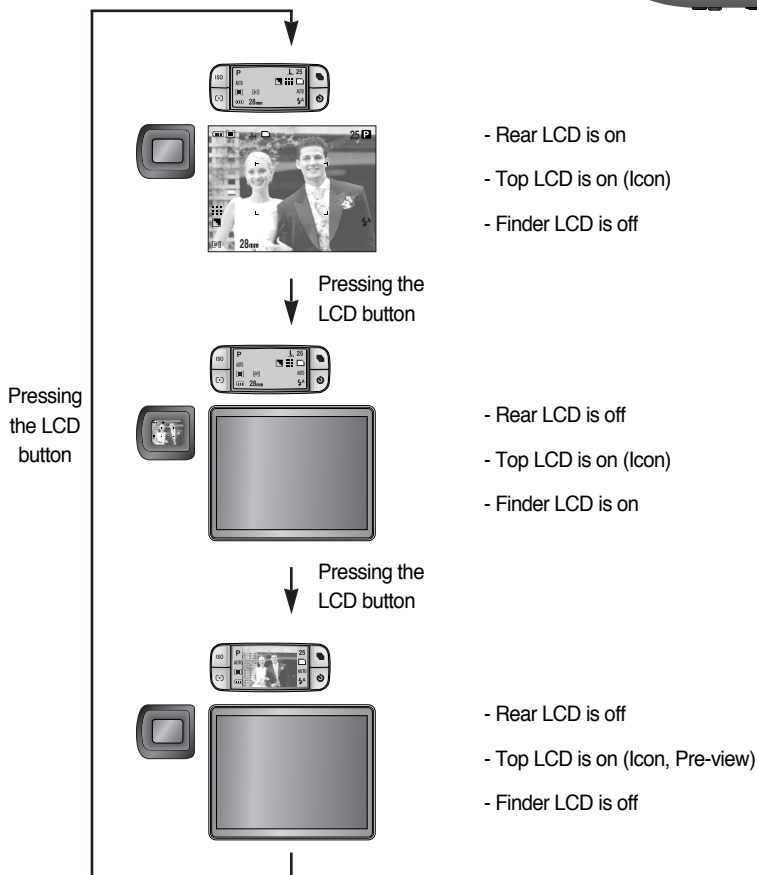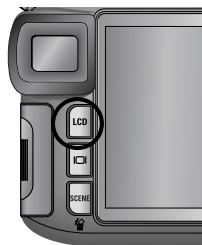
※ When using the Rear LCD, set the shutter speed over 1/250.
※ If you select the Play mode or PictBridge when the top LCD is on, the top LCD is turned off and the Rear LCD is turned on automatically.

Display/ Information button (▢)

- You can check the recording status in the LCD.
  Pressing the Display/ Information button will change
  the display as shown below.

- Some information will not display in the AUTO, MOVIE CLIP
  and SCENE mode.

[Normal display] Pressing the (▢) button → [Image only] Pressing the (▢) button → [Image & Full information]

[Current and last shot comparison] ← Pressing the (▢) button [Grid mark] ← Pressing the (▢) button [Histogram]
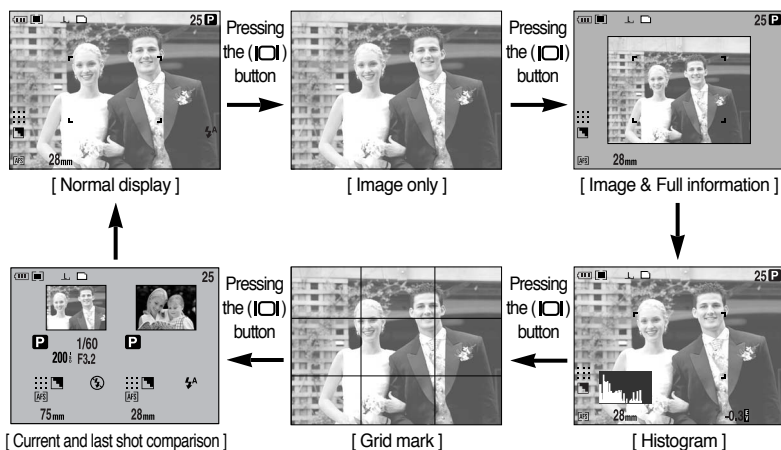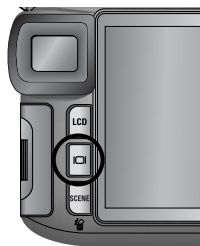
- Histogram shows you the distribution of brightness in
  recorded images. If the bars in the histogram are higher
  towards the right, the image may be too bright.
  If the bars are higher on the left, the image may be too
  dark. If the lighting conditions are too bright to check
  the subject by using the LCD, checking the histogram will
  enable more precise exposure control for the shots.

Pixel

Distribution of brightness
Dark   Bright
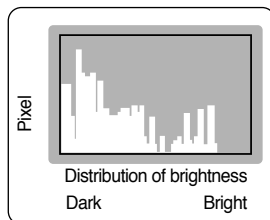
- Current and last shot comparison
  The last captured image displays on the left side of the LCD and the pre-view image displays
  on the right side of the LCD. You can compare the two images to take next shot.

※ Information displayed on the Finder LCD is the same as the information on the Rear LCD.

SCENE button

■ Select the [Scene] submenu to automatically configure optimal settings, depending on the selected scene.

■ If you change the camera mode, Macro (p.56), Flash (p.57), High speed shutter (p.49) and Drive mode settings (p.36) set in the Scene mode are changed to default setting automatically.
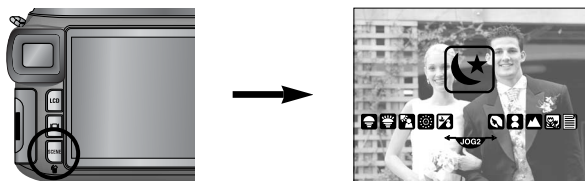
Sub menu	Icon	Description
[Night]		Use this for shooting still images at night or in other dark conditions.
[Portrait]		To take a picture of a person.
[Children]		To take a picture of fast moving objects, for example, children.
[Landscape]		To take pictures of distant scenery.
[Close up]		Close-up shooting for small objects such as plants and insects.
[Text]		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.

INFORMATION

● When [Night], [Landscape], [Close up], [Text], [Sunset], [Dawn] and [Firework] scene mode are selected, it is possible that camera shake will occur. In this case, take care of the camera shaking.

Diopter

■ You can see the Finder LCD clearly by rotating the diopter.

■ The range is from -4 to +2 dpt.

● Diopter
　　1. Select the Finder LCD by pressing the LCD
　　　 button (p.63).

　　2. While looking though the Finder LCD, rotate
　　　 the diopter to the left or the right.

　　3. When you can see the Finder LCD clearly,
　　　 adjustment is complete.
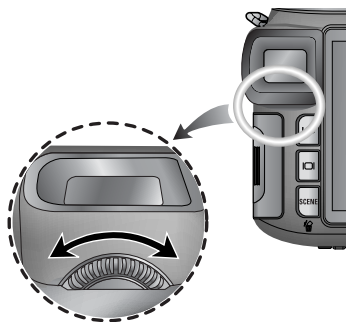
Using the LCD monitor to adjust the camera settings

■ You can use the menu on the LCD to set up recording functions.

INFORMATION

● The menu will not be displayed on the LCD monitor in the following circumstances :
  - When another button is being operated.
  - While image data is being processed. (when the Card in use lamp blinks)
  - 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.

Main menu	Sub menu	Camera working mode	Page
Size	3264X2448	⊡ P A S M My SCENE	p.70
	3264X2176		
	3264X1840		
	2400X1800		
	1632X1224		
	1024X768		
	640X480		
	640X480	🎥	
	320X240		
	160X120		
Quality	RAW	P A S M My	p.71
	TIFF		
	Super Fine	⊡ P A S M My SCENE	
	Fine		
	Normal		
Frame Rate	25 fps	🎥	
	15 fps		

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Using the LCD monitor to adjust the camera settings

Main menu	Sub menu	Camera working mode	Page
Effect	Normal	P A S M My ▣(movie)	p.72
	B & W		
	Sepia		
	Negative		
Contrast	+2 ~ 0 ~ -2	P A S M My ▣(movie)	p.73
Saturation	+2 ~ 0 ~ -2		p.74
Sharpness	Soft	P A S M My	p.75
	Normal		
	Vivid		
Voice memo	Off	▣ P A S M My SCENE	p.76
	One Pic		
	All Pics		
Interval/Time	1 ~ 60 min	P A S M My SCENE	p.39
Interval/Number	2 ~ 99 pics		
Custom	LCD Brightness, Size, Quality	▣ P A S M My ▣(movie) SCENE	p.62
	Effect	P A S M My ▣(movie)	
	Sharpness	P A S M My	
	Voice memo	▣ P A S M My SCENE	
Color Space	sRGB	P A S M My	p.77
	Adobe RGB		
Save Myset	Myset 1	P A S M My	p.78
	Myset 2		
	Myset 3		
Load Myset	Myset 1	My	
	Myset 2		
	Myset 3		

Using the LCD monitor to adjust the camera settings

Main menu	Sub menu	Camera working mode	Page
Flash Synchro.	1st Curtain	P A S M My	p.58
	2nd Curtain		
Flash Pop-up	Auto	P A S M My	p.57
	Manual		
Direct MF	Off	P A S M My	p.48
	On		
Spot AE Point	Center	P A S M My	p.79
	Focus Area		

* Menus are subject to change without prior notice.

Size

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

Flash Pop-up		^
Direct MF	OFF	1024 × 768
Spot AE point		640 × 480
P	**Size**	**L**	**3264 × 2448**
Quality	▦	3264 × 2176
Effect	NOR	3264 × 1840
Contrast		▼
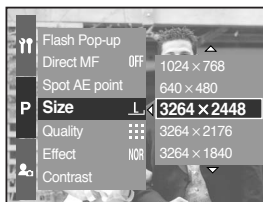
[Program mode]

Size Mode	With Menu button	With Jog dial	Icon
Still image	3264X2448	L	__L__
	3264X2176	3:2	__3:2__
	3264X1840	16:9	__16:9__
	2400X1800	M1	__M1__
	1632X1224	M2	__M2__
	1024X768	S1	__S1__
	640X480	S2	__S2__
Movie clip	640X480	640	__640__
	320X240	320	__320__
	160X120	160	__160__

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.
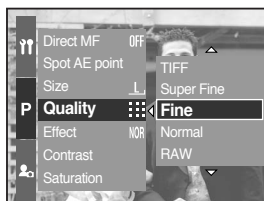
[Program mode]

Mode	Still image mode					Movie clip mode	
Icon	RAW	TIFF	▦	▥	⠏	▦	▤
Sub menu	RAW	TIFF	S. Fine	Fine	Normal	25 FPS	15 FPS
File format	dng	tif	jpeg	jpeg	jpeg	avi	avi

INFORMATION

● A RAW file contains the original image information. To edit this file format, you have to use supplied software to edit it.
● The RAW and TIFF file format are for advanced users and provides the best quality. However, large file size reduces number of available pictures to take and increases saving time to the memory card.
● A [Processing!] message is displayed while saving a RAW or TIFF file to the memory card.
● When you select a RAW or TIFF file type, the image size is fixed as 3264X2448 (└┐).
● The RAW and TIFF file format can't be selected in the SCENE 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.
● A movie clip can be recorded for as long as the available recording time of the memory capacity allows. (A movie clip sets as 640X480 movie size and 25fps frame rate can be taken up to 30 seconds.)

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Effect

■ By using the camera's digital processor, it is possible to add special effects to your images.

[Program mode]
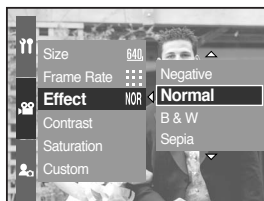
[Movie clip mode]

[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]   : Saves the image in negative mode.

Contrast

- You can change the distinction between light and dark parts of images.

- You can make images with marked differences in light and shadow softer, and those with less differences more vivid.

● How to set the contrast in the Program mode

1. Press the Menu button and select the [P] menu tab.

2. Press the Right button and select the [Contrast] menu by pressing the Up/ Down button.

	Size	L
	Quality	:::
	Effect	NOR
P	**Contrast**	**0**
	Saturation	
	Sharpness	
	Voice Memo	OFF
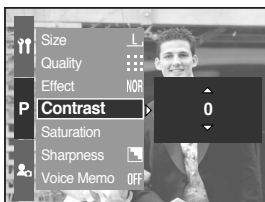
3. Press the Right button and select a desired menu by pressing the Up/ Down button.
   - You can see the changes by pressing the Up/ button.
   - Setting range : +2 ~ 0 ~ -2

4. Press the OK button to set the setting

	Size	L
	Quality	:::
	Effect	NOR
P	**Contrast**	**1**
	Saturation	
	Sharpness	
	Voice Memo	OFF
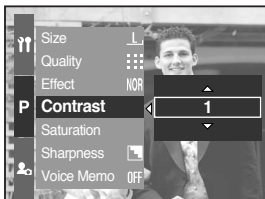
Saturation

■ You can change the saturation of images.

● How to set the saturation in the Program mode
   1. Press the Menu button and select the [P] menu tab.
   2. Press the Right button and select the [Saturation] menu
      by pressing the Up/ Down button.
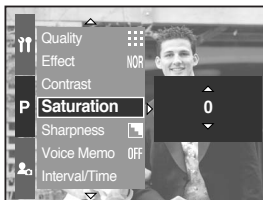
   3. Press the Right button and select a desired menu
      by pressing the Up/ Down button.
      - Setting range : +2 ~ 0 ~ -2
   4. Press the OK button to set the setting.
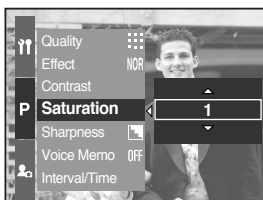
Sharpness

- You can adjust the sharpness of the picture you want to take. You cannot check the sharpness effect on the LCD before you take a picture, because this function is applied only when the captured image is stored in the memory.
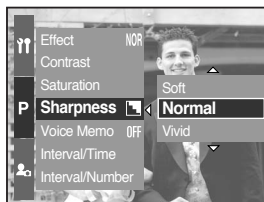
[Program mode]

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 emphasised. The edges will appear sharp, but noise may occur in the recorded image.

Voice memo

■ You can add your voice-over to a stored image.

● Recording a voice memo in the Program mode
   1. Press the Menu button and select the [P] menu tab.
   2. Press the Right button and select the [Voice Memo] menu by pressing the Up/ Down button.
   3. Press the Right button and select a desired menu by pressing the Up/ Down button.
      - [Off]   : cancels the voice memo.
      - [One Pic]   : the voice memo is added to a stored image only.
      - [All Pics]   : the voice memo is added to all stored image.
   4. Press the OK button to set the setting.
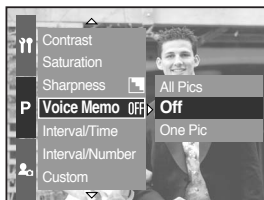
[Program mode]
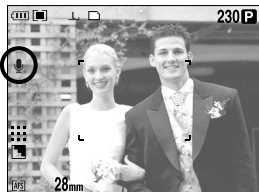
[Preparing for voice memo]
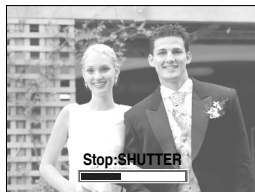
[Recording voice memo]

   5. If the voice memo indicator is displayed on the LCD, the setting is complete.
      Press the shutter button. The picture is stored on the memory card.
   6. Voice memo will be recorded for ten seconds from the moment the picture is stored.
      In the middle of the sound recording, pressing the shutter button will stop the voice memo.

INFORMATION

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

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Colour space

- You can select how the colours are reproduced (sRGB, Adobe RGB) on the monitor or printer.

- Adobe RGB has more colour spectra than sRGB and it is suitable for printing and computer graphics.

