





# FCC STATEMENT

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference received, including interference that may cause undesired operation.

#### Note:

This equipment has been tested and found to comply with the limits for Class B digital devices, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Use of shielded cable is required to comply with Class B limits in Subpart B of Part 15 of the FCC rules.

Do not make any changes or modifications to the equipment unless otherwise specified in the manual. If such changes or modifications should be made, you could be required to stop operation of the equipment.

#### Notice:

If static electricity or electromagnetism causes data transfer to discontinue midway (fail), restart the application or disconnect and connect the communication cable (USB, etc.) again.

### TRADEMARK INFORMATION

- Microsoft<sup>®</sup> and Windows<sup>®</sup> are U.S. registered trademarks of Microsoft Corporation.
- Pentium<sup>®</sup> is a registered trademark of Intel Corporation.
- Macintosh<sup>®</sup> is a trademark of Apple Computer, Inc.
- SD<sup>™</sup> is a trademark.
- SDHC<sup>TM</sup> is a trademark.



 Other names and products may be trademarks or registered trademarks of their respective owners.

### READ THIS FIRST

#### Notice:

- Product design and specifications are subject to change without notice. This includes primary product specifications, software, software drivers, and user's manual. This User Manual is a general reference guide for the product.
- The product and accessories that come with your camera may be different from those described in this manual. This is due to the fact that different retailers often specify slightly different product inclusions and accessories to suit their market requirements, customer demographics, and geographical preferences. Products very often vary between retailers especially with accessories such as batteries, chargers, AC adapters, memory cards, cables, pouches, and language support. Occasionally a retailer will specify a unique product color, appearance, and internal memory capacity. Contact your dealer for precise product definition and included accessories.
- The illustrations in this manual are for the purpose of explanation and may differ from the actual design of your camera.
- The manufacturer assumes no liability for any errors or discrepancies in this user manual.

# Safety Instructions

Read and understand all *Warnings* and *Cautions* before using this product.

### WARNING

If foreign objects or water have entered the camera, turn the power OFF and remove	
the battery and the AC power adapter.	
Continued use in this state might cause fire or electric shock. Consult the store of purchase.	
If the camera has fallen or its case has been damaged, turn the power OFF and	
remove the battery and the AC power adapter.	
Continued use in this state might cause fire or electric shock. Consult the store of purchase.	
Do not disassemble, change or repair the camera.	
This might cause fire or electric shock. For repair or internal inspection, ask the store of	$(\mathbb{R})$
purchase.	9
Use the specified AC power adapter only with the indicated power supply voltage.	
Use with any other power supply voltage might cause fire or electric shock.	U
Do not use the camera in areas near water.	
This might cause fire or electric shock. Take special care during rain, snow, on the beach,	
or near the shore.	
Do not place the camera on inclined or unstable surfaces.	
This might cause the camera to fall or tilt over, causing injury.	$\mathbf{O}$
Keep the battery out of the reach of children.	
Swallowing battery might cause poisoning. If the battery is accidentally swallowed, immediately	( )
consult a physician.	
Do not use the camera while you are walking, driving or riding a vehicle.	
This might cause you to fall over or result in traffic accident.	V

### CAUTION

Insert the battery paying careful attention to the polarity (+ or –) of the terminals.	$\frown$
Inserting the battery with its polarities inverted might cause fire and injury, or damage to the	$\bigcirc$
surrounding areas due to the battery rupturing or leaking.	
Do not fire the flash close to anyone's eyes.	
This might cause damage to the person's eyesight.	V
Do not subject the LCD monitor to impact.	
This might damage the glass on the screen or cause the internal fluid to leak. If the internal	$\wedge$
fluid enters your eyes or comes into contact with your body or clothes, rinse with fresh water.	V
If the internal fluid has entered your eyes, consult a physician to receive treatment.	
A camera is a precision instrument. Do not drop it, strike it or use excessive force when	
handling the camera.	()
This might cause damage to the camera.	U
Do not use the camera in humid, steamy, smoky, or dusty places.	
This might cause fire or electric shock.	V
Do not remove the battery immediately after long period of continuous use.	
The battery becomes hot during use. Touching a hot battery might cause burns.	V
Do not wrap the camera or place it in cloth or blankets.	
This might cause heat to build up and deform the case, resulting in fire. Use the camera in a	()
well-ventilated place.	C
Do not leave the camera in places where the temperature may rise significantly, such as	
inside a car.	()
This might adversely affect the case or the parts inside, resulting in fire.	
Before you move the camera, disconnect cords and cables.	
Failure to do this might damage cords and cables, resulting in fire and electric shock.	S

#### Warning:

TO PREVENT THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE

#### FOR AMERICAN USERS

The following advisory is included in accordance with the laws of the State of California (USA):

#### WARNING:

This product contains chemicals, including lead, known to the States of California to cause cancer, birth defects or other reproductive harm. *Wash hands after handling*.

- This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designated to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
  - \* Reorient or relocate the receiving antenna.
  - \* Increase the separation between the equipment and receiver.
  - \* Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
  - \* Consult the dealer or an experienced radio/TV technician for help.
- Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

#### FOR CANADIAN USERS

• This Class B digital apparatus complies with Canadian ICES-003

### FOR EU USERS



Note:

• This symbol mark and recycle system apply to EU countries and do not apply to countries in other areas of the world.

Your SANYO product is designed and manufactured with high quality materials and components which can be recycled and reused.

This symbol means that electrical and electronic equipment, at their end-of-life, should be disposed of separately from your household waste.

Please dispose of the equipment at your local community waste collection/recycling centre.

In the European Union there are separate collection systems for used electrical and electronic products.

Please help up to conserve the environment we live in!

### Symbols used in this manual



Points giving some extended instructions or special points to pay attention to.

You many find the answers to questions or problems concerning camera operation in the sections "Troubleshooting".



### Canadian ICES-003 information

This class B digital apparatus complies with Canadian ICES-003.

## Notes on Battery Usage

When you use the battery, carefully read and strictly observe the *Safety Instructions* and the notes described below:

- Use only the specified battery (3.7V).
- Avoid using the battery in extremely cold environments as low temperatures can shorten the battery life and reduce camera performance.
- When you are using the new rechargeable battery or rechargeable battery that has not been used for an extended period of time (the battery that passed the expiry date is an exception) might affect the number of images that can be captured. Therefore, to maximize its performance and lifetime, we recommend that you fully charge the battery and discharge it for at least one complete cycle before use.
- The battery may feel warm after long period of continuous use of the camera or the flash. This is normal and not a malfunction.
- The camera may feel warm after long period of continuous use. This is normal and not a malfunction.
- If the battery is not to be used for a long period of time, remove it from the camera to prevent leakage or corrosion.
- If the battery is not to be used for a long period of time, store it after no battery power left. If the battery is stored for a long time in a fully charged state, its performance may be impaired.
- Always keep the battery terminals in a clean state.
- Risk of explosion if battery is replaced by an incorrect type.
- Dispose of used batteries according to the recycle instructions.
- We recommend the battery should be charged 8 hours as first time use.

### CAUTION

- Danger of explosion if battery is incorrectly replaced.
- Replace only with the same or equivalent type.

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# INTRODUCTION

### Overview

Congratulations on your purchase of the new digital camera.

Capturing high-quality digital images is fast and easy with this state-of-the-art smart camera. Equipped with a 8.0 megapixel CCD, this camera is capable of capturing images with a resolution of up to 3264 x 2448 pixels.

## Package Contents

Carefully unpack your camera and ensure that you have the following items.

