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.
READ THIS FIRST

Trademark Information

- Microsoft® and Windows® are U.S. registered trademarks of Microsoft Corporation.
- Pentium® is a registered trademark of Intel Corporation.
- Macintosh is a trademark of Apple Computer, Inc.
- SD™ is a trademark.
- Other names and products may be trademarks or registered trademarks of their respective owners.

Product Information

- 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.

Warnings

If foreign objects or water have entered the camera, turn the power off and remove the battery.
Continued use 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.
Continued use 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 purchase.

Use the supplied AC adapter only with the indicated power supply voltage.
Use with any other power supply voltage might cause fire or electric shock.

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 damage.

Keep the battery out of the reach of children.
Swallowing the 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 motorcycle.
This might cause you to fall over or result in traffic accident.
Cautions

Insert the battery paying careful attention to the polarity (+ or –) of the terminals.
Inserting the battery with its polarities inverted might cause fire and injury, or damage to the 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.

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 fluid enters your eyes or comes into contact with your body or clothes, rinse with fresh water. 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.

Do not use the camera in humid, steamy, smoky, or dusty places.
This might cause fire or electric shock.

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.

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.

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.
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 extremely cold environments as low temperatures can shorten the battery life and reduce camera performance.
- When you are using a new rechargeable battery or a rechargeable battery that has not been used for an extended period of time (the battery that passed the expiry date is an exception), it may 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 a long period of continuous use of the camera or the flash. This is normal and not a malfunction.
- The camera may feel warm after a 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 is 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 clean.
- There is a risk of explosion if the battery is replaced by an incorrect type.
- Dispose of used batteries according to the recycle instructions.
- We recommend charging the battery for 8 hours before the camera’s first use.
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 7.0-megapixel CCD, this camera is capable of capturing images with a resolution of up to 3040 x 2280 pixels.

Package Contents

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

Common Product Components:
- Digital Camera
- User's manual
- 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
- Battery charger

Accessories and components may vary by retailer.
GETTING TO KNOW YOUR CAMERA

Front View

1. Anti shake button
2. Shutter button
3. Power button
4. Microphone
5. Mode switch
   - Capture mode
   - Video mode
   - Playback mode
6. Speaker
7. Flash
8. Self-timer LED (AF auxiliary LED)
9. Lens
1. LCD monitor
2. Display button
3. Status LED
4. MENU Menu button
5. SCN Scene button
6. FUNC. Function button
7. ♦ Zoom in button
   ♦ Zoom out button
8. Strap holder
9. SET / Direction button
   ▲ button
   Focus button
   ◄ button
   Flash button
   ◄ button
   Self-timer button
   ◄ button
   Backlight / Exposure compensation button
   SET Set button
10. USB or AV OUT terminal
11. DC IN 5V terminal
12. Battery / Memory card cover
13. ♕ Delete button
14. Tripod socket
Hot-Keys

Function button

There are four functions that have been assigned to the Direction button. These functions can then be set directly by pressing the Direction button without displaying the menu.

1. Press FUNC. button.
2. Toggle the respective button to change the setting.
3. Press the FUNC. button again to return to preview mode.

Anti shake button

The anti-shake function works according to the luminance of the target object. This function uses special image data processing for getting high sensitivity of CCD. High sensitivity can use higher shutter speed compared with normal mode, so it reduces influence of hand shaking. Press the anti-shake button before pressing the shutter button.
**Display button**

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

**Capture mode:**

![Capture mode images]

**Video mode:**

![Video mode images]