● How to set the Colour space in the Program mode
   1. Press the Menu button. and select the [P] menu tab.
   2. Press the Right button and select the [Color space] menu by pressing the Up/ Down button.
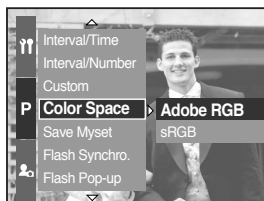
   3. Press the Right button and select a desired menu by pressing the Up/ Down button.
      - sRGB/Adobe RGB
   4. Press the OK button to set the setting.
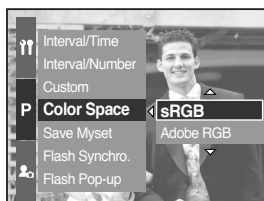
Save/ Load a specific camera configuration (MySET)

- Use the MySET mode to save frequently used camera settings (Save Myset) and use it later (Load Myset).

● Saving the camera configuration : Available in the PROGRAM, A, S, M shooting mode and MySET mode.

1. Use the camera buttons and menu to set the desired camera configuration.
2. Press the menu button in any mode except AUTO, MOVIE CLIP and SCENE mode. Select the [P] menu tab.
3. Press the Right button and select the [Save Myset] menu by pressing the Up/ Down button.
4. Press the Right button and select the desired MySET slot number to save by pressing the Up/ Down button.
5. Press the OK button and a confirmation window will display. Select [Yes] menu and press the OK button to save the current configuration in the selected MySET slot and close the menu.
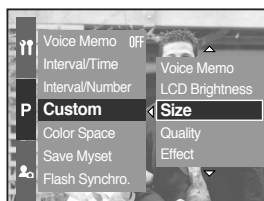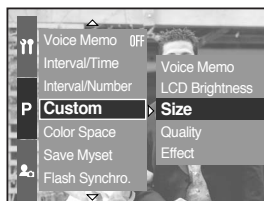
[Program mode]

● Loading the saved camera configuration : available in the MySET shooting mode.

1. Turn the Mode dial to select the MySET shooting mode and press the Menu button.
2. Press the Menu button and select the [My^1] menu.
3. Press the Right button and select the [Load Myset] menu by pressing the Up/ Down button.
4. Press the Right button and select a MySET slot number to load by pressing the Up/ Down button.
5. Press the OK button and a confirmation window will display. Select the [Yes] menu and press the OK button to set the setting.

* The current MySET slot number is displayed in the top left of the LCD.

[MySET mode]

※ Saving is available for the following camera functions.
  Functions using the camera buttons - Macro, flash, white balance, ISO, Exposure value, Aperture value and Shutter speed.
  Functions using the menu screen - Size, quality, effect and sharpness.

Spot AE (Auto Exposure) point

■ You can select a spot AE point where the brightness is calculated.

● How to set the spot AE point in the Program mode
  1. Select the spot metering mode (p.43).
  2. Press the Menu button and select the [P] menu tab.
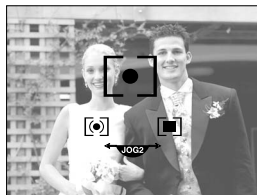
  3. Press the Right button and select the [Spot AE point]
     menu by pressing the Up/ Down button.
  4. Press the Right button and select a desired menu
     by pressing the Up/ Down button.
   - [Center]   : The brightness is calculated based on
                     the + marked area placed on the centre
                     of the Rear LCD. Select this menu when
                     the subject is in the backlight shooting
                     condition or in the shadow.
   - [Focus Area] : The brightness is calculated based on where the auto focus frame is placed.
                    If there is a gap of brightness between the subject and centre part of the LCD,
                    select this menu. Refer to page 46 for more information about how to set the
                    Spot AE point. It is the same as those for AF-A setting up.
  5. Press the OK button to set the setting.
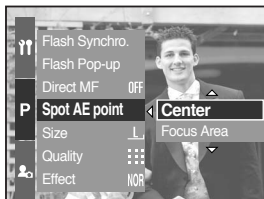
Starting play mode

■ 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 switch to Recording mode.

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

■ If you press the play mode button with turning on the Top LCD, the last image stored on the memory is displayed on the Rear LCD.

● 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.

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.
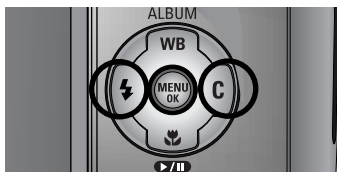
INFORMATION

● Manner mode : Pressing the play mode button for more than 2 seconds changes the buzzer and start-up sound setting to OFF, even though you may have set these to ON. Refer to page 120 (Sound) and 126 (Start up sound) for more information.

● 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.
4. Press the Play & Pause button (▶/❚❚) to play back
   a movie clip file.
 - To play back or pause a movie clip. Press the Play &
   Pause button.
 - To rewind the movie clip while it is playing, press the Left
   button. To fast forward the movie clip, press the Right
   button.
 - Whenever you press the Left/ Right button while the movie
   clip is playing the rewinding/ fast forwarding speed will be
   2, 4, 8 times faster.
   Pressing the Play & Pause button will reduce the speed.
 - To stop playback of the movie clip, press the Play & Pause button, and then press the Left
   or Right button.
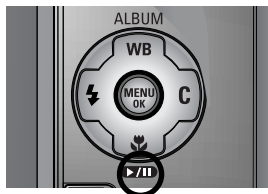
■ Movie clip capture function : capture still images from the movie clip.

● 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 back the movie clip.
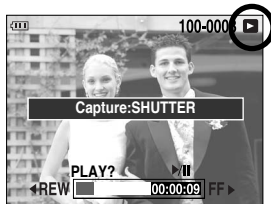
[Pause]

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 the same size as the
   original movie clip (640X480, 320X240, 160X120).

[Press the shutter button]

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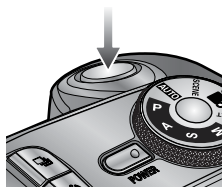
LCD monitor indicator
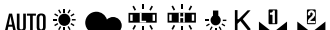
■ The LCD displays shooting information about the displayed image.

■ Refer to page 63 for more information about selecting an LCD.
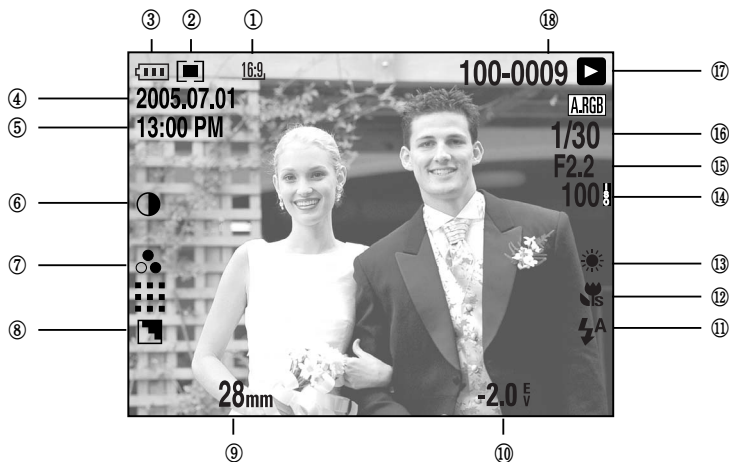
[Image & Full information]

No.	Description	Icon	Page
1	Image size	L , 3:2, 16:9, M1, M2, S1, S2, 640, 320, 160,	p.70
2	Metering	▣ ◉ ●	p.43
3	Battery status	▥ ▥ ▥ ▭	p.17
4	Date	2005.07.01	p.117
5	Time	13:00 PM	p.117
6	Contrast	◑	p.73
7	Saturation	○●	p.74
8	Quality	RAW TIFF ⣿ ⣿ ⠒	p.71
9	Sharpness	◪ ◩ ◗	p.75
10	F No.	28mm	p.44
11	Exposure compensation	-2.0 ^E_V	p.50

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LCD monitor indicator

12	Flash	◉ ⚡ (⚡)	p.57~60
13	Macro	🌷 🌷ıs 🌷ıA	p.55~56
14	White balance	AUTO ☀ ☁ ☼ ☼ ☀ K ▣ ▣	p.53~54
15	ISO	AUTO 50 100 200 400	p.42
16	Aperture value	F2.2	p.30~31
17	Shutter speed	1/30	p.30~31
18	Colour space	A.RGB	p.77
19	Play mode	▶	p.80
20	Folder name and Stored image number	100-0009	p.112

Top LCD
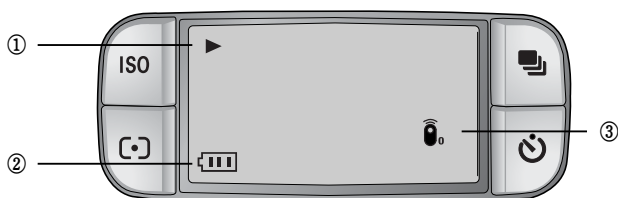
No.	Description	Icon
1	Play mode	▶
2	Battery status	▦ ▦ ▢ ▭
3	Remote control	🖰₀

Thumbnail button/ Enlargement button

- In Play mode, you can use the buttons and the jog dial on the camera to conveniently set up the Play mode functions.

- 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.
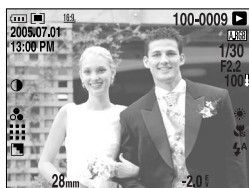
[Normal display mode]

Pressing the Thumbnail button (   )

Pressing the Thumbnail button (   )
Highlighted image

[Thumbnail display mode]

3. Change the number of thumbnails by rotating the Front jog dial (JOG1). You can select 4, 9, 16, 25 thumbnails.
   - Rotating the Front jog dial to left will reduce the number of thumbnails.
   - Rotating the Front jog dial to right will increase the number of thumbnails.
4. Rotate the Rear jog dial (JOG2) or press the Up/ Down/ Left/ Right button to move to a desired image.

● Image enlargement

1. Select an image that you want to enlarge and press the Enlargement button (Q).
2. You can change the enlargement rate by rotating the Rear jog dial (JOG2) or pressing the Thumbnail/ Enlargement button.
   - Rotating the Rear jog dial to the right or pressing the Enlargement button will increase the enlargement rate.
   - Rotating the Rear jog dial to the left or pressing the Thumbnail button will reduce the enlargement rate.
3. Different parts of the image can be viewed by pressing the Up/ Down/ Left/ Right button.

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Thumbnail button/ Enlargement button

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

Image size	L	3:2	16:9	M1	M2	S1	S2
Maximum enlargement rate	×10.20	×10.20	×10.20	×6.82	×4.64	×4.00	×3.33

INFORMATION

● 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. (If the image is not an enlarged view, the indicator will not be displayed.) You can also check the area of enlargement.
● RAW, TIFF and Movie clip files can't be enlarged.
● If an image is enlarged, a loss of quality may occur while the image is playing back.
● During the image enlargement, you can delete the image by pressing the delete button.
● When a rotated image (refer to page 123, Auto rotating sensor) is enlarged, the image is rotated vertically and enlarged. After completing the enlargement, the image will be rotated horizontally.

● Trimming : You can extract part of the image that you want and save it separately.

1. Enlarge an image by rotating the Rear jog dial (JOG2) and press the Menu button.
2. Press the Menu button and a message will display to crop the image.
3. Select a desired sub menu by pressing the Up/ Down button and press the OK button.
 - [Yes] : The trimmed image will save as a new file name, and display on the LCD.
 - [No] : The trimming menu will disappear.
 ※ If there is little memory space to save the trimmed image, the image can't be trimmed.

Display/ Information button (▯◯▯)

■ The shooting and playing back information will be displayed on the LCD. The last image stored in the memory is displayed on the LCD by pressing the play mode button.

■ Pressing the Display/ Information button(▯◯▯) in the PLAY mode will change the display as shown below.
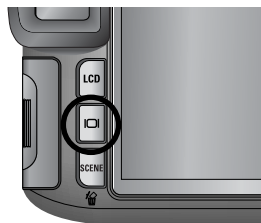
[Shooting information]   [Playing back information]   [Image only]

■ Refer to page 82 for more information about the shooting information.

■ The following is playing back information.
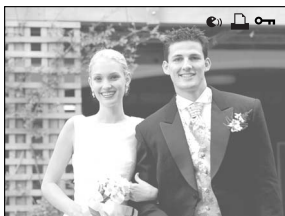
- [🔊] : Voice memo

- [🖶] : DPOF indicator

- [🔒] : Protect indicator

Album mode

- You can organise the captured still images into albums.

- This camera has 8 albums and each album can take up to 100 images.

- The album menu loading time depends on the memory card type.
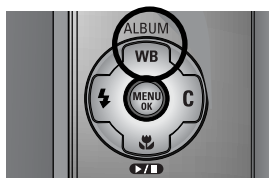
- How to use the album

● Selecting the album
  1. In the play mode, press the Album (Up) button.

  2. Select the [🔼] menu by pressing the Up/ Down button and press the Right button.

Exit:OK   Move:⬍

  3. Select a desired album by pressing the Up/ Down/ Left/ Right buttons and press the OK button.

Set:OK
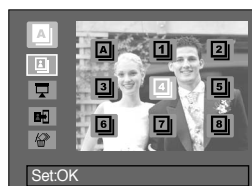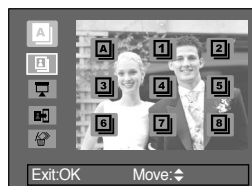
● Inserting still images into the album
  1. Select an album.
  2. Select the [🔽] menu by pressing the Up/ Down button and press the Right button.

Select:JOG1   Set:OK

Album mode

3. Select the still images you wish to add by pressing the Up/ Down/ Left/ Right buttons and rotate the Front jog dial (JOG1).
   V marks are displayed on the selected images.

 * To cancel the selection, rotate the Front jog dial (JOG1) again.

4. Press the OK button and a confirmation window will display. Select a desired sub menu by pressing the Up/ Down button and press the OK button.
   [Yes] : Inserts the selected images into the album.
   [No] : Cancels the insertion of images.

● Removing still images from the album
   1. Select an album.
   2. Select the [⌂] menu by pressing the Up/ Down button and press the Right button.
   3. Select a desired sub menu and press the OK button.
      [Select] : Specific still images in the album can be removed.
      [All] : All of the still images in the album will be removed.
   ※ If [Select] is selected :
      - Select images that you want to remove by pressing the Left/ Right buttons and rotate the Front jog dial (JOG1). V marks are displayed on the selected images.

4. Press the OK button and a confirmation window will display. Select a desired sub menu by pressing the Up/ Down button and press the OK button.
   [Yes] : Removes the selected images from the album.
   [No] : Cancels the removal of images.
 * The removed images are not deleted from the memory, but just removed from the album.

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Album mode

● Playing back the albums

◎ Playing back all of the albums

   1. Select [ ] menu and press the OK button.
      All of the albums will be selected.

   2. Select the [ ] menu by pressing the Up/ Down button
      and press the Right button.
   ※ You can select [Start], [Interval], [Repeat] and [Effect]
      menus.
    - [Start]   : Start the slide show
    - [Interval] : Set the slide show play interval
    - [Repeat] : Choose to repeat the slide show after finishing
                 the first cycle.
    - [Effect]   : Unique screen effects can be used for the
                slide show.
   3. Select the [Start] menu by pressing the Up/ Down button
      and press the OK button to start the slide show.
   4. To stop the slide show, press the MENU/ OK button.
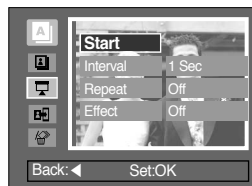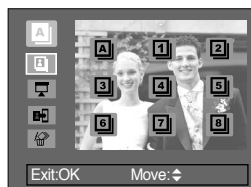
◎ Playing a desired album

   1. Select a desired album and press the OK button.
   2. Select the [ ] menu by pressing the Up/ Down
      button and press the Right button.
   ※ You can Select the [Start], [Interval], [Repeat] and
      [Effect] menu.
   3. Select the [Start] menu and press the OK button to
      start the slide show.
   4. To stop the slide show, press the MENU/ OK button.
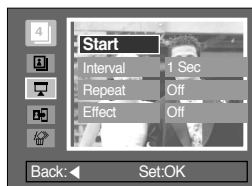
INFORMATION

- If an image is deleted from the memory, the image doesn't display on an album.
- An image can't be added twice into the same album.
- An image can be added into the different albums.

5-function button

■ The 5 function button activates the following.