#### **Common Product Components:**

- Digital camera
- Software CD-ROM
- USB cable
- AV cable
- Camera strap
- Camera pouch
- AC power adapter
- Rechargeable lithium-ion battery

#### **Common (Optional) Accessories:**

- SD/SDHC memory card
- User's manual

# **GETTING TO KNOW THE CAMERA**

### Front View

- 234 5 1 2 SAMA Capture mode 6 ▶ Playback mode 7 8
- 1. Shutter button
- 2. **ON/OFF** button
- 3. Self-timer LED
- 4. Mode switch
  - Video mode
- 5. Speaker
- 6. Lens
- 7. Microphone
- 8. Flash



12. Tripod socket

### LCD Monitor Icons

### Capture mode [ 🗅 ]

- 1. Zoom status
- 2. Voice memo
- 3. Remaining battery status
  - [ 💷 ] Full battery power
  - [ 💷 ] Medium battery power
  - [ 🖬 ] Low battery power
  - [ 
    ] No battery power
  - \* [ = ]AC adapter icon (if
- used) 4. Flash mode
- . Flash mode
  - [Blank]Auto Flash
  - [ •4 ] Red-eye Reduction
  - [ 4 ] Forced Flash
  - [ 🕃 ] Flash Off
- 5. [ 📰 ] Histogram
- Focus area (When the shutter button is pressed halfway)
- 7. Capture mode
- [Blank] Single
  - [ 🖳 ] Continuous
- [ **AEB**] AEB
- 8. Image size

[8m]	3264 x 2448
[ <b>6m</b> ]	2816 x 2112
[ <b>4</b> m]	2272 x 1704
[ 2m ]	1600 x 1200
[ O.3m ]	640 x 480

9. Possible number of shots



- [ 🖽 ] Fine
- Standard
- E ] Economy
- 11. Date and time
- 12. Self-timer icon
  - () **10S**]10 sec.
  - [🕑 **2S** ] 2 sec.
  - (i) 10+2 ] 10+2 sec.
- 13. Unsteady hold warning icon
- 14. [ 🔄 ] Exposure compensation
- [ 🔄 ] Backlight correction 15. Metering
- [Blank] Center
- [ I ] Spot
- 16. White balance [Blank] Auto
  - [ 🖧 ] Incandescent
  - □ Fluorescent 1
  - [ 🖵 ] Fluorescent 2
  - → ] Daylight
  - [ ] Cloudy
  - [ ] Manual
- 17. Focus mode
- [Blank] Auto focus
  - [ 🖲 ] Face Detection
  - [ 🕷 ] Macro [ 🗠 ] Infinity



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### Video mode [ 👪 ]

- 1. [ 📲 ] Video mode
- 2. Zoom status
- 3. Remaining battery status
- 4. Image size
- 5. Possible recording time / elapsed time
- 6. Quality
- 7. Recording indicator
- 8. Self-timer icon
- 9. Focus icon

### Playback mode [ 🖻 ] -Still image playback

- 1. Playback mode
- 2. File number
- 3. Folder number
- 4. Protect icon
- 5. Voice memo
- 6. DPOF icon

### Playback mode [ 🕞 ]-Video playback

- 1. Video status bar
- 2. Elapsed time
- 3. File number
- 4. Folder number
- 5. Protect icon
- 6. Video mode
- 7. Playback mode
- 8. Sound off icon (When the ▲ button is pressed during video playback.)
- 9. Total recorded time







### **Display button**

You can switch the image display information by pressing the **DISP** button. Each press of the **DISP** button switches the information display state in the following order:

#### Capture mode:



# **GETTING STARTED**

### **Preparation**

1. Attach the camera strap.

- 2. Open the battery/memory card cover.
- 3. Insert the supplied battery with correct orientation as shown.
- 4. Insert an SD/SDHC memory card (Optional).
  - The camera has 32MB internal memory (29MB available for image storage), but you can load an memory card to expand the camera's memory capacity.
  - Be sure to format the memory card with this camera before its initial usage.
- 5. Close the battery/memory card cover and make sure it is locked securely.



LOCK

LOCK



- To prevent valuable data from being accidentally erased from an SD/SDHC memory card you can slide the write-protected tab (on the side of the SD/SDHC memory card) to "LOCK".
- To save, edit or erase data on an SD/SDHC memory card, you must unlock the card.
- Be sure to format an SD/SDHC memory card with this digital camera before using it.

## Charging the Battery

The AC power adapter may charge the battery or operate the camera as power supply. Make sure that the power of the camera is off and then insert the battery before starting.

- 1. Connect one end of the adapter to the DC IN 5V terminal on the camera.
- 2. Connect the other end of the AC power adapter into a wall outlet.
  - The status LED lights red when charging is started and lights off when charging is completed. The LED lights green when a charging error has occurred or no battery is inserted inside the camera.



- It is recommended to fully discharge the battery before recharging.
- Charging time varies according to the ambient temperature and the status of battery.

<ul> <li>This camera must be used with specified AC power adapter. Damage caused by the use incorrect adapter is not covered under the warranty.</li> <li>Always make sure that the camera is off before removing the battery.</li> <li>The battery may feel warm after it has been charged or immediately after being used.</li> <li>The battery may feel warm after it normal and not a malfunction.</li> <li>When using the camera in cold conditions, keep the camera and battery warm by storin a warm place such as an interior pocket between shots.</li> </ul>
------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

### **Initial Settings**

### Setting the Date and Time

The date/time needs to be set if/when:

- The camera is turned on for the first time.
- The camera is turned on after leaving the camera without the battery for an extended period of time.

When the date and time information is not displayed on the LCD monitor, follow these steps to set the correct date and time.

- 1. Slide the mode switch to [
- 2. Press the **MENU** button and select [Setup] menu with the ▶ button.
- Select [Date/Time] with the ▲ / ▼ buttons and press the SET button.
- Select the item's field with the 
   / ▶ buttons and adjust the value for the date and time with the ▲ / ▼ buttons.
  - The time is displayed in 24-hour format.
- 5. After confirming all settings are correct, press the **SET** button.



### Formatting the SD/SDHC Memory Card or Internal Memory

This utility formats the internal memory (or memory card) and erases all stored images and data.

- 1. Slide the mode switch to [  $\blacktriangleright$  ].
- 2. Press the **MENU** button and select [Setup] menu with ▶ button.
- Select [Format] with the ▲ / ▼ buttons, then press the SET button.
- Select [Execute] with the ▲ / ▼ buttons, and press the SET button.
  - To cancel formatting, select [Cancel] and press the **SET** button.





- To format the internal memory, do not insert an SD/SDHC memory card into the camera. Otherwise, you will format the SD/SDHC memory card.
- Formatting the SD/SDHC memory card also erases the protected images. All data other than images are also erased. Before formatting the card, make sure that all the images are unnecessary.
- Formatting is an irreversible action and data cannot be recovered at a later time.
- An SD/SDHC memory card having any problem cannot be properly formatted.

### Setting Image Resolution and Quality

Resolution and quality settings determine the pixel size (dimension), image file size, and compression ratio for your images. These settings affect the number of images that can be stored. As you get to know the camera, it is recommended that you try each quality and resolution setting to get an appreciation for the effects that these settings will have on your images.

Higher resolution and higher quality images offer the best photographic results but produce large file sizes. Therefore, few images will take up a lot of memory space.

High resolution and quality settings are recommended for printed output and situations requiring the finest detail. Lower resolution/quality images take up less memory space and may be quite suitable for sharing images via e-mail, in a report, or on a web page.

To change image resolution or image quality, perform these steps below:

- 1. Slide the mode switch to [ 🗖 ] or [ 🚢 ].
- 2. Press the **MENU** button.
- 3. Select [Size] with the ▲ / ▼ buttons, and press the SET button.
- Select the desired setting with the ▲ / ▼ buttons, and press the SET button.
- 5. Select [Quality] with the ▲ / ▼ buttons, and press the SET button.
- Select the desired setting with the ▲ / ▼ buttons, and press the SET button.
- 7. To exit from the menu, press the **MENU** button.