- Up button : While the menu is showing, press the Up button to move the cursor up the menu.
When the menu is not displayed on the LCD, the Up button operates as
the Album button.
- Down button : While the menu is showing, press the Down button to move the cursor down.
If a still image with a voice memo or a movie clip is playing, pressing the
Down button make the files play back or pause.
- Left button : While the menu is showing, press the Left button to select the menu tab to the
left of the cursor. When the menu is not displayed, press the Left button
to select the previous image.
- RIGHT button : While the menu is showing, press the Right button to select the menu tab
to the right of the cursor. When the menu is not displayed, press the Right
button to select the next image.
- Menu/ OK button : When the menu is displayed on the LCD, the Menu/ OK button is used
for confirming data that is changed by using the 5 function button.
When you press the MENU button, the play mode menu will be
displayed on the LCD monitor. Pressing it again will return the LCD to
the initial display.

Remote control

■ After connecting the camera with an external monitor, you can see the captured image by using the remote control.

■ Remote control is optional in some countries.
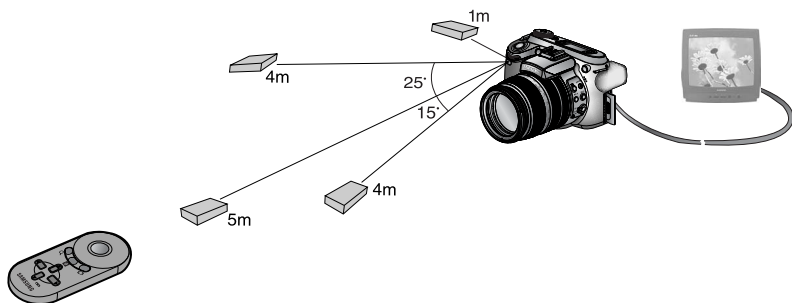
■ In play mode, you can use the remote control to set up the play mode functions.

Enlargement button

Thumbnail button

Display/ Information button

Up/ Down/ Left/ Right button

Play & Pause button
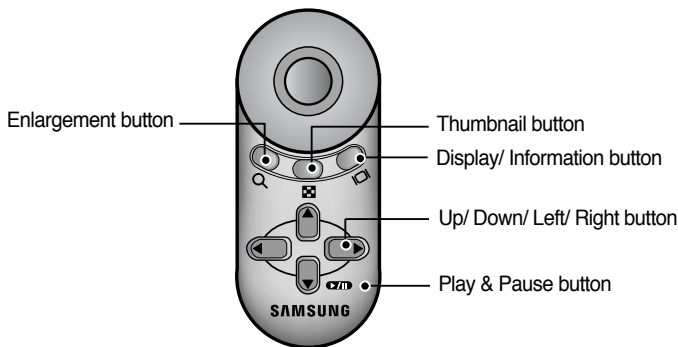
■ See below for operation of buttons

- Enlargement button : In play mode, this button enlarges the selected image.
  In the thumbnail mode, the number of thumbnails are reduced by pressing this button (Selectable number of thumbnails : 4, 9, 16, 25).

- Thumbnail button : If an image is enlarged, pressing this button will reduce the enlargement rate. In play mode, you can view multiple pictures by pressing this button. In the thumbnail mode, the number of thumbnails are increased by pressing this button (Selectable number of thumbnails : 4, 9, 16, 25).

Remote control

- Display/ Information button : In play mode, you can view the information of the selected image by pressing this button.
- Up/ Down/ Left/ Right button : In play mode, you can select a still image or movie clip by pressing the Left/ Right button.
In play mode, different parts of the enlarged image can be viewed by pressing these buttons.
In the thumbnail mode, you can move to a desired image by pressing these buttons.
- Play & Pause button : If a still image with a voice memo or a movie clip is playing, pressing this button make the files play back or pause.

Delete button (🗑)

■ This deletes images stored on the memory.

● Deleting Images in Play Mode
  1. Select an image that you want to delete by pressing the Left/ Right button and press the Delete (🗑) button.

  2. A message will display as shown alongside on the LCD.
  3. Select the [Yes] and press the OK button to delete the selected image.

Delete?
Yes
No
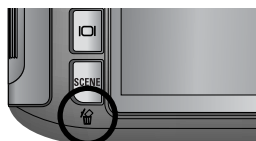
Delete:OK

INFORMATION

● While the delete menu is displaying, you can select a different image by pressing the Left/ Right button.
● Before deleting images from the camera, you should protect (p.98) or download images (p.145~146, 152~153) to your computer that you wish to keep.

Setting up the play back function using the LCD monitor

■ PLAY mode functions can be changed by using the LCD monitor.
Press the Menu button and select the [▶] menu tab. The play back menu will display.
The menus you can set up in Play mode are as follows. To capture an image after setting up the play menu, press the Play mode button or shutter button.

Menu tab	Main menu	Sub menu	Secondary menu	Page
▶	Slide Show	Interval	1, 3, 5, 10 sec	p.96~97
		Repeat	Off, On	
		Effect	Cancel	
			Effect 1,2,3	
		Start	-	
	Protect	Select	Unlock/ Lock/ Cancel	p.98
		All Pics		
	Delete	Select	-	p.99
		All Pics	-	
	Voice Memo	Off		p.100
		On		
	Resize	7M	-	p.101
		6M	-	
		5M	-	
		4M	-	
		3M	-	
		2M	-	
		1M	-	
		640X480	-	
		User Image	-	
	Rotate	Right 90°	-	p.102
		Left 90°	-	
		180°	-	
	DPOF/ Standard	Select/ All Pics/ Cancel	-	p.103~104
	DPOF/ Index	No/ Yes	-	
	DPOF/ Size	Select/ All Pics/ Cancel	-	

Setting up the play back function using the LCD monitor

■ This menu is available while the camera is connected to a PictBridge supporting printer (direct connection to the camera, sold separately) with a USB cable.

Menu tab	Main menu	Sub menu	Secondary menu	Page
ℐ	Images	One Pic	-	p.106
		All Pics	-	
	Auto Set	No	-	p.107
		Yes	-	
	Custom Set	Paper Size	Auto	p.107
			Postcard	
			Card	
			4X6	
			L	
			2L	
			Letter	
			A4	
			A3	
		Layout	Auto	
			Full	
			1	
			2	
			4	
			8	
			9	
			16	
		Paper Type	Auto	
			Plain	
			Photo	
			Fastphoto	

Setting up the play back function using the LCD monitor

Menu tab	Main menu	Sub menu	Secondary menu	Page
	Custom Set	Quality	Auto	p.107
			Draft	
			Normal	
			Fine	
		Date Print	Auto	
			Off	
			On	
		File Name	Auto	
			Off	
			On	
	Print	Standard	-	p.108
		Index	-	
	DPOF Print	No	-	p.108
		Yes	-	
	Reset	No	-	p.109
		Yes	-	

※ Menus are subject to change without prior notice.

Starting the slide show

■ Images can be displayed continuously at pre-set intervals. You can view the slide show by connecting the camera to an external monitor.

1. In play mode, press the Menu button and select the [▶] menu tab.
2. Press the Right button and select the [Slide Show] menu by pressing the Up/ Down button.
3. Press the Right button and select a desired sub menu by pressing the Up/ Down button.

● Setting play interval : Set the slide show play interval.

1. Select the [Interval] menu by pressing the Up/ Down button and press the Right button.
2. Press the Up/ Down button to select the desired interval.
3. Press the OK button to set the setting.
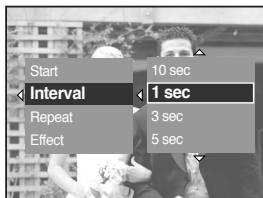
● Repeat setting : setting the slide show to repeat after the first cycle.

1. Select the [Repeat] menu by pressing the Up/ Down button and press the Right button.
2. Select a desired sub menu by pressing the Up/ Down button.
   [Off] Selected : The slide show is closed after one cycle.
   [On] selected : The slide show is repeated until cancelled.
3. Press the OK button to set the setting.

INFORMATION

● The loading time depends on the image size and quality.
● While the slide show is playing, only the first frame of a movie clip file is displayed.

Starting the slide show

● Configure slide show effects : Unique screen effects can be used for the slide show.

  1. Select the [Effect] sub menu by pressing the Up/ Down button and press the Right button.
  2. Use the Up/ Down button to select the type of effect.

  [Off]   : Normal display.
  [Effect 1] : Image moves from the top left.
  [Effect 2] : The image slides diagonally from top left
              to bottom right.
  [Effect 3] : Image is displayed slowly from the centre
              outwards.
  3. Press the OK button to set the setting.

● Start the slide show : The slide show can start only in the [Start] menu.

  1. Select the [Start] menu by pressing the Up/ Down
     button.
  2. Press the OK button to start the slide show.
   - Press the Play & Pause button to pause the slide show.
   - Press the Play & Pause button (▶/❚❚) again to
     resume the slide show.
   - To stop the slide show, press the Play & Pause button,
     and then press the Left or Right button.

《97》
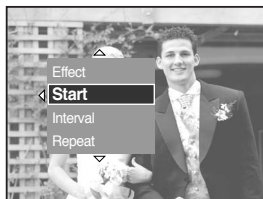
Protecting images

■ This is used to protect specific shots from being accidentally erased (Lock). It also unprotects images that have been previously protected (Unlock).

● How to protect images

1. In play mode, press the Menu button.
2. Select the [▶] menu tab and press the Right button.
3. Select the [Protect] 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 Right button.

[Select] : Selection window for an image to be protected/ released is displayed.
- Rear jog dial (JOG2)   : Select an image
- Front jog dial (JOG1)   : Protect/ release the image
- OK Button : Your changes will be saved and the menu will disappear.

[All Pics]   : Protect/ release all saved images
- [Lock]   : Protect all saved images
- [Unlock]   : Unprotect all save images
- [Cancel]   : The confirmation window will disappear.
- OK button : The changed settings are saved and menu will disappear.

- If you protect an image, the protect icon will be displayed by pressing the Display/ Information button on the LCD. (An unprotected image has no indicator)

- An image in LOCK mode will be protected from the delete function, but will NOT be protected from the Format function.

《98》

Deleting images

■ Of all the files stored in the memory card, the unprotected files in the DCIM subfolder will be
deleted. Remember that this will permanently delete unprotected images.
Important shots should be stored on a computer before deletion takes place.
The startup image is stored in the camera's internal memory (i.e., not on the memory card)
and it will not be deleted even if you delete all files on the memory card.

● How to delete images

1. In play mode, press the Menu button.
2. Select the [▶] menu tab and press the Right button.
3. Select the [Delete] menu and press the Right button.
4. Select a desired sub menu by pressing the Up/ Down
   button and press the Right button.

 [Select] : Selection window for an image to delete is
           displayed.
 - Rear jog dial (JOG2) : Select an image.
 - Front jog dial (JOG1) : Select the image for deletion.
 - OK button : Press the OK Button to display the
              confirmation message. Select the [Yes]
              menu and press the OK Button again to
              delete [🔏] marked images.
 [All Pics] : Displays confirmation window. Select the [Yes]
            menu and press the OK button to delete all
            unprotected images. If there are no protected
            images, a [No Image!] message will display.
5. After deletion, the screen will be changed to the play
   mode screen.

DPOF/Size
Slide Show
Protect
Delete ▸ **Select**
Resize   All Pics
DPOF/Standard
DPOF/Index

Move Pic:JOG2   Select:JOG1   Set:OK

Delete?
Yes
No

Delete:OK
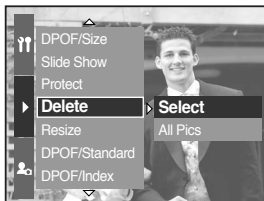
Voice memo

■ You can add your voice to a stored still image.

● How to add a voice to a still image
  1. Select an image that you wish to add sound to by pressing the Left/ Right button.
  2. Select the [▶] menu by pressing the Menu button and press the Right button.
  3. Select the [Voice Memo] menu by pressing the Up/ Down button and press the Right button.
  4. Select the [On] menu by pressing the Up/ Down button and press the OK button.

  5. The camera is now ready to record a voice memo.
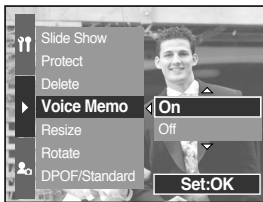
  6. Press the shutter button to start recording and voice will be recorded to the still image for 10 seconds. While the voice is recording, the recording status window will be displayed as shown alongside.
  7. The recording can be stopped by pressing the shutter button again.
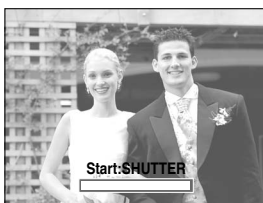
  8. The ( ) icon will be displayed on the LCD by pressing the Display/ Information button after voice memo recording has finished.
  - Voice memos can't be recorded onto movie clip files.
  - A distance of 40cm between you and the camera (microphone) is the best distance to record sound.
  - The voice memo will be saved in *.wav format, but has the same file name as the still image to which it corresponds.
  - If you add a new voice memo to the still image that already has a voice memo, the existing voice memo will be erased.

《100》

Resize

■ Change the resolution (size) of pictures taken. Select the [User Image] to save an image to be the start-up image. The resized image will have a new file name.

1. In play mode, press the Menu button and select the [▶] menu tab.
2. Press the Right button and select the [Resize] menu by pressing the Up/ Down button.
3. Press the Right button and select a desired sub menu by pressing the Up/ Down button.
4. Press the OK button and a confirmation window will display.
5. Select the [Yes] menu and press OK button to save the resized image.
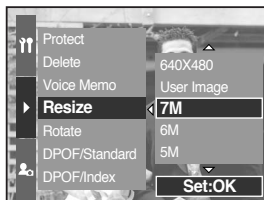
● Image Resize Types

Size	7M	6M	5M	4M	3M	2M	1M	640 X480	User Image
3264X2448	O	O	O	O	O	O	O	O	O
3264X2176	X	X	X	X	X	X	X	X	X
3264X1840	X	X	X	X	X	X	X	X	X
2400X1800	X	X	X	O	O	O	O	O	O
1632X1224	X	X	X	X	X	O	O	O	O
1024X768	X	X	X	X	X	X	X	O	O
640X480	X	X	X	X	X	X	X	X	O

INFORMATION

● A large sized image can be resized to a smaller sized image, but not vice versa.
● 3264X2176(3:2) and 3264X1840(16:9) image size files, RAW, TIFF and Movie clip (AVI) files can't be resized.
● You can change the resolution of only those files compressed in the JPEG 4:2:2 format.
● The resized image will have a new file name. The [User Image] image is stored not on the memory card but on the internal memory.
● If the memory capacity is insufficient to store the resized image, a [Card Full!] message will display on the LCD and the resized image will not be stored.

《101》

Rotating an image

■ You can rotate the stored images by various degrees.

1. In play mode, press the Menu button and select the [▶] menu.
2. Press the Right button and select the [Rotate] menu by pressing the Up/ Down button.
3. Press the Right button and select a desired sub menu by pressing the Up/ Down button.
   [Right 90°] : Rotate picture in a clockwise direction
   [Left 90°] : Rotate picture in a counter clock-wise direction
   [180°] : Rotate picture 180 degrees
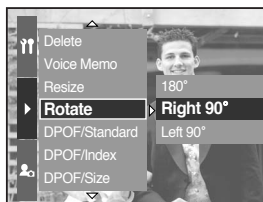
[Right 90°]
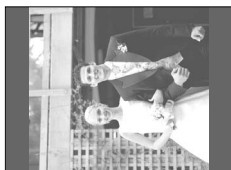
[Left 90°]

[180°]

4. Press the OK button and a confirmation window will display.
5. Select the [Yes] menu and press the OK button. A rotated image will display on the LCD and the menu will disappear. There will be empty space to the left and right of the rotated image.

INFORMATION

● The rotated image can't be enlarged or trimmed.
● RAW, TIFF and movie clip can't be rotated.

DPOF

- DPOF(Digital Print Order Format) allows you to embed printing information on your memory card's MISC folder. Select the pictures to be printed and how many prints to make.

- The DPOF indicator will display on the LCD when an image that has DPOF information plays back. Images can then be printed on DPOF printers, or at an increasing number of photo labs.

- This function is not available for Movie clips, RAW and TIFF files.

- Depending on the manufacturer and print model, cancelling the printing may take a little longer for the printer to process.

DPOF : STANDARD

- This function allows you to embed print quantity information on a stored image.

    1. In play mode, press the Menu button.
    2. Select [▶] menu tab and press the Right button.
    3. Select the [DPOF/Standard] 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 Right button.
    [Select] : Selection window for an image to print is displayed.
    - Rear jog dial (JOG2)   : Select an image to print.
    - Front jog dial (JOG1)   : Select the number of prints.
    [All Pics] : Configure number of prints for all pictures except movie and voice files.
    - Front jog dial (JOG1) : Select the number of prints.
    [Cancel] : Cancel the print setup.
    5. Press the OK button to confirm the setting. If an image carries DPOF instructions, the DPOF indicator (🖪) will show.
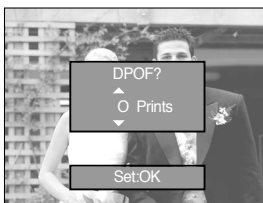
DPOF : INDEX

■ Images (except for movie clips and voice file) are printed as index type.
1. In play mode, press the Menu button and select the [▶] menu tab.
2. Press the Right button and select the [DPOF/Index] menu by pressing the Up/ Down button.
3. Press the Right button and select a desired sub menu by pressing the Up/Down button.
   If [No] is selected : Cancel the index print setting.
   If [Yes] is selected : The image will be printed in index format.
4. Press the OK button to set the setting.

Resize	
Rotate	
DPOF/Standard	
DPOF/Index	**No**
DPOF/Size	Yes
Slide Show	
Protect	**Set:OK**

DPOF : PRINT SIZE

■ You can specify the print size when printing images stored on the memory card.
The [DPOF/Size] menu is available only for DPOF 1.1 compatible printers.

● Setting the Print Size
1. In play mode, press the Menu button.
2. Select [▶] menu tab and press the Right button.
3. Select the [DPOF/Size] 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 Right button.
 [Select] : Selection window for an image to be changed printed size is displayed.
 - Rear jog dial (JOG2) : Select an image.
 - Front jog dial (JOG1) : Change the print size.
 - OK button : Your changes will be saved and the menu will disappear.
 [All Pics] : Change print size of all saved images
 - Select a desired print size by pressing the Up/ Down button.
 * DPOF Size secondary menu : Cancel, 3X5, 4X6, 5X7, 8X10

Rotate	
DPOF/Standard	
DPOF/Index	Cancel
DPOF/Size	**Select**
Slide Show	All Pics
Protect	
Delete	

3 X 5

Move Pic:JOG2   Select:JOG1   Set:OK

DPOF?
Cancel
3 X 5
4 X 6
5 X 7
8 X 10

Set:OK
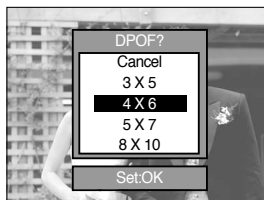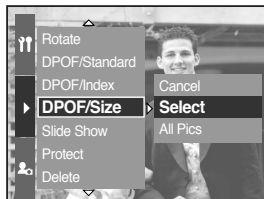
PictBridge

■ You can use the USB cable to connect this camera to a printer that supports PictBridge (sold separately) and print the stored images directly. RAW, TIFF and Movie clip files cannot be printed. You can set up the following settings from the PictBridge menu.

Images	: Select the pictures to be printed.
Auto Set/ Custom Set	: Setting up printing
Print	: Printing pictures
DPOF Print	: Printing the DPOF files
Reset	: Initialising the PictBridge functions

● Connecting the Camera to a Printer

1. Press the POWER button to turn on the camera.
2. Press the Menu button and select the set up menu tab (🅸🅸).
3. Press the Right button and select the [USB] menu by pressing the Up/ Down button.
4. Press the Right button and select the [Printer] menu by pressing the Up/ Down button.
5. Press the OK button to set the setting.
6. Use the supplied USB cable to connect the camera to the printer as shown below.
7. Turn on the printer and the camera will be connected to the printer.
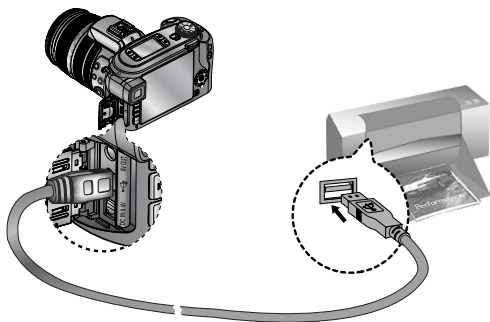
※ If you selected [Computer] in Step 4, when you connect the camera to your printer, the [Connecting Computer] message will display and the connection will not be established. In this case, disconnect the USB cable, and then follow the procedure from Step 1 and onward.

PictBridge : Picture Selection

■ Easy printing

When you connect the camera to printer in the Play back mode, you can print a picture easily.

- Pressing the shutter button : Currently displayed image will be printed with the printer's default setting.
- Pressing the Left/ Right button : Selects a previous/ next image.

100-0009

Move Pic: ◀ ▶   Print:SHUTTER
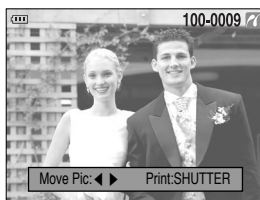
■ Select pictures to print

1. Connect the camera to your printer. The USB menu must be set to [Printer] before you connect the camera to the printer. (See p.105)
2. Press the Menu button and select the [✗] menu tab by pressing the Up/ Down button.
3. Press the Right button and select a desired sub menu by pressing the Up/ Down button. And then press the Right button.

DPOF Print
Reset
Images ▷ **One Pic**
Auto Set   All Pics
Custom Set
Print

When [One Pic] is selected : The PictBridge function will be applied only to the picture currently displayed.

When [All Pics] is selected : The PictBridge function will be applied to all pictures, excluding RAW, TIFF and movie clips files.

● Setting the Number of Copies to Print
- Select [One Pic] or [All Pics]. A screen where you can set the number of copies to print will appear as shown below.

Print?
▲
0   Prints
▼
Move Pic: ◀ ▶   Set:OK

Print?
▲
0   Prints
▼
Set:OK

[When [One Pic] is selected]   [When [All Pics] is selected]

- Press the Up/ Down button to select the number of prints.
- When you select [One Pic] menu, use the Left/ Right button to select another picture and select the number of prints for another picture.
- After setting the number of prints, press the OK button to save.

《106》

PictBridge : Print Setting

■ AUTO SET

Connect the camera to your printer. The USB menu must
be set to [Printer] before you connect the camera to the
printer. (See p.105)

1. Select the [Auto Set] menu by pressing the Left/ Right
   button.
2. Press the Right button and select a desired sub menu
   by pressing the Up/ Down button.

   [No] : [Custom Set] values are kept.

   [Yes] : Press the OK button and a confirmation window will display. Press the OK button
           again and all values in the [Custom Set] are automatically changed.
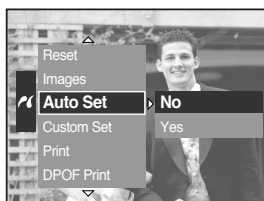
■ Custom Set : You can select the Paper Size, Print Format, Paper Type, Print Quality, Date,
              Print, and File Name Print menus for printed pictures.

Connect the camera to your printer. The USB menu must
be set to [Printer] before you connect the camera to the
printer. (See p.105)

1. Select the [Auto Set] menu by pressing the Left/ Right
   button.
2. Press the Right button and select a desired sub menu
   by pressing the Up/ Down button.
3. Select a desired sub menu and press the OK button.
   The menus you can set up are as follows :
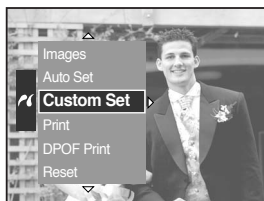
Menu	Function	Sub menu
Paper Size	Setting the size of the printing paper	Auto, Postcard, Card, 4X6, L, 2L, Letter, A4, A3
Layout	Setting the number of pictures to be printed on a sheet of paper	Auto, Full, 1, 2, 4, 8, 9, 16
Paper Type	Setting the quality of the printing paper	Auto, Plain, Photo, Fastphoto
Quality	Setting the quality of the picture to be printed	Auto, Draft, Normal, Fine
Date Print	Setting whether to print the date	Auto, Off, On
File Name	Setting whether to print the file name	Auto, Off, On

※ Some menu options are not supported in all manufacturer and printer models.

※ If the setting values are not changed in the automatic/manual setting, the setting values are
automatically kept.

《107》

PictBridge : Printing

■ Printing Pictures

Connect the camera to your printer. The USB menu must
be set to [Printer] before you connect the camera to the
printer. (See p.105)

1. Select the [Print] menu by pressing the Left/ Right
   button.
2. Press the Right button and select a desired sub menu
   by pressing the Up/ Down button.

   [Standard] : Print the pictures stored in the memory
   card in set numbers. One picture is printed on one piece of paper.

   [Index]　　 : Print multiple images on one sheet of paper.
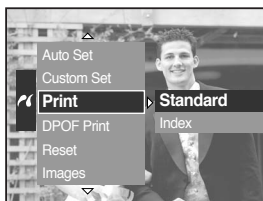
3. The screen shown on the right will appear and the
   picture will be printed. If no picture is selected,
   the [No image!] message will be displayed.
   Press the Menu/ OK button while printing to cancel
   the printing and the [Print] menu is displayed.

   ※ Depending on the manufacturer and printer model,
   some menus may not be available.

   ※ Depending on the manufacturer and print model,
   cancelling the printing may take a little longer for the
   printer to process.

■ DPOF Print : This allows you to directly print the files with DPOF information.

Connect the camera to your printer. The USB menu must
be set to [Printer] before you connect the camera to the
printer. (See p.105)

1. Select the [DPOF Print] menu by pressing the Left/ Right
   button.
2. Select a desired sub menu by pressing the Up/ Down
   button and press the OK button.

   [No]　 : Cancel the printing
   [Yes] : Directly print the file with the DPOF information

   ※ With a printer that does not support DPOF, the menu is still displayed but not available.

PictBridge : RESET

■ Initialises user-changed configurations.

Connect the camera to your printer. The USB menu must
be set to [Printer] before you connect the camera to the
printer. (See p.105)

1. Select the [Reset] menu by pressing the Left/ Right
   button.
2. Press the Right button and select a desired sub menu
   by pressing the Up/ Down button.

   If [No] is selected   : Settings will not be reset.

   If [Yes] is selected : Press the OK button and a confirmation window will display.
                           Press the OK button again and all print and image settings will be
                           reset.
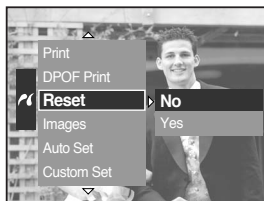
※ Default print setting varies depending on the printer manufacturer.
   For your printer's default setting, refer to the user's guide that came with your printer.

《109》

Setup menu

- In this mode, you can set up basic settings.
  The items indicated by ▨▨▨▨▨ are default settings.

Menu tab	Main menu	Sub menu		Secondary menu	Page
▓▓	File	Series		-	p.112
		Reset		-	
	Power Off	1, 3, 5 min		-	p.113
	LCD Off	Off, 10, 20, 30, 60 sec		-	p.114
	Language	ENGLISH	한국어	FRANÇAIS	p.115
		DEUTSCH	ESPAÑOL	ITALIANO	
		简体中文	繁體中文	日本語	
		PУCCКИЙ	PORTUGUÊS	DUTCH	
		DANSK	SVENSKA	SUOMI	
		Type A			
		ไทย	BAHASA	عربي	
		Type B			
		Magyar	POLSKI	Čeština	
	Format	No		-	p.116
		Yes		-	
	Date & Time	2005/07/01 13:00		-	p.117
	Date Type	yy/mm/dd		-	
		mm/dd/yy		-	
		dd/mm/yy		-	
	World Time	Cape Verde		Tashkent	p.118
		London		Almaty	
		Rome, Paris, Berlin		Bangkok, Jakarta	
		Athens, Helsinki		Beijing , Hong Kong	
		Moscow		Seoul, Tokyo	
		Abu Dhabi		Guam, Sydney	

Setup menu

Menu tab	Main menu	Sub menu	Secondary menu	Page
🍴	World Time	Okhotsk	Denver, Phoenix	p.118
		Wellington, Auckland	Chicago, Dallas	
		Samoa, Midway	New York, Miami	
		Honolulu, Hawaii	Caracas, La Paz	
		Alaska	Buenos Aires	
		LA, San Francisco	Mid-Atlantic	
	Imprint	Off	-	p.119
		Date		
		Date & Time		
	Sound	Off	Low	p.120
		Medium	High	
	Brightness	Main LCD	Bright, Normal, Dark	p.120
		EVF		
		Top LCD		
	Video Out	NTSC	-	p.121
		PAL		
	Quick View	Off, 0.5, 1, 3, 5 sec	-	p.122
	Auto Rotating	Off	-	p.123
		On		
	USB	Computer	-	p.124
		Printer		
	Reset	No	-	p.124
		Yes		

* Menus are subject to change without prior notice.

File name

■ This function allows the user to select the file naming format.

● How to set the file names

  1. Press the Menu button and select the [🍴] menu tab.
  2. Press the Right button and select the [File] menu by pressing the Up/ Down button.
 3. Press the Right button and select a desired sub menu by pressing the Up/ Down button.

     [Series] : New files are named using numbers that follow the previous sequence, even when a new memory card is used, or after formatting, or after deleting all pictures.

     [Reset] : After using the reset function, the next file name will be set from 0001 even after formatting, deleting all or inserting a new memory card.

  4. Press the OK button to set the setting.

INFORMATION

● The first stored folder name is 100SSCAM, and the first file name is SH100001.
● File names are assigned sequentially from SH100001 → SH100002 →~→ SH109999. But, files that was saved as the Adobe RGB type are assigned as _H1xxxxx.
● The folder number is assigned sequentially from 100 to 999 as follows : 100SSCAM → 101SSCAM →~→ 999SSCAM.
● The files used with the memory card conform to the DCF(Design rule for Camera File systems) format.

Auto power off

■ This function switches the camera off after a set amount of time in order to prevent unnecessary battery drainage.

● How to set the Auto power Off

1. Press the Menu button and select the [📍] menu tab.
2. Press the Right button and select the [Power Off] menu by pressing the Up/ Down button.
3. Press the Right button and select a desired sub menu by pressing the Up/ Down button.
   [1, 3, 5 min] : The power will turn off automatically if not used for the period of time specified.
4. Press the OK button to set the setting.

🔒	USB	
	Reset All	
	File	1 min
📍	**Power Off** ◁	**3 min**
	LCD Off	5 min
	Language	
P	Format	
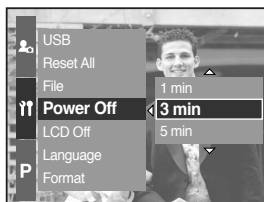
INFORMATION

● Even if the battery or AC adapter are removed and inserted again, the power off setting will be preserved.
● Note that the automatic power off function will not operate if the camera is in PC mode, slide show, interval shooting and playing back a movie clip.

Auto turning off the LCD

■ This function switches the LCD off after a set amount of time in order to prevent unnecessary battery drainage.

● How to set the auto turn off time

1. Press the Menu button and select the [📶] menu tab.
2. Press the Right button and select the [LCD Off] menu by pressing the Up/ Down button.
3. Press the Right button and select a desired sub menu by pressing the Up/ button.

    [Off]　　　　　　　　 : The LCD will not turn off.
    [10, 20, 30, 60 sec] : The LCD will turn off automatically if not used for the period of time specified.

4. Press the OK button to set the setting.

Reset All		
File	30 sec	
Power Off	60 sec	
LCD Off ◄	**Off**	
Language	10 sec	
Format	20 sec	
P Date & Time		

INFORMATION

● Even if the battery or AC adapter are removed and inserted again, the auto LCD turn off setting will be preserved.
● Note that the automatic LCD off function will not operate if the camera is in PC mode, slide show, interval shooting and playing back a movie clip.

Language

■ There is a choice of languages that can be displayed on the LCD. Even if the battery or AC adapter are removed and inserted again, the language setting will be preserved.

● How to set the language

1. Press the Menu button and select the [🍴] menu tab.
2. Press the Right button and select the [Language] menu by pressing the Up/ Down button.
3. Press the Right button and select a desired sub menu by pressing the Up/ Down button.
   - LANGUAGE sub menu : English, Korean, French, German, Spanish, Italian, S. Chinese, T. Chinese, Japanese, Russian, Portuguese, Dutch, Danish, Swedish, Finnish.
4. Press the OK button to set the setting.