[ 📲 ] Mode

### Possible number of shots (still image)

The table shows the approximate shots that you can capture at each setting based on the capacity of the internal memory and the SD/SDHC memory card.

	Quality		Internal		SD/SDHC memory card capacity						
Size			Memory	64MB	128MB	256MB	512MB	1GB	2GB	4GB SDHC	
	Ħ	Fine	10	22	45	91	183	368	738	1478	
<b>8</b> M		Standard	13	28	58	118	238	477	955	1913	
3204 X 2440		Economy	16	35	71	143	289	579	1160	2323	
		Fine	14	30	63	127	255	512	1025	2053	
<b>6M</b>		Standard	18	38	79	159	320	642	1285	2573	
2816 X 2112		Economy	19	40	83	167	336	674	1349	2701	
4-	▦	Fine	24	51	103	209	420	842	1686	3374	
<b>4</b> M 2272 x 1704		Standard	27	57	116	233	469	939	1881	3765	
		Economy	32	67	137	276	554	1111	2225	4454	
	Ħ	Fine	49	102	209	415	833	1669	3342	6688	
<b>2M</b>		Standard	59	121	246	495	993	1990	3984	7974	
1600 X 1200		Economy	67	138	279	561	1126	2255	4515	9037	
<b>O.3M</b> 640 x 480	Ħ	Fine	152	311	628	1263	2535	5076	10160	20335	
		Standard	184	377	762	1531	3072	6153	12316	24649	
		Economy	229	468	945	1900	3812	7634	15279	30579	

0.			Internal		S	D/SDHC I	memory o	card capa	acity	
Size	Quality		Memory	64MB	128MB	256MB	512MB	1GB	2GB	4GB SDHC
VGA	Ħ	Fine	00:00:12	00:00:26	00:00:53	00:01:47	00:03:35	00:07:12	00:14:25	00:28:51
640 x 480		Standard	00:00:14	00:00:30	00:01:00	00:02:02	00:04:05	00:08:11	00:16:24	00:32:50
	Ħ	Fine	00:00:39	00:01:20	00:02:42	00:05:27	00:10:57	00:21:56	00:43:54	01:27:52
320 x 240		Standard	00:00:45	00:01:38	00:03:09	00:06:20	00:12:42	00:25:26	00:50:55	01:41:55

### Possible recording time / sec (video clip)

\* If your memory card is not high speed write (over 2MB/Sec for random write), it will cause video clip auto stop or unexpected results. Your camera has to set to QVGA size and standard quality to prevent this problem if you want to use slow speed memory card.

# PHOTOGRAPHY MODE

# [ 🗖 ] Capture Mode

Your camera is equipped with a 2.7" full color LTPS-TFT LCD monitor to help you compose images, playback recorded images/video clips or adjust menu settings.

- 1. Press the **ON/OFF** button to turn the power on.
  - The status LED lights green and the camera is initiated.
  - When the power is turned on, the camera will start in the mode that was set.
  - If the power is turned on at [ □ ] or [ □ ] mode, the lens will extend forward and it is ready for shooting. At both modes, if the mode switch is set to [ □ ], the lens barrel will retract into the camera body after 30 seconds.
  - If the power is turned on at [ ▶] mode, the lens will remain closed.
- 2. Slide the mode switch to [
- 3. Compose your image in the LCD monitor.
  - Pressing the \$ button zooms in on the subject, and enlarges the subject on the LCD monitor.
  - Pressing the **•••** button provides a wider angle image.
- 4. Press the shutter button.
  - Pressing the shutter button down halfway automatically focuses and adjusts the exposure, and pressing the shutter button down fully captures the images.
  - If the photographic preview is set to "On", the captured image will be displayed while the image is being recorded onto the SD/SDHC memory card.





## **Recording Voice Memos**

A voice memo can be recorded once for 30 seconds in the still image mode immediately following a still image captured.

- 1. Slide the mode switch to [  $\square$  ].
- Press the MENU button, and select the [Function] menu with the ► button.
  - [Function] menu is displayed.
- Select [Voice Memo] with the ▲ / ▼ buttons, and press the SET button.
- Select [On] with the ▲ / ▼ buttons, and press the SET button.
- 5. Press the **MENU** button to exit from the menu.
  - An [ ] icon is displayed on the screen.



Capture Function Setup

- 6. Compose the image, press the shutter button down halfway, then press it down fully.
  - [VOICE RECORDING] is displayed on the screen immediately, and the voice memo recording starts.
- 7. Press the shutter button one more time during recording, or wait for 30 seconds.
  - [VOICE RECORD END] will be displayed and the recording will end.
  - An [ 🕀 ] icon is displayed with images that have been recorded with a voice memo.



Voice memo is only available in [Single] capture mode.

Voice memo is automatically fixed at [Off] in [Continuous] or [AEB] capture mode.

## Using the Digital Zoom

Using a combination of 4 times optical zoom and 5 times digital zoom permits zoom photography of up to 20 times to suit the subject and the distance. The digital zoom is a compelling feature, the more an image is enlarged (zoomed), the more pixelated (grainier) the image will appear.

- 1. Slide the mode switch to [ 🗖 ] or [ 🚢 ].
- 2. To enable the digital zoom:
  - a. Press the MENU button.
  - b. Select [Function] with the ▶ button.
  - c. Select [Digital Zoom] with the  $\blacktriangle$  /  $\blacktriangledown$  buttons, and press the SET button.
  - d. Select [On] with the  $\blacktriangle$  /  $\blacktriangledown$  buttons again, and press the SET button.
  - e. Press the MENU button to exit from the menu screen.
  - f. To activate the digital zoom, press and hold the \$ button completely until the image on the LCD monitor expands.



3. Press the shutter button to capture a "zoomed" image.



The zoom setting is automatically cancelled by either turning the camera off or the activation of the Auto Off function.

## Exposure Compensation/Backlight Correction

Images can be captured with the overall screen intentionally made brighter or darker. These settings are used when a suitable brightness (exposure) cannot otherwise be obtained in circumstance where the difference in brightness between the subject and the background (the contrast) is large, or when the subject that you want to photograph is very small within the screen. Exposure can be set in 0.3 EV units.

- 1. Slide the mode switch to [ 🗖 ] and press the 🔀 🖄 button.
  - Each press of the 🛃 🐼 button displays the setting in the order of [Blank], [ ⊠ ] Backlight Correction, and [ ⊠ ] Exposure Compensation.
  - The exposure compensation value adjustment can only be made when the blue text appears.
- 2. Set the exposure value with the  $\blacktriangle$  /  $\blacktriangledown$  buttons.
  - Press the ▲ button to increase the value.
  - Press the ▼ button to decrease the value.
  - The setting range of the exposure compensation is as follows. -2.0, -1.7, -1.3, -1.0, -0.7, -0.3, 0, +0.3, +0.7, +1.0, +1.3, +1.7, +2.0
  - Press the Z button to confirm the setting.
  - The larger the value, the brighter the image. The smaller the value, the darker the image. The set value is displayed on the screen.

### **Effective Subjects and Set Values**

- + (positive) compensation
  - \* Printed matter comprising black text on whitish paper
  - \* Backlighting
  - \* Bright scenes or strong reflected light such as ski slopes
  - \* When the sky accounts for a large area on the screen
- (negative) compensation
  - \* People illuminated by a spotlight, in particular, against dark background
  - \* Printed matter comprising white text on blackish paper
  - \* Weak reflecting bodies such as evergreen trees or darkish leaves
- Backlight correction (+1.3, fixed)
  - \* When the background is bright and the subject is dark.
  - \* When subjects (people) have a light source such as the sun to their backs.





## Setting the Scene Mode

By simply selecting one of the following 22 modes, you can capture the image with most appropriate settings.

- 1. Slide the mode switch to [
  - a. Press the **MENU** button.
  - b. Select [Scene Mode] with the  $\blacktriangle/\nabla$  buttons, and press the SET button.
  - c. Select the desired scene mode with the  $\blacktriangle/\nabla$  buttons, and press the SET button.
- 2. Compose the image, press the shutter button down halfway, and then press it down fully.

The table below will help you choose the appropriate scene mode:

Scene mode	Description
[ P ] Program AE	Select this mode to capture images without having to set special functions or
	manual adjustments.
	However, this useful mode also allows you to make changes on camera
	settings to suit the photographic condition.
[ 🛤 ] Panorama	Select this mode to take a series of shots then stitch them together with
	software to make a single image.
[ 👩 ] Portrait Man	Select this mode when you want to capture an image that makes a man
	stands out against a defocused (blurred) background.
[ 🕥 ] Portrait Lady	Select this mode when you want to capture an image that makes a lady
	stands out against a defocused (blurred) background.
[▲] Landscape	Select this mode when you want to capture landscape images with bright color.
[ 🗞 ] Sports	Select this mode when you want to capture fast-moving subjects.
[ 🖧 ] Night Portrait	Select this mode when you want to capture people with an evening or night
	scene background.
[ *) ] Night Scene	Select this mode when you want to capture dark scenes such as night views.
[ 🎬 ] Candlelight	Select this mode when you want to capture images of candlelit scene, without
	spoiling the atmosphere.
[ \star ] Fireworks	Select this mode when you want to capture fireworks clearly with optimal
	exposure. The shutter speed becomes slower, so using a tripod is recommended.

Scene	mode	Description
[TEXT]	Text	Select this mode when you want to capture an image that contains black and
		white subjects like printed documents.
[ 🛖 ]	Sunset	Select this mode when you want to capture images of a beautiful sunset shot
		that vividly captures beautiful red colors.
[ 🚔 ]	Sunrise	Select this mode when you want to capture images of sunrise scene. This
		mode helps keep the deep hues in the scene.
[坐]	Splash Water	Select this mode when you want to capture images of splashing water.
[ 🄊 ]	Flow Water	Select this mode when you want to capture the soft flowing water. Shutter
		speed is automatically slowed down while maintaining proper exposure, which
		produces an image with the water blurred into smooth flowing lines along with
		a sharply focused background.
[8]	Sepia	Select this mode when you want to capture a sepia image.
[ 🖳 ]	Monochrome	Select this mode when you want to capture a black & white image.
[*2*]	Snow	Select this mode when you want to capture clear snow scenes without darkened
		subjects and bluish tint.
[ 🏝 ]	Beach	Select this mode when you want to capture bright beach scenes and sunlit
		water surfaces.
[ 😴 ]	Pets	Select this mode when you want to capture your pets. Shoot from the eye level
		of your pets.
[()]	Anti Shake	This mode minimizes the influences of hand shaking when you want to
		capture an image.
[ 🚊 ]	User Setting	This mode allows you manually set the setting parameters and all these settings
		will be memorized.

### **Recording Shots using Face Detection Technology**

Face Detection Technology can identify and focus on the human faces in the image. This advanced function simultaneously detects up to 5 human faces regardless of their position in the scene.

White frame

Green frame

Red frame



Face detection function is on

Focus lock

Out of focus

- 1. Slide the mode switch to [
- 2. Toggle the se button until [ ) icon appears on the LCD monitor.
  - The white frame is identified as the "top priority" face (main focus frame), and gray ones around the other faces.
- 3. Press the shutter button halfway down to lock the focus.
  - The main focus frame simultaneously turns green.
  - If the "top priority" face is out of focus, the main focus frame turns red.
- 4. Press the shutter button down fully to capture your image.



- Subjects that are not suitable with this function:
  - a. A person is wearing glasses, sunglasses, or face is covered with hat or hair.
- b. A person turned sideways.

# [ 📲 ] Video Mode

This mode allows you to record video clips at a resolution of  $320 \times 240 / 640 \times 480$  pixels. You can select audio to be recorded or not.

- 1. Slide the mode switch to [ 🛍 ].
- 2. Compose the image.
- 3. Press the shutter button.
  - The recording of the video clip will start.
  - Pressing the shutter button one more time will end the recording of the video clip.
  - The recording time depends on the storage size and the subject of the image to be recorded.
  - Zoom function cannot be used during video recording.



When recording a video clip, the flash and "10+2 sec." self-timer function cannot be used.

If the access speed of your SD/SDHC memory card is not enough for recording video clips in the currently selected quality, a warning icon [ i ] will appear, and the video recording will stop. In this case, select a video quality lower than the current one.

# [ ] PLAYBACK MODE

### Playing Back Still Images

You can play back the still images on an LCD monitor.

- 1. Slide the mode switch to [ 🕞 ].
- The last image appears on the screen.
- 2. The images can be fed in reverse or fed forward with the  $\triangleleft$  /  $\blacktriangleright$  buttons.
  - To view the previous image, press the ◀ button.
  - To view the next image, press the ▶ button.
  - Pressing the ▲ / ▼ buttons during image playback will result in a 90 degree rotated display.
  - The ▲ button rotates the image counterclockwise and displays it, whereas the ▼ button rotates the image clockwise and displays it. A press of the button opposite to the direction in which the image was rotated will return the image to the normal display.
  - Press the +++ button to view the images in the thumbnail display. Images that have been selected with the ▲ / ▼ / ◀ / ▶ buttons will be indicated by a yellow frame. Press the SET button to display the selected image is displayed at its regular size.







An [  $\begin{array}{c} \bigtriangledown \\ \end{array}$  ] icon is displayed with the video data. Video clips cannot be rotated.

- An [ ] ] icon is displayed with images which have an audio memo recorded.
- Press the SET button to playback the voice memo data.

## Playing Back Video Clips

You can play back video clips recorded on the LCD monitor. You can also play back sound if you recording with the audio.

- 1. Slide the mode switch to [  $\blacktriangleright$  ].
  - The last image appears on the screen.
- 2. Select the desired video clip with the  $\triangleleft$  /  $\blacktriangleright$  buttons.
- 3. Press the **SET** button.
  - A press of the ► / < buttons during playback allows fast forward play / fast reverse play.
  - To stop video playback, press the ▼ button.
    - This stops playback and returns to the start of the video clip.
  - To pause video playback, press the **SET** button. This pauses video playback.

To cancel pause, press the SET button again.

- Video clips cannot be displayed rotated or enlarged.
- You are recommended to use Windows Media Player or QuickTime Player to play the video clip back on your computer.
- QuickTime Player is a free media player available at www.apple.com; and compatible with Mac and Windows-computers.
  - For more information about the operation of the media player, refer to its respective help documentation.

### Playing Back Still Images/Video Clips on a TV

You can also play back your images on a TV screen. Before connecting to any video devices, make sure to select NTSC/PAL to match the broadcast standard of the video equipment you are going to connect to the camera.

- 1. Slide the mode switch to [  $\blacktriangleright$  ].
- 2. Connect one end of the AV cable to the AV OUT terminal of the camera.
- 3. Connect the other end to the AV input socket of the TV set.
- 4. Turn the TV and camera on.
- 5. Play back the still images/video clips.
  - The method of operation is the same as playing back still images and video clips on the camera.



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NOTE

## **Attaching Voice Memos**

A maximum of 30 seconds of audio can be recorded like a memo for captured still images. The voice memo can be recorded only once.

- 1. Slide the mode switch to [ ].
- The last image appears on the screen.
- 2. Select the image that you want to attach the voice memo with the  $\triangleleft$  /  $\blacktriangleright$  buttons.
- 3. Press the shutter button.
  - [VOICE RECORDING] is displayed on the screen and recording starts.
- 4. To stop recording voice memo during recording, press the shutter button again.
- [VOICE RECORD END] will be displayed and the recording will end. An [ ] icon is displayed with images that have been recorded with a voice memo.

#### Playing back voice memo

A press of the SET button displays [VOICE PLAYBACK] and plays back the voice memo.