File	
Power Off	BAHASA
LCD Off	عربي
Language	**ENGLISH**
Format	한국어
Date & Time	FRANÇAIS
Date Type	
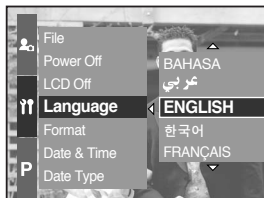
INFORMATION

● Type A or B language can be inserted depending on the region
  - Type A : Thai, Bahasa, Arabic
  - Type B : Hungarian, Polish, Czech

Formatting a memory card

■ This is used for formatting the memory card. If you run [Format] on the memory card, all images, including the protected images, will be deleted. Be sure to download important images to your PC before formatting the memory card.

● How to format the memory card
  1. Press the Menu button and select the [🍴] menu tab.
 2. Press the Right button and select the [Format] menu by pressing the Up/ Down button.
  3. Press the Right button and select a desired sub menu by pressing the Up/ Down button.

     If [No] is selected   : The memory card will not be formatted.
     If [Yes] is selected   : A [Processing!] message appears and the memory card will be formatted. If you ran FORMAT in Play mode, a [No Image!] message will appear.

Power Off	
LCD Off	
Language	
🍴 **Format**	◁ **No**
Date & Time	Yes
Date Type	
P World Time	**Set:OK**
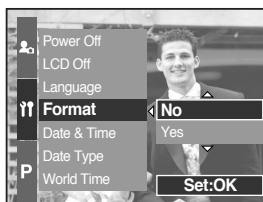
INFORMATION

  ● Be sure to run [Format] on the following types of memory card.
    - A new memory card, or an unformatted memory card.
    - A memory card that has a file this camera can't recognise or one that has been taken from another camera.
  ● Always format the memory card using this camera. If you insert a memory card that has been formatted using other cameras, memory card readers, or PCs, you will get a [Card Error!] message.

Setting up the Date & Time

■ You can change the date and time that will be displayed on the captured images.

● How to set the Date & Time

1. Press the Menu button and select the [🛠] menu tab.
2. Press the Right button and select the [Date & Time] menu by pressing the Up/ Down button.
3. Press the Right button and select a desired sub menu by pressing the Up/ Down button.
   - Left/ Right button : Selects the year/ month/ day/ hour/ minute item.
   - Up/ Down button : Changes the setting value
4. Press the OK button to set the setting.
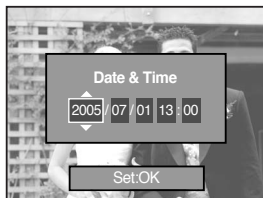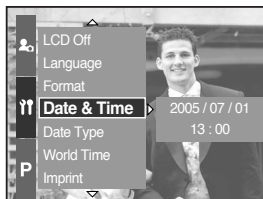
Setting up the date type

■ You can change the date type that will be displayed on the captured images.

● How to set the date type

1. Press the Menu button and select the [🛠] menu tab.
2. Press the Right button and select the [Date Type] menu by pressing the Up/ Down button.
3. Press the Right button and select a desired sub menu by pressing the Up/ Down button.
   - Up/ Down : Changes the date type
                [yy/mm/dd], [mm/dd/yy], [dd/mm/yy].
4. Press the OK button to set the setting.

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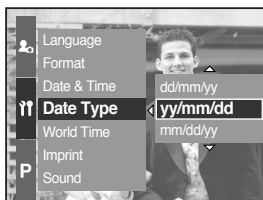
World time

■ You can check the time of cities of various nations.

● How to check the time

1. Press the Menu button and select the [🍴] menu tab.
2. Press the Right button and select the [World Time] menu by pressing the Up/ Down button.

Format	
Date & Time	
Date Type	
World Time	▷ **Seoul**
Imprint	Tokyo
Sound	
Brightness	
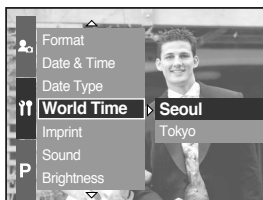
3. Press the Right button and a world map will display as shown alongside.
   - Left/ Right or Rear jog dial (JOG2) : moves the red line to check the time of various cities.
4. Press the OK button to set the setting.

Seoul, Tokyo
2005/07/01 13:00 PM

Set:OK

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Imprinting the recording date

■ There is an option to include Date/Time on still images.

● How to imprint the date & time

1. Press the Menu button and select the [📱] menu tab.
2. Press the Right button and select the [Imprint] menu by pressing the Up/ Down button.
3. Press the Right button and select a desired sub menu.

> [Off] : The DATE & TIME will not be imprinted on the image file.
>
> [Date] : Only the DATE will be imprinted on the image file.
>
> [Date & Time] : The DATE & TIME will be imprinted on the image file.

4. Press the OK button to set the setting.

👤	Date & Time
	Date Type
	World Time
🍴	**Imprint**
	Sound
	Brightness
P	Video Out
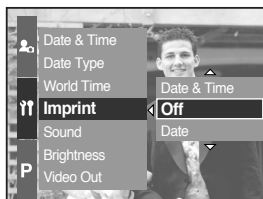
Date & Time
Off
Date

INFORMATION

● The Date & Time are imprinted at the bottom right side of the still image.
● The date will be imprinted as a DATE TYPE setting.
● TIME is imprinted in the following way : [Hour : Minute] and hours are shown using the 24 hour clock.
● The imprint function is applied only to still images except for the images taken in the [Text] scene mode.

Sound

■ If you set the operation sound to ON, various sounds will be activated for camera startup, when button are pressed, and if there is a card error, so that you can be aware of the camera operation status.

● How to set the sound

1. Press the Menu button and select the [📍] menu tab.
2. Press the Right button and select the [Sound] menu by pressing the Up/ Down button.
3. Press the Right button and select a desired sub menu. [Sound] sub menu : Off/ Low/ Medium/ High
4. Press the OK button to set the setting.
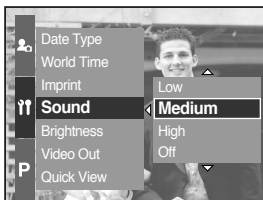
LCD brightness

■ You can adjust the Rear, Finder and Top LCD brightness.

● How to set the brightness

1. Press the Menu button and select the [📍] menu tab.
2. Press the Right button and select the [Brightness] menu by pressing the Up/ Down button.
3. Press the Right button and select a desired LCD by pressing the Up/ Down button.
4. Press the Right button and select a desired sub menu.
   - [Brightness] sub menu : Dark, Normal, Bright
5. Press the OK button to set the setting.
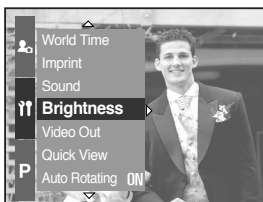
Selecting Video out type

■ The Movie output signal from the camera can be NTSC or PAL.
  Your choice of output will be governed by the type of device (monitor or TV, etc.) to which the camera is connected. PAL mode can support only BDGHI.

● How to set the video out type

  1. Press the Menu button and select the [🍴] menu tab.
  2. Press the Right button and select the [Video Out] menu
     by pressing the Up/ Down button.
  3. Press the Right button and select a desired LCD
     by pressing the Up/ Down button.
     - [Video Out] sub menu : NTSC, PAL
  4. Press the OK button to set the setting.

Imprint	
Sound	
Brightness	
Video Out	◀ **NTSC**
Quick View	PAL
Auto Rotating ON	
USB	
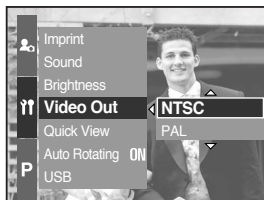
● Connecting to an external monitor
  In RECORDING/ PLAY mode, you can
  view the stored still images or movie clips
  by connecting the camera to an external
  monitor via the AV cable. When the
  camera is connected to an external
  monitor, the LCD monitor will be turned
  off automatically.

Yellow Colour-Video
White Colour-Voice (Stereo)
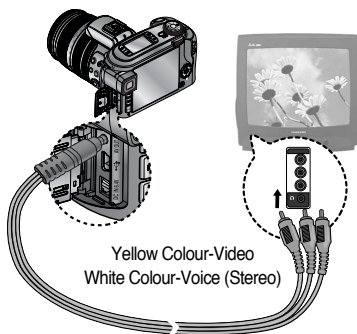
INFORMATION

- ● NTSC : U.S.A, Canada, Japan, South Korea, Taiwan, Mexico.
- ● PAL : Australia, Austria, Belgium, China, Denmark, Finland, Germany, U.K., Holland, Italy, Kuwait, Malaysia, New Zealand, Singapore, Spain, Sweden, Switzerland, Thailand, Norway.
- ● When using a TV as an external monitor, you will need to select the external or AV channel of the TV.
- ● There will be a digital noise on the external monitor, but it is not a malfunction.
- ● If the image is not in the centre of the screen, use the TV controls to centre it.
- ● When the camera is connected to an external monitor, the menu will be visible on the external monitor and the menu functions are the same as those indicated on the LCD.

Quick view

■ If you enable Quick View before capturing an image, you can view the image you just captured on the LCD for the duration set in the [Quick View] setup. Quick view is possible only with still images.
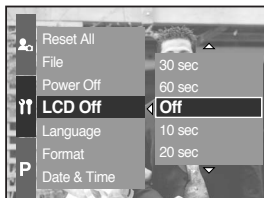
● How to set the quick view

1. Press the Menu button and select the [🍴] menu tab.
2. Press the Right button and select the [Quick View] menu by pressing the Up/ Down button.
3. Press the Right button and select a desired sub menu by pressing the Up/ Down button.

   [Off]   : The quick view function can't be activated.
   [0.5, 1, 3, 5 sec] : The captured image is briefly displayed during the selected time.

4. Press the OK button to set the setting.
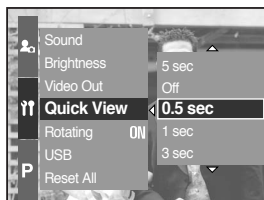
Auto rotating sensor

- When an image taking vertically plays back, the auto rotating sensor will rotate the image correctly.

- You can view the reversed image correctly without rotating the image.

● How to set the auto rotating sensor

1. Press the Menu button and select the [🍴] menu tab.
2. Press the Right button and select the [Auto Rotating] menu by pressing the Up/ Down button.
3. Press the Right button and select a desired sub menu by pressing the Up/ Down button.
   [Off] : The image will not be rotated automatically.
   [On] : The image will be rotated automatically.
4. Press the OK button to set the setting.

Brightness	
Video Out	
Quick View	
Auto Rotating ON	**On**
USB	Off
Reset All	
File	
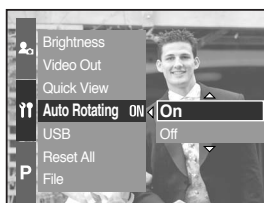
※ Selecting the [On] sub menu

[Taking an image]   [Playing back the image]

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Connecting an External Device (USB)

■ You can select an external device to which you want to connect the camera using the USB cable.

● How to set the external device

1. Press the Menu button and select the [🍴] menu tab.
2. Press the Right button and select the [USB] menu by pressing the Up/ Down button.
3. Press the Right button and select a desired sub menu by pressing the Up/ Down button.

   [Computer] : Select this if you want to connect the camera to your PC.

   Refer to page 144 for instructions on how to connect the camera to your PC.

   [Printer] : Select this if you want to connect the camera to your printer.

   Refer to page 105 for instructions on how to connect the camera to your printer.

4. Press the OK button to set the setting.

Video Out	
Quick View	
Auto Rotating	
USB	◄ **Computer**
Reset All	Printer
File	ON
Power Off	

Initialisation

■ All camera menu and function settings will be restored to their default values.
However, values for DATE/ TIME, LANGUAGE, and VIDEO OUT will not be changed.

● How to set the initialisation

1. Press the Menu button and select the [🍴] menu tab.
2. Press the Right button and select the [Reset All] menu by pressing the Up/ Down button.
3. Press the Right button and select a desired sub menu by pressing the Up/ Down button.

   If [No] is selected : Settings will not be restored to their defaults.

   If [Yes] is selected : A confirmation window will display.

   Select the [Yes] menu by pressing the Up/ Down button.

   All settings will be restored to their defaults.

Quick View	
Auto Rotating	ON
USB	
Reset All	◄ **No**
File	Yes
Power Off	
LCD Off	Set:OK
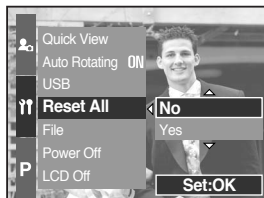
Setting up the MYCAM menu

■ You can set up a start up image, start up sound, shutter sound and sound effect. The items indicated by ░░░░░░ are default settings.

Menu tab	Main menu	Sub menu		Page
👤📷	Start Image	Off	Logo	p.126
		User Image	-	
	Start Sound	Off	Sound 1	p.126
		Sound 2	Sound 3	
	Shutter Sound	Off	Shutter 1	p.127
		Shutter 2	Shutter 3	
	Sound Effect	Off	Effect 1	p.127
		Effect 2	Effect 3	

* Menus are subject to change without prior notice.

Start up image

■ You can select the image that is first displayed on the LCD whenever the camera is turned on.

● How to set the start up image

   1. Press the Menu button and select the [☻] menu tab.

   2. Press the Right button and select the [Start Image] menu
   by pressing the Up/ Down button.

   3. Press the Right button and select a desired sub menu
      by pressing the Up/ Down button.

   4. Press the OK button to set the setting.

| P |
| Sound Effect |
| **Start Image** |
| Start Sound |
| Shutter Sound |
| Set:OK |

INFORMATION

   ● Use a saved image for the start-up image with the [User Image] in the [Resize] menu in
      the play mode.

   ● The start-up image will not be deleted by deleting all images or Format function.

   ● The User images will be deleted by [Reset] menu.

Start up sound

■ You can select the sound that is activated whenever the camera is turned on.

● How to set the start up sound

   1. Press the Menu button and select the [☻] menu tab.

   2. Press the Right button and select the [Start Sound] menu
      by pressing the Up/ Down button.

   3. Press the Right button and select a desired sub menu
      by pressing the Up/ Down button.

   4. Press the OK button to set the setting.

P	
Start Image	Off
Start Sound	**Sound 1**
Shutter Sound	Sound 2
Sound Effect	Sound 3

Shutter sound

- You can select the shutter sound.

- How to select the shutter sound
    1. Press the Menu button and select the [🔊] menu tab.
    2. Press the Right button and select the [Shutter Sound] menu by pressing the Up/ Down button.
    3. Press the Right button and select a desired sub menu by pressing the Up/ Down button.
    4. Press the OK button to set the setting.

P		
	Start Sound	Off
🔊	**Shutter Sound**	**Sound 1**
	Sound Effect	Sound 2
	Start Image	Sound 3
❘❘		
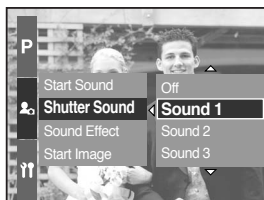
Sound type

- You can select a type of sound when the sound is activated.

- How to set the type of sound
    1. Press the Menu button and select the [🔊] menu tab.
    2. Press the Right button and select the [Sound Effect] menu by pressing the Up/ Down button.
    3. Press the Right button and select a desired sub menu by pressing the Up/ Down button.
    4. Press the OK button to set the setting.

P		
	Shutter Sound	Effect 3
🔊	**Sound Effect**	**Off**
	Start Image	Effect 1
	Start Sound	Effect 2
❘❘		

Important notes

Be sure to observe the following precautions!

■ This unit contains precision electronic components. Do not use or store this unit in the following locations.
  - Areas exposed to severe changes in temperature and humidity.
  - Areas exposed to dust and dirt.
  - Areas exposed to direct sunlight or the inside of a vehicle in hot weather.
  - Environments where there is high magnetism or excessive vibration.
  - Areas with high explosives or highly flammable materials.

■ Do not let the unit come into contact with dust, vinyl goods, or chemicals, such as insecticides, for an extended period of time.

■ Sand can be particularly troublesome to cameras.
  - Do not let sand get inside the unit when using it on beaches, coastal dunes, or other areas where there is lots of sand.
  - Doing so may result in failure or may permanently render the unit unusable.

■ Handling the camera
  - Never drop the camera or subject it to severe shocks or vibrations.
  - This camera is not waterproof. To avoid dangerous electrical shocks, never hold or operate the camera with wet hands.
  - If you use this camera in wet places, such as beach or pool, do not let water or sand get inside the camera.