Voice memo is only available for still images.

### **Slideshow Display**

The slideshow function enables you to playback your still images automatically in order one image at a time.

- 1. Slide the mode switch to [  $\blacktriangleright$  ].
- 2. Press the **MENU** button.
  - The playback menu is displayed.
- Select [Slide Show] with the ▲ / ▼ buttons, and press the SET button.
- Select the desired interval time with the ▲ / ▼ buttons, and press the SET button.
  - The slideshow starts.
- 5. To stop the slide show during playback, press the **SET** button.
  - The image is displayed on screen when you press the **SET** button.

Play	Setup
Fix Red Eyes	Next Menu
Slide Show	3 sec.
DPOF	Next Menu
Protect	Next Menu
LCD Bright.	0
Resize	Next Menu
Quality	Next Menu
MENU:E	xit (SET:Adj.



The Auto Off function does not operate during slide show.

■ All still images in the folder are automatically played back.

### Zoom Playback

This mode also allows you to enlarge your image on the selected portion of the image to check for small details.

- 1. Slide the mode switch to [  $\blacktriangleright$  ].
- Press the 
   / ▶ buttons to select the image you want to enlarge.
  - You can also select the image you want to enlarge from the thumbnail display.
- 3. Adjust the zoom ratio with the 4 / +++ buttons.
  - Pressing the ∮ button enlarges the image.
  - To return to normal magnification, press the +++ button.
  - The magnification factor is displayed on the LCD monitor.
  - The image is displayed enlarged, and a blue frame and yellow frame are displayed on the LCD monitor.
  - The blue frame indicates the entire image, while the yellow frame shows the location of the currently enlarged area.
- 4. Press the  $\blacktriangle$  /  $\bigtriangledown$  /  $\blacklozenge$  /  $\blacklozenge$  buttons to select the area to enlarge.
- 5. To return to regular display, toggle the 🗰 button until the regular display appears on the screen.



The range of magnification factor is from 1x to 4x in 0.5x increments.



Entire image Current position of enlargement

## **Protecting Images**

Set the data to read-only to prevent images from being erased by mistake.

#### **Protecting Images**

- 1. Slide the mode switch to [  $\blacktriangleright$  ].
- Select the image that you want to protect with the ◀ / ► buttons.
- 3. Press the **MENU** button.
  - The playback menu is displayed.
- Select [Protect] with the ▲ / ▼ buttons, and press the SET button.
- Select [Single] or [All] with the ▲ / ▼ buttons, and press the SET button.
- Select [Set] with the ▲ / ▼ buttons, and press the SET button.
  - Protection is applied to the image and the camera returns to the playback mode.
  - The protect icon [ ] is displayed with protected images.
    When [All] has been selected, [] ] is displayed with all the images.







#### **Canceling the Protection**

To cancel protection for only one image, display the image that you want to remove the image protection.

- 1. Select [Protect] with the ▲ / ▼ buttons from the playback menu, and press the SET button.
- 2. Select [Single] or [All] with the  $\blacktriangle$  /  $\blacktriangledown$  buttons, and press the **SET** button.
- 3. Select [Cancel Protect] with the  $\blacktriangle$  /  $\blacktriangledown$  buttons, and press the **SET** button.
  - The removal of image protection is executed and the camera returns to the playback mode.

#### Protecting multiple images simultaneously

- 1. Select [Protect] with the  $\blacktriangle$  /  $\blacktriangledown$  buttons from the playback menu, and press the **SET** button.
- 2. Select [Select] with the  $\blacktriangle$  /  $\blacktriangledown$  buttons, and press the SET button.
  - The images are displayed in the thumbnail display.
- 3. Select the image you want to protect with the  $\blacktriangle$  /  $\blacktriangledown$  /  $\blacklozenge$  /  $\blacklozenge$  buttons, and press the **DISP** button.
  - The protect icon [ ] is displayed with protected images. Selecting a protected image and pressing the **DISP** button again will cancel the protection. This procedure is repeated to select multiple images.
- 4. Press the **SET** button.
  - Protection and cancellation the protection are executed and the camera returns to playback mode.



Formatting an SD/SDHC memory card overrides protection, and erases all images regardless of their protected status.

### **DPOF Settings**

DPOF is the abbreviation for Digital Print Order Format, which allows you to embed printing information on your memory card. You can select the images to be printed and how many prints to make with the DPOF menu in the camera and insert the memory card to the card compatible printer. When the printer starts printing, it will read the embedded information on the memory card and print the specified images.

- 1. Slide the mode switch to [  $\blacktriangleright$  ].
- Select the image that you want to set DPOF with the ◀ / ► buttons.
- 3. Press the **MENU** button.
  - The playback menu is displayed.
- Select [DPOF] with the ▲ / ▼ buttons, and press the SET button.
  - The DPOF setting screen is displayed.
- Select [Single] or [All] with the ▲ / ▼ buttons, and press the SET button.
  - [Single]: Sets DPOF for each individual image.
  - [All]: Sets DPOF for all images at once.
- Select [Print Num] with the ▲ / ▼ buttons, and press the SET button.
  - This displays the number of prints setting screen.
- Set the number of prints with the ▲ / ▼ buttons, and press the SET button.
  - You can set up to 9 prints for each image.
- Select [Date Print] with the ▲ / ▼ buttons, and press the SET button.
  - The date setting screen appears.
- Select date to [On] or [Off] with the ▲ / ▼ buttons, and press the SET button.
  - [On]: The date of the image will also be printed.
  - [Off]: The date of the image will not be printed.
- 10.Select [Print Enable] with the ▲ / ▼ buttons, and press the SET button.







11.Select [Execute] with the  $\blacktriangle$  /  $\blacktriangledown$  buttons, and press the SET button.

- This creates a file containing the DPOF information, and when the operation is finished, the screen returns to the playback mode.
- The DPOF icon [ ] is displayed on each image that has set up DPOF settings.





The date that is printed on the image is the date set on the camera. To print the correct date on the image, set the date on the camera before you capture the image. Refer to section in this manual titled "Setting the Date and Time" for further details.

# Removing Red-eye

You can use this function to remove the red-eye effect after an image is taken.

- 1. Slide the mode switch to [  $\blacktriangleright$  ].
- 2. Select the image that you want to edit with the  $\triangleleft$  /  $\blacktriangleright$  buttons.
- 3. Press the **MENU** button.
- Select [Fix Red Eyes] with the ▲ / ▼ buttons, and press the SET button.
- 5. Select [Execute] with the ▲ / ▼ buttons, and press the SET button.
- 6. View the changes on the corrected image.
- 7. To save your corrected image, select [Confirm] with the ▲ / ▼ buttons, and press the **SET** button.
  - When this process ends, this replaces the original image with the corrected image.



### Resizing an Image

Resizes a previously saved image.

Resizing replaces the original image with the changed image. It is only possible to resize to a smaller size.

- The following images cannot be resized:
- Image size (640 x 480)
- Image captured with another camera
- Protected images
- Video clips
- Images cannot be resized when the SD/SDHC memory card is write protected
- 1. Slide the mode switch to [  $\blacktriangleright$  ].
- Select the image that you want to resize with the ◀ / ► buttons.
- 3. Press the **MENU** button.
- Select [Resize] with the ▲ / ▼ buttons, and press the SET button.
- 5. Select the image size that you want to change with the ▲ / ▼ buttons, and press the **SET** button.
  - To quit resizing, press the **MENU** button.
  - When resizing ends, the screen returns to playback mode.





It is possible to reduce the size of an image. It is not possible to increase the size of an image, or to restore size after it has been decreased.

## **Erasing Images**

#### Erasing at Photography Mode (Quick Delete Function)

The quick delete function enables you to delete the last-captured image during capture.