■ Extremes in temperature may cause problems.
  - If the camera is transferred from a cold to a warm and humid environment, condensation can form on the delicate electronic circuitry. If this occurs, turn the camera off and wait for at least 1 hour until all moisture is dispersed. Moisture build up can also occur in the memory card. If this happens, turn off the camera and remove the memory card. Wait until the moisture has dispersed.

Important notes

- Caution on Using the Lens
  - If the lens is subjected to direct sunlight, it could result in discoloration and deterioration of the image sensor.
  - Pay attention not to get fingerprints or foreign substances on the surface of the lens.

- If the digital camera is not used for a long period, an electric discharge can occur.
  It is a good idea to remove the batteries and the memory card if you do not intend using the camera for an extended period of time.

- If the camera is exposed to an electronic interference, it will turn itself off to protect the memory card.

- Camera Maintenance
  - Use a soft brush (available from photo stores) to gently clean the lens and LCD assemblies.
    If this does not work, lens-cleaning paper with lens cleaning fluid can be used.
    Clean the camera body with a soft cloth. Do not allow this camera to come into contact with solvent materials such as benzol, insecticide, thinners etc. This may damage the body shell of the camera and also affect its performance. Rough handling can damage the LCD monitor. Take care to avoid damage and keep the camera in its protective carry case at all times when not in use.

- Do not attempt to disassemble or modify the camera.

- Under certain conditions, static electricity can cause the flash unit to fire. This is not harmful to the camera and is not a malfunction.

- When images are uploaded or downloaded, the data transfer may be affected by static electricity. In this case, disconnect and re-connect the USB cable before trying the transfer again.

- Before an important event or going on a trip, you should check the camera condition.
  - Take a picture for testing the camera condition and prepare extra batteries.
  - Samsung cannot be held responsible for camera malfunctions.

Warning indicator

■ There are several warnings that may appear on the LCD display.

Card Error !
- · Memory card error
  - → Turn off the camera power and turn it on again
  - → Insert the memory card again
  - → Insert the memory card and format the memory card (p.116)

No Card !
- · A memory card is not inserted
  - → Insert a memory card
- · The camera can't recognise the memory card
  - → Insert the memory card again
  - → Turn off the camera power and turn it on again

Card Full !
- · There is insufficient memory capacity to take an image
  - → Insert a new memory card
  - → Delete unnecessary image files to free up some memory

No Image !
- · There are no images stored on the memory card
  - → Take images
  - → Insert a memory card that is holding some images

File Error !
- · File error
  - → Format the memory card
- · Memory card error
  - → Contact a camera service centre

Low Battery !
- · There is low battery capacity
  - → Insert charged battery

Warning indicator

Set USB
- · [USB] sub menu and connected device are not matched.
  - → Reconfigure [USB] in the [Setup] menu.

Out Of Number
- · When selecting too many printing pages in the PictBridge menu.
  - → Select printing page within the limitation.

Before contacting a service centre

■ Please check the following

The camera doesn't switch on
- · There is low battery capacity.
  - → Insert charged battery.
- · Battery is inserted inserted incorrectly with the reverse polarities.
  - → Insert the battery according to the polarity marks (+, -).

The camera power ceases while in use.
- · The battery is exhausted.
  - → Insert charged battery.
- · The Camera is turned off automatically.
  - → Turn off the camera power and turn it on again.

Battery drain quickly
- · The Camera is being used in low temperatures.
  - → Keep the camera in warm conditions (i.e. inside a coat or jacket) and only remove it in
    order to take images.

Before contacting a service centre

Camera does not take images when pressing the Shutter button
- · There is insufficient memory capacity.
  - → Delete unnecessary image files
- · The memory card has not been formatted
  - → Format the memory card (p.116)
- · The memory card is exhausted
  - → Insert a new memory card
- · The camera's power is off
  - → Turn the camera power on
- · The batteries are exhausted
  - → Insert charged battery.

The camera suddenly stops working while in use
- · The camera was stopped due to a malfunction
  - → Remove/ re-insert battery and switch the camera on

The images are unclear
- · A picture was taken the subject without setting an appropriate macro mode
  - → Select an appropriate macro mode to take a clear image.
- · Taking a picture beyond the flash range
  - → Take a picture within the flash range
- · The lens is smudged or dirty
  - → Clean the lens
- · The focus is not correct in the manual focus mode
  - → Set the correct focus in the manual focus mode.
- · There was camera shake when using a high rate zoom.
  - → Use a tripod when using a high rate zoom.

The flash does not fire
- · Flash off mode has been selected
  - → Dis-engage flash off mode
- · The camera mode can't use the flash
  - → Refer to the FLASH instruction (p.57~60)

Incorrect date and time is displayed
- · The date and time have been set incorrectly or the camera has adopted the default settings
  - → Reset the date and time correctly

Before contacting a service centre

The images don't play back
- · Incorrect file name (Violation of DCF format)
  - → Do not change the image file name

Colour of image is different to the original scene
- · White balance or effect setting is incorrect
  - → Select appropriate White balance and effect

Images are too bright
- · Exposure is excessive
  - → Reset exposure compensation

No image on external monitor
- · The external monitor has not been connected properly with the camera
  - → Check the connection cables
- · There are incorrect files in the memory card
  - → Insert a memory card that has correct files

When using the PC's explorer, the [Removable Disk] file does not show
- · Cable connection is incorrect
  - → Check the connection
- · The camera is off
  - → Turn the camera on
- · The operating system is not Windows 98, 98SE, 2000, ME, XP/ Mac OS 10.0 or later.
  Alternatively the PC does not support USB
  - → Install Windows 98, 98SE, 2000, ME, XP/ Mac OS 10.0 or later to PC that supports USB
- · The camera driver is not installed
  - → Install a [USB Storage Driver]

Specifications

Image Sensor	Type	2/3" CCD
	Effective Pixel	Approx. 8.0 Mega-pixel
	Total Pixel	Approx. 8.3 Mega-pixel
Lens	Focal Length	Schneider Lens f = 7.2 ~ 108.0mm (35mm film equivalent : 28~420mm)
	F No.	F2.2 ~ F4.6
	Digital Zoom	Still Image mode : 1.0X, 2.0X, 4.0X Play mode : 1.0X ~ 10.2X (depends on image size)
Viewfinder	Electronic Viewfinder	0.44" color TFT LCD (235,000 dot)
	LCD Monitor	Main : 3.5" colour TFT LCD (235,000 dot) Top : 1.44" Wide color TFT LCD (115,000 dot, Status or Preview selectable)
Focusing	Type	TTL auto focus (9 points multi-focusing)
	Modes	Single AF, Continuous AF, Manual focus AF lock, AF area select, Direct manual focus available
	Range	(see table below)
Shutter	Type	Mechanical and Electronic shutter
	Speed	2 ~ 1/4,000 sec. (Manual mode : 15 ~ 1/4,000 sec.)
Exposure	Control	Program AE, Shutter Priority AE, Aperture Priority AE or Manual Exposure Metering : Multi, Center-weighted, Spot AE lock available
	Compensation	±2EV (1/3EV steps)
	ISO Equivalent	Auto, 50, 100, 200, 400
High Speed Mode		Up to max ISO 400 automatically
Flash	Modes	Auto, Auto & Red-eye reduction, Fill-in, Slow sync, Slow sync & Red-eye reduction, Flash off Flash compensation : ±2EV (1/3EV steps)
	Range	Wide : 0.7 ~ 6.0m (ISO 100), Tele : 1.5 ~ 3.0m (ISO 100)
	Recharging Time	Approx. 5 sec.
	External Flash (optional)	SEF-42A : DC 6V, 4 x AA Alkaline
Sharpness		Soft, Normal, Vivid
Effect		Normal, B&W, Sepia, Negative Contrast adjust, Saturation adjust
Color Space		sRGB, Adobe RGB
White Balance		Auto, Daylight, Cloudy, Fluorescent_H, Fluorescent_L, Tungsten, Custom 1, Custom 2, Color temperature adjust
Voice Recording		Voice Memo in Still Image (max. 10 sec.)
Date Imprinting		Date&Time, Date, Off (user selectable)
Shooting	Still Image	Modes : Auto, Program, A, S, M, Myset, Movie, Scene 　　　　* Scene : Night, Portrait, Children, Landscape, Close-up, Text, Sunset, Dawn, Backlight, Fireworks, Beach & Snow Continuous : Single, Continuous (1.0 fps), Continuous HS (2.5 fps), Continuous UHS (10fps with 1 Mega-pixel quality), Interval (1~60 mins up to 99 frames) Self-timer : 2 sec., 10 sec., Double, Remote control 0 sec., Remote control 2 sec. Bracketing : Exposure, Focusing, White Balance (3 frames or 5 frames selectable)

Focusing Range:

Focus mode	Wide	Middle (200mm)	Tele (420mm)
Normal	50cm ~ Infinity	2.0m ~ Infinity	4.0m ~ Infinity
Macro	10 ~ 70cm	60cm ~ 2.1m	1.5 ~ 4.3m
Super Macro	3 ~ 70cm (Focal Length 50~100mm)		

Specifications

Shooting	Movie Clip	With stereo audio (recording time : memory capacity dependent) (640X480 and 25fps : up to 30 sec.) Size : 640x480, 320x240, 160x120 Frame rate : 25 fps, 15 fps
Storage	Media	CompactFlash Card Type I or Type II (Up to 4GB guaranteed)
	File Format	Still Image : RAW(DNG), TIFF, JPEG (DCF), EXIF 2.2, DPOF 1.1, PictBridge 1.0 Movie Clip : AVI (MJPEG) Audio : WAV
	Image Size	L : 3264x2448, 3:2 : 3264x2176, 16:9 : 3264x1840 M1 : 2400x1800 M2 : 1632x1224 , S1 : 1024x768, S2 : 640x480
	Capacity (64MB)	L : RAW 3, TIFF 2, Superfine 15, Fine 29, Normal 42 3:2 : RAW -, TIFF -, Superfine 17, Fine 32, Normal 46 16:9 : RAW -, TIFF -, Superfine 20, Fine 38, Normal 54 M1 : RAW -, TIFF -, Superfine 27, Fine 50, Normal 71 M2 : RAW -, TIFF -, Superfine 54, Fine 94, Normal 124 S1 : RAW -, TIFF -, Superfine 111, Fine 169, Normal 205 S2 : RAW -, TIFF -, Superfine 292, Fine 450, Normal 548 * These figures are measured under Samsung's standard conditions and may vary depending on shooting conditions and camera settings.
Image Play	Type	Single image, Thumbnails, Slide show, Movie Clip, Album Organization
	Editing	Trimming, Resizing, Rotating
Interface		Digital output connector : USB 2.0 Audio : Stereo Video output : NTSC, PAL (user selectable) DC power input connector : 7.4V
Power Source		Rechargeable battery : 7.4V Li-ion battery(SLB-1974), Charger : SBC-L4 AC Adaptor : DC 8.4V, 1.5A (SAC-81, optional) * Included battery may vary depending on sales region.
Dimensions (WxHxD)		135.5x87x78.6mm (144.6mm, including lens protrusion)
Weight		870.5g (without battery and card)
Operating Temperature		0 ~ 40°C
Operating Humidity		5 ~ 85%
Software	Camera Driver	Storage Driver (Windows98/98SE/2000/ME/XP Mac OS 10.0 or later)
	Application	Digimax Master, Digimax Reader
Special Features		The world's longest[1] built in 15X zoom - 28mm wide-angle and 15X ultra high zoom capability The world's largest[1] digital camera LCD - 3.5" TFT with 235K Pixels The world's largest-capacity[1] lithium-ion battery - 7.4V 1900mAh The world's first [1]top TFT LCD for waist level shooting - 1.44" wide type High Speed mode suppressing camera shake

※ Specifications are subject to change without prior notice.

※ All trademarks are the property of their respective owners.

※ *1 : Among digital cameras, introduced by August of 2005.

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Software Notes

Please ensure that you read the instruction manual carefully before use.
- · The attached software is a camera driver and image editing software tool for Windows.
- · Under no circumstances should all or part of either the software or the user manual be reproduced.
- · Copyrights for software are licensed only for use with a camera.
- · In the unlikely event of a manufacturing fault, we will repair or exchange your camera. We cannot, however, be held responsible in any way for damage caused by inappropriate use.
- · Using a Hand-made PC or a PC and OS that has not been guaranteed by the manufacturer is not covered by the Samsung warranty.
- · Before reading this manual, you should have a basic knowledge of computers and O/S (Operating Systems).

System Requirements

For Windows	For Macintosh
PC with processor better than Pentium II 450Mz (Pentium 700MHz recommended)	Power Mac G3 or later
Windows 98/98SE/2000/ME/XP	Mac OS 10.0 or later
Minimum 64MB RAM (XP : 128MB) 200MB of available hard disk space (1GB recommended)	Minimum 64MB RAM 110MB of available hard-disk space
USB port	USB port
CD-ROM drive	CD-ROM drive
1024x768 pixels, 16-bit colour display compatible monitor (24-bit colour display recommended)	QuickTime player or a media player that supports AVI file format

About the software

After inserting the software CD provided with this camera into the CD-ROM drive, the following window should automatically run.

Before connecting the camera to the PC, you should first install the camera driver.

■ **Camera driver : This enables images to transfer between the camera and PC.**
This camera uses the USB Storage Driver as the camera driver. You can use the camera as a USB card reader. After installing the driver and connecting this camera to the PC, you can find [Removable Disk] in [Windows Explorer] or [My computer]. A USB Storage Driver is provided only for Windows. A USB Driver for MAC is not included with the Application CD. You can use the camera with Mac OS 10.0 or later.

■ **Digimax Master : This is the all-in-on multi media software solution**
You can download, view, edit and save your digital images and movie clips with this software. This software is only compatible with Windows.

■ **Digimax Reader : Text recognition program**
You can save an image file that was captured in the TEXT mode as a text file with this program. This software is only compatible with Windows.

INFORMATION

● Be sure to check the system requirements before installing the driver.
● To play back the movie clip on a PC, DirectX 9.0 or later must be installed. (p.138)
● You should allow 5~10 seconds for running the automatic setup program according to the capability of your computer. If the frame does not show, run the [Windows Explorer] and select [Samsung.exe] in the CD-ROM Drive root directory.

Setting up the application software

To use this camera with a PC, install the application software first.
After this has been done, the stored images in the camera can be moved to the PC and can be edited by an image editing program.

INFORMATION

- Close other programs before installing the application software.
- Before installing the application software, disconnect the USB connection.

You can visit the Samsung web-site through the internet.

http://www.samsungcamera.com : English
http://www.samsungcamera.co.kr : Korean

1. Click the [Install] menu in the Auto run frame.
   The camera driver is installed automatically.

   [Click !]

2. Installation is complete.
   Click the [Finish] button.
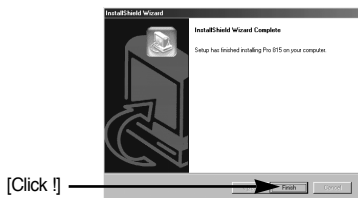
   [Click !]

3. The Software License Agreement window for DirectX will be displayed.
   If you agree to this, select [I accept the agreement] and click [Next >] button. the window will then move to the next step. If you disagree, select [I do not accept the agreement] and click [Cancel] button.
   The installation program will be cancelled.
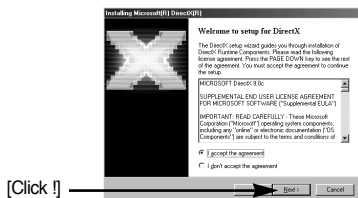
   [Click !]

Setting up the application software

4. A window will open. Click the [Next(N) >] button.
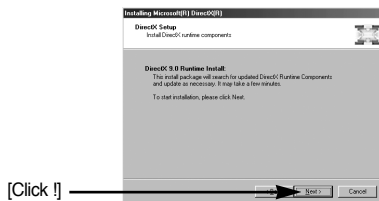
[Click !]

5. DirectX Installation is completed.
   Click the [Finish] button and then the Digimax
   Master installation will be started.
   * The system will not reboot even if you click
     the [Finish] button.
   * The screen shot of step 5 can can be
     different from the illustration depending on
     the system requirements.

[Click !]

6. A window where you can choose the program you
   want to install will appear. Click the [Install] button.
   For information on application software, please refer to
   page 137.