- 1. Slide the mode switch to [
- 2. Press the  $\overline{1}$  button.
  - The last image and quick delete menu appear on the screen.
- 3. Select [Execute] with the  $\blacktriangle$  /  $\blacktriangledown$  buttons.
- 4. Press the **SET** button to confirm the deletion.
  - To not delete, select [Cancel], and press the SET button.

#### **Erasing at Playback Mode**

Erasing single image / Erasing all images

- 1. Slide the mode switch to [  $\blacktriangleright$  ].
  - The last image will be displayed on the screen.
- 2. Select the image you want to erase with the  $\triangleleft$  /  $\blacktriangleright$  buttons.
- 3. Press the 🚡 button.
  - The deletion menu will be displayed.
- 4. Select [Single] or [All] with the ▲ / ▼ buttons, and press the SET button.
  - [Single]: Erases the selected image or the last image.
  - [All]: Erases all of the images except for the protected images.
  - [Select]: Erases a number of selected images.





- 5. Select [Execute] with the  $\blacktriangle$  /  $\blacktriangledown$  buttons, and press the **SET** button.
  - To not erase, select [Cancel], and press the SET button.



Deleting an image will not affect sequential image numbering. For example, if you delete image number 240, the next captured image will be numbered 241 even though 240 no longer exists. In other words, an image-number is retired when an image is deleted and will not be reused or reassigned to another subsequently captured image.

#### Erasing selected images

This erases a number of selected images.

- 1. Slide the mode switch to [  $\blacktriangleright$  ].
- 2. Press the 🚡 button.
  - The deletion menu will be displayed.
- 3. Select [Select] with the ▲ / ▼ buttons, and press the SET button.
  - The images are displayed in the thumbnail display.
- Select the image you want to erase with the ▲ / ▼ / ◀ / ▶ buttons, and press the m button.
  - The [ ] icon will be displayed. One more press of the erase button will cancel the operation. Repeat this procedure and select all the images that you want to erase.
- 5. Press the SET button.



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# **MENU OPTIONS**

## Capture Menu (Capture)

This menu is for the basic settings to be used when capturing still images.

- 1. Slide the mode switch to [
- 2. Press the **MENU** button.
  - [Capture] menu is displayed.
- 3. Select the desired [Capture] option item with the ▲ / ▼ buttons, and press the **SET** button to enter its respective menu.
- Select the desired setting with the ▲ / ▼ buttons, and press the SET button.
- 5. To exit from the menu, press the **MENU** button.

#### Scene Mode

Refer to section in this manual titled "Setting the Scene Mode" for further details.

#### Size

This sets the size of the image that will be captured.

- \* [**8M**] 3264 x 2448
- \* [**GM**] 2816 x 2112
- \* [**4M**] 2272 x 1704
- \* [**2M**] 1600 x 1200
- \* [**0.3M**] 640 x 480

#### Quality

This sets the quality (compression rate) at which the image is captured.

- \* [🖽 ] 🛛 Fine
- \* [ 📑 ] Standard
- \* [🖪 ] Economy

#### Sharpness

This sets the sharpness of the image that will be captured.

\* Hard / Normal / Soft





Next Menu

MENU:Exit SET:Adj.

Manual WB

#### Saturation

This sets the saturation of the image that will be captured.

\* High / Normal / Low

#### White Balance

This sets the white balance capturing under a variety of lighting conditions and permits images to be captured that approach the conditions that are seen by the human eye.

- \* [ Blank ] Auto
- [ <u>八</u> ] [ 中] Incandescent
- Fluorescent 1
- [ 🖵 ] Fluorescent 2
- [ 🔆 ] Davlight
- Cloudy [①]
- [ 🛃 ] Manual

#### Manual WB

This manually sets the white balance and stores it. Use of this is convenient when the white balance does not offer a good match.

Before selecting [Execute] and before taking your image, place a white paper in the scene and set the white balance manually.

\* Cancel / Execute

#### ISO

This sets the sensitivity for capturing images. When the sensitivity is raised (and the ISO figure is increased), photography will become possible even in dark locations, but the more pixelated (grainier) the image will appear.

\* Auto / 64 / 100 / 200 / 400 / 800 / 1600

#### Metering

This sets the metering method for calculating the exposure.

- \* [Blank] Center: Averages the light metered from the entire frame, but gives greater weight to the subject matter at the center.
- A very small portion of the center of the screen is measured to calculate the \* [ • ] Spot: correct exposure.

## Capture Menu (Function)

- 1. Slide the mode switch to [  $\square$  ].
- Press the MENU button, and select the [Function] menu with the ► button.
  - [Function] menu is displayed.
- 3. Select the desired [Function] option item with the ▲ / ▼ buttons, and press the **SET** button to enter its respective menu.
- Select the desired setting with the ▲ / ▼ buttons, and press the SET button.
- 5. To exit from the menu, press the **MENU** button.

#### **Capture Mode**

This sets the recording method at the time of capturing images.

- \* [Blank] Single: Captures an image at a time.
- \* [ ] Continuous: Permits continuous photography of 3 images max.
- \* [**AEB**] AEB: Permits 3 consecutive images in the order of standard exposure, underexposure and overexposure compensation.



In [Continuous] and [AEB] capture mode, the voice memo is automatically fixed at [Off].

### Voice Memo

Refer to section in this manual titled "Recording Voice Memos" for further details.

\* On / Off



When [Voice Memo] is set to [On], the preview setting is also fixed at [On].

Capture / Fun	ction Setup
Capture Mode	Single
Voice Memo	Off
LCD Bright.	0
Digital Zoom	Off
Preview	Off
Date Print	Off
MENU:E	xit (SET:Adj.

#### LCD Bright.

Select a brightness level for the LCD monitor. The LCD becomes brighter with the  $\blacktriangle$  button and darker with the  $\blacktriangledown$  button. The adjustment range is from -5 to +5.



#### **Digital Zoom**

This sets whether or not to use digital zoom at the time of photography.

\* On / Off

#### Preview

This sets whether or not to display the captured image on the screen immediately after the image is captured.

\* On / Off

#### **Date Print**

The date of recording can be printed directly on the still images. This function must be activated before the image is captured.  $^{\ast}$  On / Off



Date imprinted here

## Video Menu (Capture)

This menu is for the basic settings to be used when recording video clips.

- 1. Slide the mode switch to [ 📲 ].
- 2. Press the **MENU** button.
  - [Capture] menu is displayed.
- Select the desired [Capture] option item with the ▲ / ▼ buttons, and press the SET button to enter its respective menu.
- Select the desired setting with the ▲ / ▼ buttons, and press the SET button.
- 5. To exit from the menu, press the **MENU** button.

#### Size

This sets the size of the video clip that will be captured.

- \* [VGA] 640 x 480
- \* [**O**\_ VGA ] 320 x 240

#### Quality

This sets the quality (compression rate) at which the video clip is captured.

- \* [ 🖽 ] 🛛 Fine
- \* [ 🖪 ] Standard

#### Color

This sets the color of the video clip that will be captured.

\* Normal / Vivid / Sepia / Monochrome



## Video Menu (Function)

- 1. Slide the mode switch to [ 🛍 ].
- Press the MENU button, and select the [Function] menu with the ► button.
  - [Function] menu is displayed.
- Select the desired [Function] option item with the ▲ / ▼ buttons, and press the SET button to enter its respective menu.
- Select the desired setting with the ▲ / ▼ buttons, and press the SET button.
- 5. To exit from the menu, press the **MENU** button.



#### Audio

This sets whether or not to record audio at the time of video recording.

\* On / Off

#### LCD Bright.

Refer to section in this manual titled "LCD Bright." in Capture Menu (Function) for further details.

#### **Digital Zoom**

Refer to section in this manual titled "Digital Zoom" in Capture Menu (Function) for further details.

### Playback Menu

In the [ ] mode, set which settings are to be used for playback.

- 1. Slide the mode switch to [  $\blacktriangleright$  ].
- 2. Press the **MENU** button.
  - The playback menu is displayed.
- 3. Select the desired option item with the ▲ / ▼ buttons, and press the **SET** button to enter its respective menu.
- Select the desired setting with the ▲ / ▼ buttons, and press the SET button.
- 5. To exit from the menu, press the **MENU** button.

#### **Fix Red Eyes**

Refer to section in this manual titled "Removing Red-eye" for further details.

#### Slide Show

Refer to section in this manual titled "Slideshow Display" for further details.

#### DPOF

Refer to section in this manual titled "DPOF Settings" for further details.

#### Protect

Refer to section in this manual titled "Protecting Images" for further details.

#### LCD Bright.

Refer to section in this manual titled "LCD Bright." in Capture Menu (Function) for further details.

#### Resize

Refer to section in this manual titled "Resizing an Image" for further details.

#### Quality

Changes the quality (compression) of a recorded image. Compresses images down to half of their size or less, overwrites old size images with newly compressed images. It is only possible to reduce the image quality/size, never to increase it.

#### Copy to Card

Allows you to copy your files from the digital still camera's internal memory to an SD/SDHC memory card. Of course, you can only do this if you have an SD/SDHC memory card installed and some files in internal memory.

\* Cancel / Execute



## Setup Menu (In Photography Mode)

Set your camera's operating environment.

- 1. Slide the mode switch to [ 🗖 ] or [ 🛍 ].
- Press the MENU button, and select the [Setup] menu with the ▶ button.
  - [Setup] menu is displayed.
- Select the desired [Setup] option item with the ▲ / ▼ buttons, and press the SET button to enter its respective menu.
- Select the desired setting with the ▲ / ▼ buttons, and press the SET button.
- 5. To exit from the menu, press the **MENU** button.



#### Веер

This sets whether or not to mute the camera sound each time you press the camera button. \* On / Off

#### Fr. No. Reset

This creates a new folder. The captured images are recorded to the newly created folder from number 0001.

\* Cancel / Execute

#### Auto Off

If no operation is performed for a specific period of time, the power to the camera is automatically turned off. This feature is useful to reduce battery wear.

\* 1 Min. / 2 Min. / 3 Min. / Off

#### Date/Time

Refer to section in this manual titled "Setting the Date and Time" for further details.

#### Sys. Reset

This returns all basic settings to the camera's default settings. The time setting will not be reset. \* Cancel / Execute

#### Language

Specify in which language menus and messages are to be displayed on the LCD monitor.

## Setup Menu (In Playback Mode)

- 1. Slide the mode switch to [  $\blacktriangleright$  ].
- Press the MENU button, and select the [Setup] menu with the ► button.
  - [Setup] menu is displayed.
- Select the desired [Setup] option item with the ▲ / ▼ buttons, and press the SET button to enter its respective menu.
- 4. Select the desired setting with the ▲ / ▼ buttons, and press the **SET** button.
- 5. To exit from the menu, press the **MENU** button.



Refer to section in this manual titled "Beep" in Setup Menu (In Photography Mode) for further details.

#### Format

Refer to section in this manual titled "Formatting the SD/SDHC Memory Card or Internal Memory" for further details.

#### Fr. No. Reset

Refer to section in this manual titled "Fr. No. Reset" in Setup Menu (In Photography Mode) for further details. **Media Info.** 

This displays the free capacity of the internal memory or the memory card.

#### System Info.

This displays the firmware version of the camera.

#### Language

Refer to section in this manual titled "Language" in Setup Menu (In Photography Mode) for further details.

#### Video Output

This sets video output system of the video equipment that you are going to connect to the camera. \* NTSC / PAL



# CONNECTING TO A PICTBRIDGE COMPLIANT PRINTER

If a printer that supports PictBridge is available, images can be printed by connecting the digital still camera directly to the PictBridge-compatible printer without using a computer.

#### Connecting the camera to the printer

- 1. Connect one end of the USB cable to the USB terminal of the camera.
- 2. Connect the other end of the USB cable to the USB port on the printer.
- 3. Turn on your camera.
  - The [USB] screen appears.
- 4. Select [Printer] with the  $\blacktriangle$  /  $\bigtriangledown$  buttons, and press the **SET** button.

#### **Printing images**

When the camera is properly connected to a PictBridge compliant printer, the PictBridge menu is displayed on the monitor.

- 1. Select the item you want to configure with the ▲ / ▼ buttons, and press the **SET** button.
  - [Images]: Select whether you want to print specific image or all images. You may also select printing number for specific image.
  - [Date Print]: According to the printer type, select whether you want to print the image with date imprint or not.
    - [Paper Size]: Select the desired paper size according to the printer type.
  - [Layout]: Select the desired printing layout according to the printer type.
  - [Print]: After all settings are configured, select this item to start printing.
- If you select [Images] in the previous step, the figure shown on the right hand side will appear. Select [Select], [All] or [DPOF] with the ▲ / ▼ buttons, and press the SET button.
  - [Select]: Select to print one specific image.
  - [All]: Select to print all images.
  - [DPOF]: Select to print images with DPOF settings.
  - [Exit]: Exit from Images option.



Next Menu

SET:Enter



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- 3. If you select [Select] in the previous step, the figure shown on the right hand side will appear.
  - Select the image that you want to print with the </
  - Select the [Print Num] (up to 99) with the ▲ / ▼ buttons.
  - After selecting the desired image and printing number, press the **SET** button to confirm.
- 4. Select [Exit] with the ▲ / ▼ buttons, and press the SET button.

- 5. Select [Print] with the ▲ / ▼ buttons, and press the **SET** button to start printing.
- 6. The printing starts and the figure shown on the right hand side appears.
  - [COMPLETE] will be displayed temporarily, reminding you that the printing procedure is finished.
  - If an error is detected during the connection (i.e. the printer hardware problem) between camera and printer, [PRINT ERROR] will be displayed.
  - If an error is detected during the communication (i.e. wrong setting on the camera) between camera and printer, [ERROR] will be displayed.



# TRANSFERRING RECORDED IMAGES AND VIDEOS TO YOUR COMPUTER

#### **System Requirements**

Windows	Macintosh
Pentium III 600 MHz or higher	■ PowerPC G3/G4/G5
Windows 2000/XP/Vista	<ul> <li>OS 9.0 or later</li> </ul>
■ 128MB RAM	■ 128MB RAM
128MB hard disk space	128MB hard disk space
CD-ROM drive	CD-ROM drive
Available USB port	Available USB port

## **Downloading Your Files**

- 1. Connect one end of the USB cable to an available USB port on your computer.
- 2. Connect the other end of the USB cable to the USB terminal on the camera.
- 3. Turn on your camera.
- 4. Select [PC] using the  $\blacktriangle$  /  $\blacktriangledown$  buttons and press the **SET** button.
- 5. From the Windows desktop, double click on "My Computer".
- 6. Look for a new "removable disk" icon.
  - This "removable disk" is actually the memory (or memory card) in your camera. Typically, the camera will be assigned drive letter "e" or higher.
- 7. Double click on the removable disk and locate the DCIM folder.
- 8. Double click on the DCIM folder to open it to find more folders.
  - Your recorded images and video clips will be inside these folders.
- 9. Copy & Paste or Drag-N-Drop image and video files to a folder on your computer.

**Mac users:** Double-click the "untitled" or "unlabeled" disk drive icon on your desktop. iPhoto may automatically launch.