[Click !]

INFORMATION

● If you select [Exit] at step 6, the application program installation will be cancelled.

7. The Digimax Master installation window will be
   displayed as shown alongside. Click the [Next >]
   button.

[Click !]

Setting up the application software

INFORMATION

● If you select [Cancel] at step 7, a window for installing Digimax Reader will be displayed.

8. A window will open. Click the [Next >] button.

[Click !]

9. A destination selection window will open. Click [Next >].
   To copy the files to another folder, click [Browse..] and
   choose a folder you want.
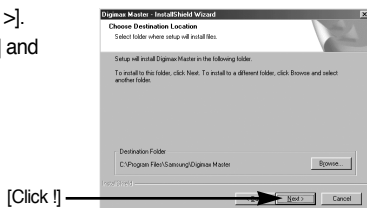
[Click !]

10. A window will open, asking you to choose a folder to
    which program icons will be added.
    Click [Next >] button. If you want to choose another
    folder, click [Browse..] and choose a folder you want.
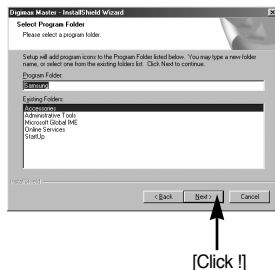
[Click !]

11. Click [Install(I)] button and Digimax Master starts installing.
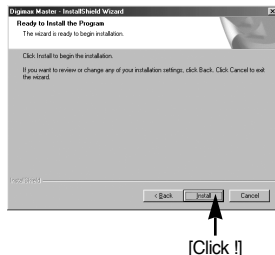
[Click !]

Setting up the application software

12. Digimax Master installation is successfully completed.
    Click the [Finish] button to install Digimax Reader.
    * The screen shot of step 12 can be different from the
      illustration depending on the system requirements.
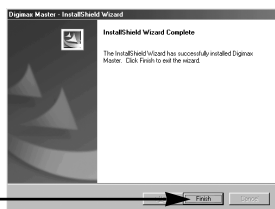
[Click !]

13. A window will be displayed as shown alongside.
    Click the [INSTALL] button.
    - If you click the [Manual] button instructions,
      instructions for using Digimax reader will be
      displayed.
    - Click the [EXIT] button and the Digimax reader
      installation will be cancelled and a window for
      restarting the computer will appear.
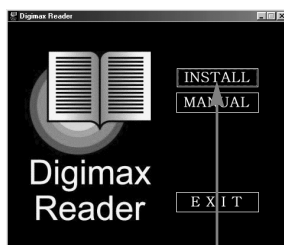
[Click !]

14. A window will open. Click the [Next >] button.
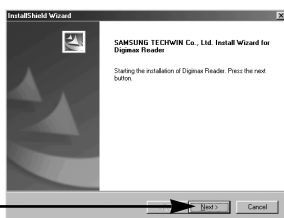
[Click !]

15. The Software License Agreement window will be
    displayed. If you agree to this, click [Yes],
    the window will then move to the next step.
    If you disagree, click [No] and the installation
    program will be cancelled.

[Click !]

Setting up the application software

16. A destination selection window will open.
Click the [Next >] button.
To copy the files to another folder, click
[Browse...] and choose a folder you want.

[Click !]
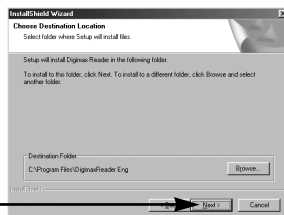
17. Digimax Reader Installation is completed.
The system will not reboot even if the [Yes, I
want to restart the computer now] option is
selected.

※ The screen shot of step 17 can be different
from the illustration depending on the system
requirements.
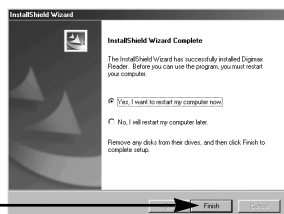
[Click !]

18. To apply changes, you must restart the computer.
Select [Yes, I want to restart my computer now], and
then click the [OK] button.

[Click !]
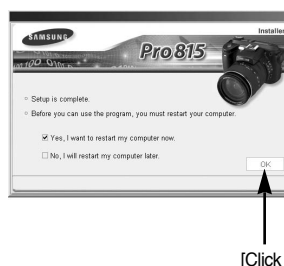
19. After restarting the computer, connect the PC to the camera with the USB cable.

20. Turn the camera power on.
The [Found New Hardware Wizard] will open and
the computer will recognise the camera.
* If your OS is Windows XP, an image viewer
program will open.
If the download window of Digmax Master opens
after starting Digimax Master, the camera driver was
setup successfully.
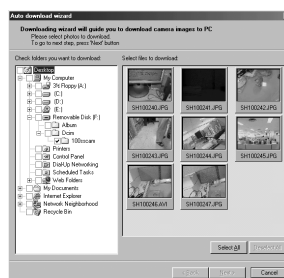
Setting up the application software

21. If you can see [Removable Disk] under [My computer], the camera driver installation was successful. Now you can transfer image files from the camera to PC via the USB cable.
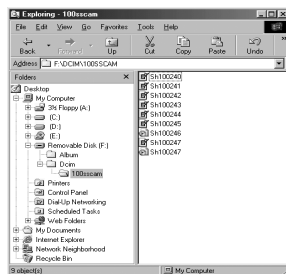
INFORMATION

● If you have installed the camera driver, The [Found New Hardware Wizard] may not open.

● On a Windows 98 or 98 SE system, the Found New Hardware Wizard dialog box opens and a window asking you to select a driver file may appear. In this case, specify "USB Driver" in the CD supplied. (for Windows 98 and 98 SE).

● Before connecting the camera to the PC, You should first install the camera driver.

● After installing the camera driver, you have to restart your PC.

● If you connect the camera to the PC before installing the camera driver, the [Found New Hardware Wizard] will open.
In this case, cancel the [Found New Hardware Wizard] and disconnect the camera.
Install the camera driver and connect the camera to the PC again.

● Should the computer not find the camera driver after installation, please try one or more of the following measures.
1. Delete the camera driver (p.147), and re-install the driver.
2. Refer to FAQ (p.160) to check for a possible solution to the problem.
3. If your PC's central processing unit is VIA chip (This is shown in the USB Host Controller), download the patch file from the Samsung Camera web page. (http://www.samsungcamera.com)

Starting PC mode

- If you connect the USB cable to a USB port on your PC and then turn on the power, the camera will automatically switch to "computer connection mode".
- In this mode, you can download stored images to your PC through the USB cable.
- The LCD monitor is always turned off in PC mode.
- The Card in use lamp will blink when the files are transferring via the USB connection.

■ Connecting the camera to a PC
  1. Turn the PC power on.
  2. Turn the camera power on.
  3. Press the Menu button and select the [🍴] menu tab.
  4. Press the Right button and select the [USB] menu by pressing the Up/ Down button.
  5. Press the Right button and select a desired sub menu by pressing the Up/ Down button.
  6. Select the [Computer] menu and press the OK button.
  7. Connect the PC and the camera via the USB cable.
     - Insert the small plug of the USB cable into the camera USB connection terminal.
     - Insert the large connector of the USB cable into the USB port of the PC.
     - The plugs must be firmly inserted.

Video Out	
Quick View	
Auto Rotating	
USB	**Computer**
Reset All	Printer
File ON	
Power Off	

  ※ If you selected [Printer] in Step 6, when you connect the camera to your computer, the [Connecting Printer] message will be displayed on the LCD monitor and the connection will not be established. In this case, disconnect the USB cable, and then follow the procedure from Step 3 and onward.
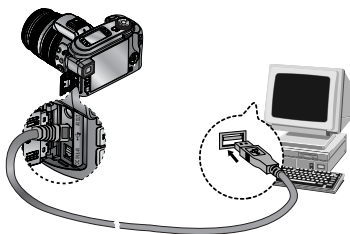
■ Disconnecting the camera and PC : Refer to page 150 (Removing the removable disk).

INFORMATION

- The camera driver must be installed before using PC mode.
- To save battery power, it is recommended that you use an AC adapter (Optional) when connecting the camera to a computer.

Starting PC mode

■ Downloading stored images
You can download the still images stored on the camera to your PC's hard disk and print them or use a photo editing software to edit them.

1. Connect the camera to your PC with the USB cable.

2. On your computer's desktop display, select
[My computer] and double click [Removable Disk
→ DCIM → 100SSCAM].
The image files will then be displayed.
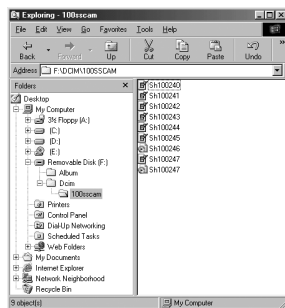
3. Select an image and press the right mouse button.
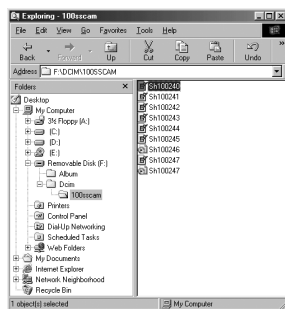
4. A pop-up menu will open.
Click the [Cut] or [Copy] menu.
- [Cut]   : cuts a selected file.
- [Copy] : copies files.
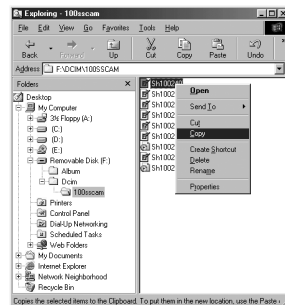
5. Click a folder where you want to paste the file.

Starting PC mode

6. Press the right mouse button and a pop-up menu will open. Click [Paste].

7. An image file is transferred from the camera to your PC.
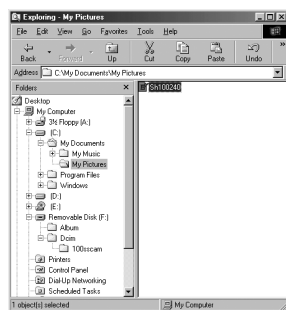
  - By using [Digimax Master], you can see the stored images in the memory directly on the PC monitor and you can copy or move the image files.

Removing the USB Driver for Windows 98SE

■ To remove the USB driver, refer to the process shown below.

1. Click [Start → Settings] and click [Control Panel].
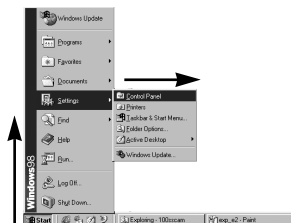
2. Double-click [System].

3. Select [Device manager → Hard Disk Controller → Samsung Digital Camera] and click the [Remove] button.
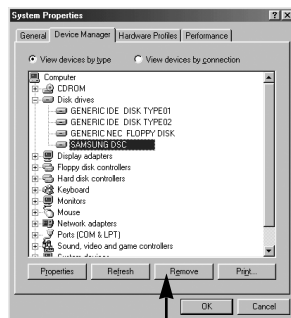
[Click !]

4. Click the [OK] button.
   The camera is removed from the system.

Removing the USB Driver for Windows 98SE

5. Trace [Start → Settings → Control Panel] and double click [Add/Remove programs].
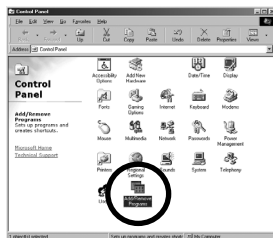
6. The [Add/Remove Programs Properties] window will open. Click [Pro 815] and click the [Add/Remove] button.
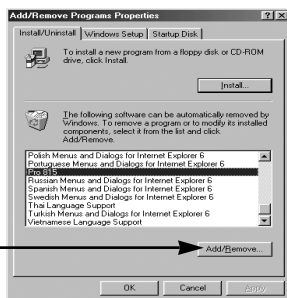
[Click !]

7. Uninstallation is complete. Click the [Finish] button and the window will disappear.
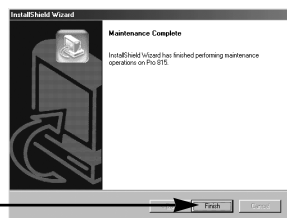
[Click !]

Removable Disk

■ To use this camera as a Removable Disk, install (p.138) the USB Driver.

1. Before turning the camera power on, connect the camera to the PC with the USB cable.

2. Click [Removable Disk] under [My Computer] or [Windows Explorer].

3. Image files stored in the Removable Disk (DCIM → 100SSCAM) can be transferred to the PC.

INFORMATION

Important information whilst using the Removable Disk
● The [Removable Disk] indicator will not show when the camera power is off or the USB cable is removed.
● We recommend that you should copy the images to the PC to view them. Opening images directly from the removable disk may be subject to unexpected disconnection.
● When uploading images from the PC to the camera, ensure that the uploaded file names are not the same as those already stored on the memory.
● When you upload a file that is not taken by this camera to the Removable Disk, the [File Error!] message will be displayed on the LCD monitor in the PLAY mode, and nothing is displayed in THUMBNAIL mode.
● The Card in use lamp will blink, when a file is transferred (copy or deletion) between the PC and the camera. Do not remove the USB cable until the lamp stops blinking. To remove the USB cable in Windows 2000/ME/XP, use the [Unplug or Eject Hardware] icon on the task bar.
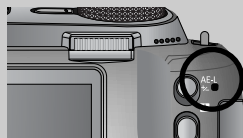
Removing the removable disk

■ Windows 98/98SE
  1. Check whether the camera and PC is transferring a file. If the Card in use lamp blinks, you have to wait until the lamp is turned off.
  2. Unplug the USB cable.

■ Windows 2000/ME/XP
  (The illustrations may be different from the real display in accordance with the Windows O/S.)
  1. Check whether the camera and PC is transferring a file. If the Card in use lamp blinks, you have to wait until the lamp is turned off.

  2. Double-click the [Unplug or Eject Hardware] icon on the task bar.

  [Double-click!]

  3. The [Unplug or Eject Hardware] window will open. Select the [USB Mass Storage Device] and click the [Stop] button.
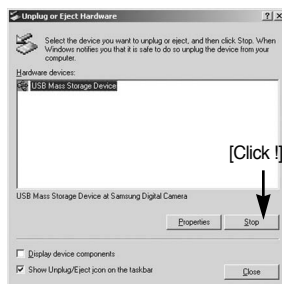
  [Click !]

  4. The [Stop a Hardware device] window will open. Select the [USB Mass Storage Device] and click the [OK] button.

  [Click !]

  5. A [Safe to Remove Hardware] window will open. Click the [OK] button.

  [Click !]

Removing the removable disk

6. A [Unplug or Eject Hardware] window will open. Click the [Close] button and the removable disk will be removed safely.
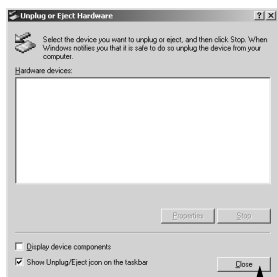
7. Unplug the USB cable.

[Click !]

Setting up the USB Driver for MAC

1. A USB Driver for MAC is not included with the software CD as MAC OS supports the camera driver.
2. Check the MAC OS. This camera is compatible with MAC OS 10.0 or later.
3. Connect the camera to the Macintosh and turn the camera power on.
4. A new icon will be displayed on the desktop after connecting the camera to the MAC.

Using the USB Driver for MAC

1. Double click a new icon on the desktop and the folder in the memory will be displayed.

2. Select an image file and copy or move it to MAC.

CAUTION

● For Mac OS 10.0 or later : First complete uploading from computer to camera and then remove the removable disk with the Extract command.

Digimax Master

- You can download, view, edit and save your digital images and movies with this software. This software is only compatible with Windows except for the Windows 98.

- To start the program, click [Start → Programs → Samsung → Digimax Master].

● Downloading images
  1. Connect the camera to your PC.

  2. A window for downloading images will display after connecting the camera and your PC.
     - To download the captured images, select the [Select All(A)] button.
     - Select desired folder in the window and click the [Select All(A)] button. You can save captured images and selected folder.
     - If you click the [Cancel] button, downloading will be cancelled.
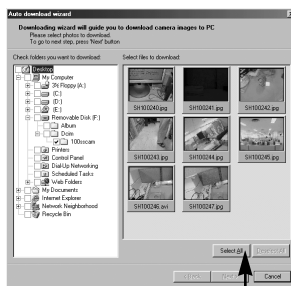
[Click !]