# USING THE CAMERA AS A PC CAMERA

Your camera can act as a PC camera, which allows you to videoconference with business associates, or have a real-time conversation with friends or family. To use the camera for videoconferencing, your computer system must include the items as below:

- Microphone
- Sound card
- Speakers or headphones
- Network or Internet connection
- 1. After installing the PC camera driver (included on the CD-ROM) in your Windows operating system, restart your computer.
- 2. Connect one end of the USB cable to the USB terminal of the camera.
- 3. Connect the other end of the USB cable to an available USB port on your computer.
- 4. Turn on your camera.
- 5. Select [PC Camera] with the  $\blacktriangle$  /  $\blacktriangledown$  buttons and press the **SET** button.
- 6. Position the camera steadily on top of your computer monitor or use a tripod.
- 7. Launch the videoconferencing application software.
  - Simply follow the instructions in the application software to start your camera.

	-	This function is not supported by Mac. You are recommended to use MediaOne Gallery SE (included on the CD-ROM) or Windows Netmeeting (Windows Meeting Space on Windows Vista) as a videoconferencing application
NOTE	=	The video resolution for videoconferencing applications is generally 320 x 240. For more information about the operation of videoconference application software, refer to its respective help documentation.

# **EDITING SOFTWARE INSTALLATION**

There are 2 types of software that are included on the CD-ROM:

**MediaOne Gallery SE** - makes it the easiest way to manage and share your digital life with family & friends. The intuitive thumbnail library automatically organizes, updates and sorts files for the most natural way to browse your multimedia collection.

**COOL 360 SE** - combines ease-of-use, power and flexibility to allow even novice digital imaging enthusiasts to move beyond traditional photos into immersive imaging. Its intuitive interface and easy-to-use wizard deliver great-looking panoramas while advanced warping, blending and alignment tools ensure excellent results.

To install software:

- 1. Insert the CD-ROM that came with the camera into your CD-ROM drive. The welcome screen appears.
- Click the respective software name.
   Follow the on-screen instructions to complete the installation.
  - For more information about the operation of the software, refer to its respective help documentation.
    - For Windows 2000/XP/Vista users, please make sure to install and use the software in "Administrator" mode.
  - The software is not supported by Mac.
  - COOL 360 SE is not supported by Windows Vista.

# **CAMERA SPECIFICATIONS**

Item	Description	
Image sensor	1/2.5" CCD sensor (8.0 megapixels)	
	<pre><still image=""></still></pre>	
Image resolution	3264 X 2448, 2816 X 2112, 2272 X 1704, 1600 X 1200, 640 X 480	
	< 1000  cmp > 640  x 480 (25  fms) = 320  x 240 (25  fms)	
LCD monitor	2 7" full color I TPS-TET I CD (230K pixels)	
	32 MB internal memory (approx, 29 MB for image storage)	
Recording media	Supports SD/SDHC memory card (up to 4 GB) (optional)	
File format	JPEG. DCF 1.1. EXIF 2.2. DPOF. AVI	
	4x optical zoom lens	
Lens	Aperture range: 2.7(W) – 5.4(T)	
Lens	Focal length: 4.6mm – 18.4mm (equivalent to 28mm – 112mm on a 35mm camera)	
	Standard:	
	40cm/15.7" to infinity	
Focus range	Macro:	
3	5cm/2.0" to infinity (Wide)	
Obyettan an and		
Snutter speed		
Constativity	4  Mage	
Sensitivity	Manual/ISO 64/100/200/400/800/1600)	
	5x (Capture mode)	
Digital zoom	4x (Playback mode)	
	0.5m/1.6ft - 2.4m/7.9ft (Wide)	
Flash effective range	0.5m/1.6ft - 2.1m/6.9ft (Tele)	
Terminal	DC IN 5V	
	USB 2.0 (high speed) / AV OUT	
Power supply	Rechargeable Lithium-ion battery (3.7V)	
	AC power adapter	
Operating environment	Temperature: 0°C-40°C(32° F to 104°F)	
Dimensione	Humidity: 15-90%(Non-condensing)	
Dimensions	Approx. 94 x 55 x 24mm (without protruding parts)	
Weight	Approx. 132g (without battery and memory card)	

\*Design and specifications are subject to change without notice.

# TROUBLESHOOTING

Refer to the symptoms and solutions listed below before sending the camera for repairs. If the problem persists, contact your local reseller or service center.

#### Power Supply

Symptom	Cause	Solution
The power does not come	The battery in not inserted.	Insert the battery correctly.
on.	The battery is exhausted.	Recharge the battery.
The power cuts out during	The camera was left unattended and	Turn the nower back on
use.	unused, so the auto power off cuts it off.	Turri the power back on.
The battery runs out quickly.	It is being used in extreme low	
	temperature.	
	Many shots are being captured in	
	dark places inside, requiring flash.	
	The battery is not fully charged.	Fully charge the battery and
	The battery is not used for an	discharge it for at least one complete
	extended period of time after	cycle before use to maximize its
	charged.	performance and lifetime.
The battery or camera feels	Long period of continuous use of the	
warm.	camera or the flash.	

### Shooting

Symptom	Cause	Solution
	The battery is running low.	Recharge the battery.
	The power is not on.	Turn the power on.
	The camera is not in shooting mode.	Slide the mode switch to shooting mode.
	The shutter button is not pressed all	Press the shutter button all the
	the way down.	way down.
	The memory card does not have any	Insert a new memory card, or
Even if I press the shutter	free capacity.	delete unwanted files.
button, the camera does	End of memory card life.	Insert a new memory card.
not shoot.	The flash is charging.	Wait until the status LED off.
	The memory card is unrecognized by	Format the memory card in this
	the camera	camera before its first use or when
		it was used other than this camera.
	The auto power off function is activated.	Turn the power on again.
	The memory card is write-protected.	Remove the write-protection.
Images do not appear on	The power is not on.	Turn the power on.
the LCD monitor	LCD monitor is dark	Adjust the brightness of the LCD
		monitor in the menu.
	The lens is dirty.	Wipe clean with a soft, dry cloth
Although it is set to auto		or lens paper.
focus, it does not focus.	The distance to the subject is smaller	Get your subject within the
	than the effective range.	effective focus range.
The flash does not fire.	The flash is set to flash off.	Set the flash to something other
The flash cannot recharge.		than flash off mode.
Even though the flash fired,	The distance to the subject is greater	Get closer to your subject and
the image is dark.	than flash effective range.	shoot.
	The image is captured in a dark place	Set the flash to something other
The image is dark.	while set to flash off.	than flash off mode.
	It is under-exposed	Set the exposure compensation
		to a larger value.
The image is too bright.	It is over-expected	Set the exposure compensation
		to a smaller value.
The image lacks natural color.	The image was captured in	
	conditions that are hard for auto white	Add a white object to the
	balance to adjust to.	composition.

### Playback

Symptom	Cause	Solution
Cannot playback.	It is not set to playback mode.	Slide the mode switch to playback mode.
The contents of memory	You played back a memory card that	Insert a memory card that was
card cannot be played back.	was not formatted by this device.	formatted and stored on by this device.
Files cannot be deleted.	The file is protected.	Cancel protection.
	You played back a memory card that	Insert a memory card that was
	was not formatted by this device.	formatted and stored on by this device.
	The memory card is write-protected.	Remove the write-protection.
Cannot format a memory	The memory card is write-protected.	Remove the write-protection.
card.	End of memory card life.	Insert a new memory card.
The playback image is dark though I used the flash.	The LCD monitor is too dark.	Adjust the brightness of LCD monitor.

#### Other Problems

Symptom	Cause	Solution
Even when the camera's		
buttons are pressed, it	The battery is running low.	Recharge the battery.
does not operate.		
The date and time is wrong.	The correct date and time in not set.	Set the correct date and time.
The date set has	The battery is removed with the power	Set the date and time again
disappeared.	still on.	det me date and time again.

### About connecting to your computer/software

Symptom	Cause	Solution
Cannot download images.	The free space on the hard disk in your computer may be insufficient.	Check whether the hard disk has a space for running Windows, and if the drive for loading image files has a capacity at least that of the memory card inserted in the camera.
	No power supply.	Recharge the battery. Use an AC power adapter. Turn the power on.



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