  3. Click [Next(N) >] button.
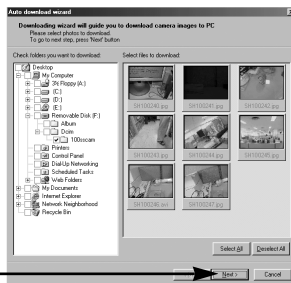
[Click !]

Digimax Master

4. Select a destination and make a folder to save
   downloaded images and folders.
   - Folders will be made in order of date and images
     will be downloaded.
   - Folder names can be made as you want and
     images will be downloaded.
   - After selecting a folder that was made before,
     images will be downloaded.

5. Click [Next(N) >] button.
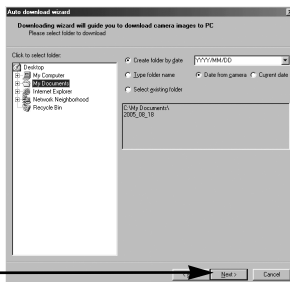
[Click !]

6. A window will open as shown alongside.
   The destination of the selected folder will be
   displayed on the upper side of the window.
   Click the [Start] button to download the images.

[Click !]
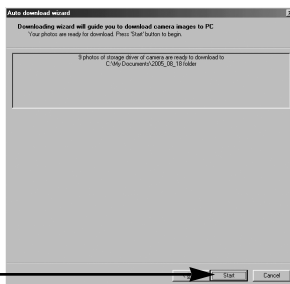
7. Downloaded images will be displayed.
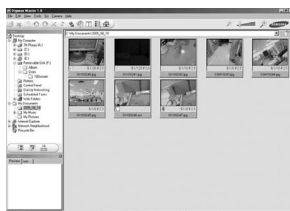
Digimax Master

● Image viewer : You can view the stored images.
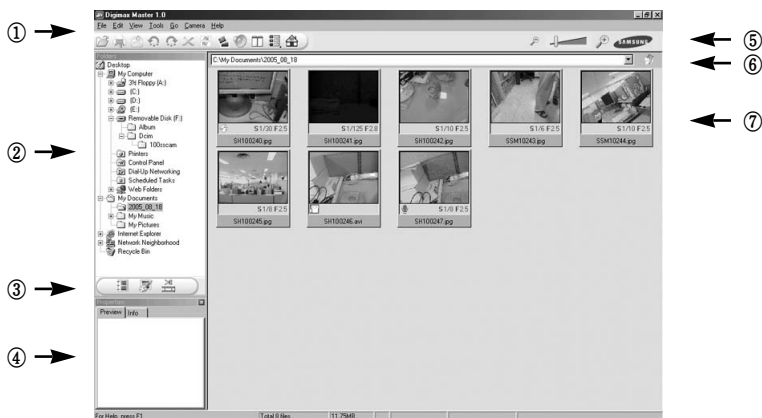
- Image viewer functions are listed below.
    ① Menu bar : You can select menus.

          File, Edit, View, Tools, Change functions, Auto download, help, etc.

    ② Image selection window : You can select the desired images in this window.
    ③ Media type selection menu : You can select image viewer, image edit, movie edit

          functions in this menu.

    ④ Preview window : You can preview a image or a movie clip and check the multi media

          information.

    ⑤ Zoom bar : You can change preview size.
    ⑥ Folder display window : You can see the folder location of the selected image.
    ⑦ Image display window : Images of the selected folder are displayed.

※ Refer to the [Help] menu in Digimax Master for further information.

Digimax Master

● Image edit : You can edit the still image.
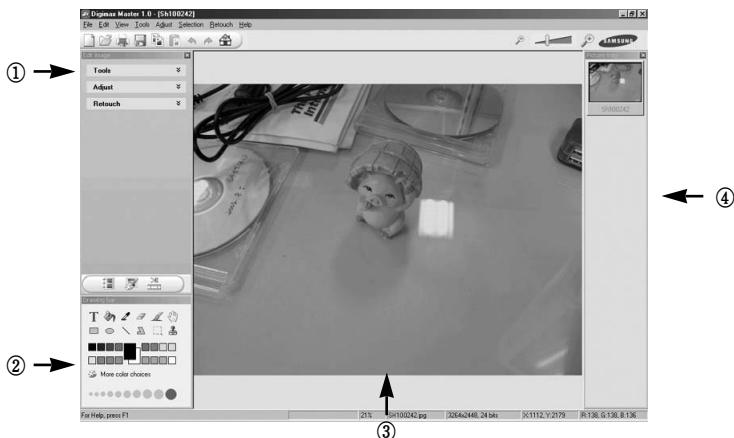
- Image edit functions are listed below.
  ① Edit menu : You can select the following menus.
    [Tools] : You can resize or crop the selected image. See the [Help] menu.
    [Adjust] : You can modify image quality. See the [Help] menu.
    [Retouch] : You can change image or insert effects on the image. See the [Help] menu.
  ② Drawing tools : Tools for editing an image.
  ③ Image display window : a selected image displays in this window.
  ④ Preview window : You can preview the changed image.

※ A still image edited with Digimax Master can't be played back on the camera.
※ Refer to the [Help] menu in Digimax Master for further information.

Digimax Master

● DNG converter : You can convert a RAW (*.dng) file into a JPEG or TIFF file format.
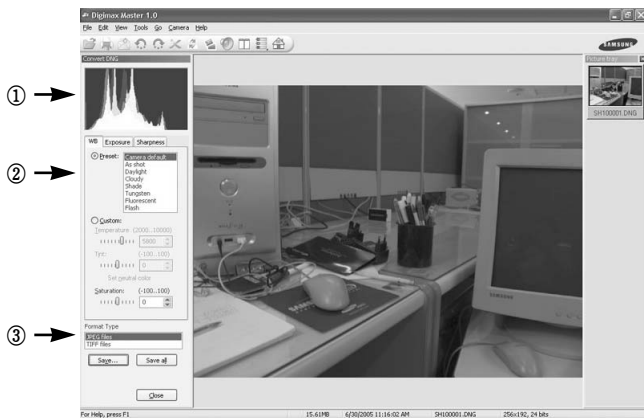
- DNG converter functions are listed below.
    ① Histogram display : Histogram of displayed image will be displayed.
    ② Tools : You can edit the RAW (*.dng) files as you want
       [White Balance] : You can edit the colour temperature and saturation of the image.
       [Exposure] : You can edit the Exposure value, Contrast and gamma value.
       [Sharpness] : You can edit the Sharpness of the image.
    ③ File format : You can convert the RAW (*.dng) file into a file format as you want (*.jpg, *.tiff, etc.).

※ Refer to the [Help] menu in Digimax Master for further information.

Digimax Master

● Movie edit : You can have still images, movies, narration and music all in one movie file.

① →

← ②
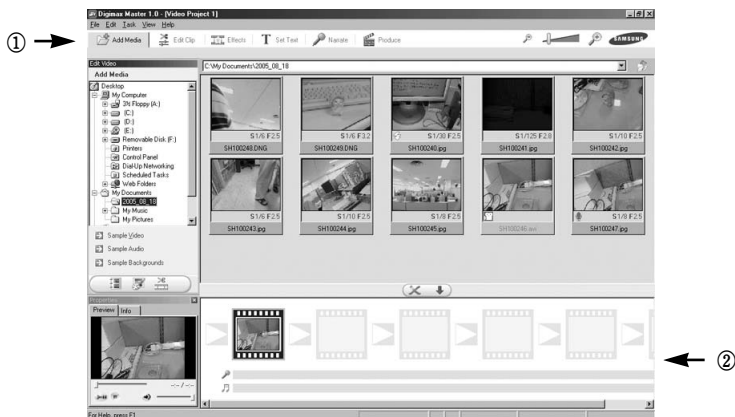
- Movie clip edit functions are listed below.
  ① Edit menu : You can select the following menus.

  [Add Media] : You can add other media elements to a movie.

  [Edit Clip] : You can change the brightness, contrast, colour and saturation.

  [Effects] : You can insert an effect.

  [Set Text] : You can insert texts.

  [Narrate] : You can insert a narration.

  [Produce] : You can save the edited multi media as a new file name.

  You can select AVI, Windows media (wmv), Windows media (asf) and movie clip for this camera (avi, MPEG-4) file types.

  ② Frame display window : You can insert multi media in this window.

※ Some movie clips that was compressed with a codec that is not compatible with the Digimax Master can't play back in the Digimax Master.
※ Refer to the [Help] menu in Digimax Master for further information.

Digimax Reader

- Digimax Reader is a Text recognition program. You can save an image file that is captured in the Text mode, as a text file with this program.
  This software is only compatible with Windows.

- To start the program, click [Start → Programs → Digimax Reader Eng].
  The following screen will appear.
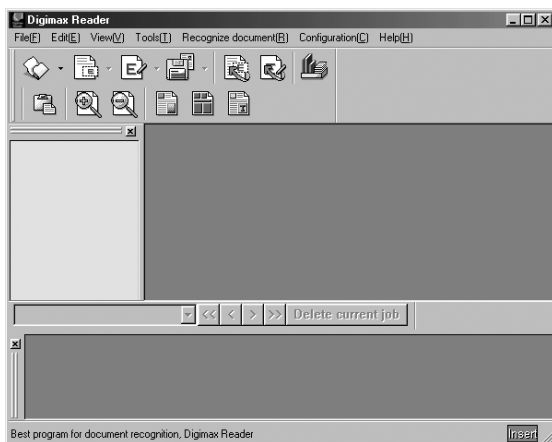
- How to use the Digimax Reader
  1. Connect the camera and the PC with a USB cable and download the images that were stored in the camera to the PC.
     * Please see page 145~146, 152~153 for details on Connecting a camera and PC, Downloading images.

  2. Run the Digimax Reader.

  3. Click the Open( ) icon as shown alongside.
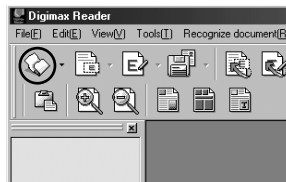
Digimax Reader

4. Select the image you want to save as a text file.
   * Only an image that was taken with a SAMSUNG camera can be opened.
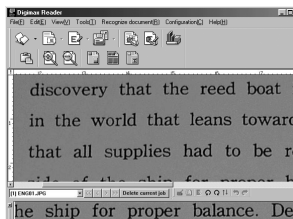
5. Click the Area Analysis( ) icon to scan the image.

6. Part of the image you selected will be displayed as shown.
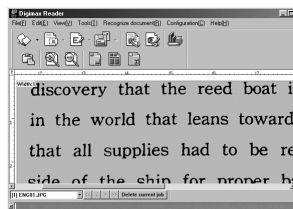
7. Click the Character Recognition( ) icon.
   The part selected in the previous step will be recognized as text.
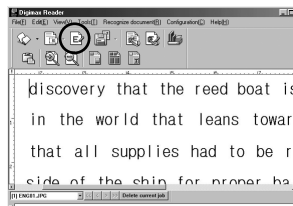
8. To save the section as a text, click the Save( ) icon. A window as shown alongside will be displayed.
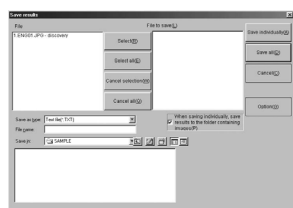
Digimax Reader

9. Select the file type that you want.
   Selectable file types : *.TXT, *.HWP, *.DOC, *.RTF

INFORMATION

● To get an image that can be recognized as a text :
  - Keep a distance that you can capture the image clearly between the subject and the camera.
  - The subject need to be centered.
  - Avoid camera shake to get a good image.
● Refer to the [Help] menu in Digimax Reader for further information.

FAQ

■ Please check the following if the USB connection malfunctions.

[Case 1]   The camera power is off.
    → Turn the camera power on. We recommend using an AC power adapter in PC mode.

[Case 2]   USB Driver is not installed correctly.
    → Install the USB Driver correctly. Refer to page 138.

[Case 3]   The USB cable is not connected or you are using a cable with an incorrect specification.
    → Use a USB cable with the correct specification.

[Case 4]   The camera is not recognized by your PC.
    Sometimes, the camera may appear under [Unknown Devices] in Device Manager.
    → Install the camera driver correctly.
    Turn off the camera, remove the USB cable, plug in the USB cable again, and then turn on the camera.

FAQ

[Case 5] There is an unexpected error during file transfer
→ Turn the camera power off and on again. Transfer the file again.

[Case 6] How do I know my computer supports a USB Interface?
→ Check the USB port in your computer or keyboard.
→ Check the OS version. A USB Interface is available in Windows 98, 98SE, 2000, ME, XP.
→ Check [Universal Serial Bus controllers] in Device Manager. Do the following to checks [Universal Serial Bus controllers].
  Win 98/ME   : Follow [Start → Settings → Control Panel → System → Device Manager → Universal Serial Bus controllers].
  Win 2000   : Follow [Start → Settings → Control Panel → System → Hardware → Device Manager → Universal Serial Bus controllers].
  Win XP   : Follow [Start → Control Panel → Performance and Maintenance → System → Hardware → Device Manager → Universal Serial Bus controllers].
  There must be USB Host Controller and USB root hub under [Universal Serial Bus controllers].
  In addition, double-click on the USB Universal Host Controller and the USB Root Hub to check if the Device Status states "This device is working properly". If the Device Status says the device is "not working properly", click the "Driver" tab and then click [Update Driver] or [Reinstall Driver].
→ When all the conditions mentioned above are met, the computer can support the USB interface.

[Case 7] When using the USB hub.
→ There may be a problem in connecting the camera to the PC through the USB hub if the PC and the hub are not compatible. Wherever possible, connect the camera to the PC directly.

[Case 8] Are other USB cables connected to the PC?
→ The camera may malfunction when it is connected to the PC at the same time as another USB cable. In this case, disconnect the other USB cable, and connect only one USB cable to the camera.

FAQ

[Case 9]   When I open the Device Manager (by clicking Start → (Settings) → Control
            Panel → (Performance and Maintenance) → System → (Hardware) → Device
            Manager), there are 「Unknown Devices」 or 「Other Devices」 entries with a
            yellow question mark (?) beside them or devices with an exclamation mark (!)
            beside them.

→   Right-click on the entry with the question (?) or exclamation (!) mark and select
     "Remove". Restart the PC and connect the camera the again. For Windows 98
     PC, remove the camera driver also, restart the PC, and then reinstall the
     camera driver.

→   Double-click on the entry with the question (?) or exclamation (!) mark, click the
     "Driver" tab, and click [Update Driver] or [Reinstall Driver]. If a message appears
     asking you to specify the location of the appropriate device driver, specify "USB
     Driver" in the CD supplied.

[Case 10]   In some security programs (Norton Anti Virus, V3, etc.), the computer may not
            recognise the camera as a removable disk.

→   Stop the security programs and connect the camera to the computer. Refer to
     the security program instructions about how to stop the program.

■ When the movie clip doesn't play back on the PC
※ When the movie clip recorded by the camera doesn't play back on the PC, the causes are
  mostly due to the codec installed on the PC.

● When the DirectX 9.0 or later is not installed
  → Install the DirectX 9.0 or later
  1) Insert the CD provided with the camera
  2) Run the windows explorer and select [CD-ROM drive:\USB Driver\DirectX 9.0] folder and
     click the DXESETUP.exe file.The DirectX will be installed. Visit the following site for
     downloading the DirectX.http://www.microsoft.com/directx

FAQ

- If a PC (Windows 98) stops responding while the camera and PC are connected repeatedly
  → If a PC (Windows 98) is turned on for a long time and the camera is connected repeatedly the PC may not recognise the camera. In this case, re-start the PC.

- If a PC connected with the camera stops responding while Windows is starting.
  → In this case, disconnect the PC and the camera and Windows will start.
    If the problem happens continuously, set the Legacy USB Support to disable and re-start the PC. The Legacy USB Support is in the BIOS setup menu. (The BIOS setup menu differs from the PC manufacturers and some BIOS menus don't have Legacy USB Support) If you can't change the menu by yourself, contact to the PC manufacturer or BIOS manufacturer.

- If the movie clip can't be deleted, removable disk can't be extracted or an error message displays during the file transfer.
  → If you install only the Digimax Master, the problems mentioned above occasionally happen.
    - Close the Digimax Master, program by clicking the Digimax Master icon on the Taskbar.
    - Install all the application programs included in the software CD.

SAMSUNG

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