**Playback mode:**

![Playback mode images]
**LCD Monitor Display**

**Capture Mode**

1. Mode indication
2. Date and time
3. Flash mode
   - [Blank] Auto Flash
   - [ ] Red-eye Reduction
   - [ ] Forced Flash
   - [ ] Flash Off
4. Battery condition
   - [ ] Full battery power
   - [ ] Medium battery power
   - [ ] Low battery power
   - [ ] No battery power
   * [ ] AC adapter icon (if used)
5. Storage media
   - [ ] Internal memory (no card)
   - [ ] SD/SDHC memory card
6. Voice memo
7. Self-timer icon
   - [ ] 10 sec.
   - [ ] 2 sec.
   - [ ] 10+2 sec.
8. Main focus area
9. Capture mode icon
   - [Blank] Single
   - [ ] Continuous
   - [AEB] Auto Exposure Bracketing
   - [ ] Burst
   - [ ] Series + flash
   - [ ] Pre-Shot
   - [ ] Couple Shot
   - [ ] Album Shot
10. Image quality
    - [ ] Fine
    - [ ] Standard
    - [ ] Economy
11. Image size resolution
    - [7M] 3040 x 2280
    - [5M] 2560 x 1920
    - [3M] 2048 x 1536
    - [1.3M] 1280 x 960
    - [0.3M] 640 x 480

* [Wide 5M] 3040 x 1712 / [Wide 3.7M] 2560 x 1440 is only available when [16:9] is set to [On].

12. Available number of shots
13. Zoom status
14. Shutter speed / Aperture
15. [ ] Exposure compensation
    - [ ] Backlight correction
16. ISO
17. Slow shutter warning
   * Poor lighting conditions. Images will be vulnerable to vibration.
18. Metering
    - [ ] Multi
    - [ ] Spot
    - [ ] Average
19. White Balance
    - [Blank] Auto
    - [ ] Incandescent
    - [ ] Fluorescent 1
    - [ ] Fluorescent 2
    - [ ] Daylight
    - [ ] Cloudy
    - [ ] Manual
20. Focus setting
    - [Blank] Auto Focus
    - [ ] Macro
    - [ ] Infinity
21. Anti Shake
Video mode [  ]
1. Mode icon
2. Date and time
3. Battery condition
4. Storage media
5. Self-timer icon
6. Video quality
7. Video resolution
8. Available recording time/Elapsed time
9. Zoom status
10. White balance icon
11. Focus setting

Playback mode [ ] - Still image playback
1. Mode icon
2. File number
3. Folder number
4. Protect icon
5. Voice memo
6. DPOF icon
7. Storage media

Playback mode [ ] - Video playback
1. Video status bar
2. Elapsed time
3. Mode icon
4. Protect icon
5. File number
6. Folder number
7. Sound off icon (When the button is pressed during video playback)
8. Play mode
9. Storage media
10. Total recorded time
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 (26MB available for image storage), but you can load an SD/SDHC 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.

To prevent valuable data from being accidentally erased from an SD/SDHC memory card, you can slide the write protect 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.
To prevent damaging of an SD/SDHC memory card, be sure to turn off the power when inserting or removing the SD/SDHC memory card. If inserting or removing the SD/SDHC memory card with the power on, the camera will automatically turn off.
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. Insert one end of the AC power adapter into the DC IN 5V terminal of the camera.
2. Insert the other end of the AC power adapter into a wall outlet.
   - The status LED flashes green when charging is started and lights green when charging is completed. The LED lights red when a charging error has occurred.
   - It is recommended that you fully discharge the battery before recharging.
   - Charging time varies according to the ambient temperature and the status of battery.

This camera must be used with the specified battery and AC power adapter for battery charging. Damage caused by the use of an incorrect adapter is not covered under the warranty.

The battery may feel warm after it has been charged or immediately after being used. This is normal and not a malfunction.

When using the camera in cold areas, keep the camera and battery warm by holding them inside your outer clothes.
Initial Settings

Setting the Date and Time

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

- Camera is turned on for the first time.
- 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 [ ], and press the MENU button.
2. Select [Setup 2] with the button.
3. Select [Date/Time] with the / buttons, and press the SET button.
4. Select [Setup] with / 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 date and time is displayed as the format you set.
   - The time is displayed in 24-hour format.
   - After confirming all settings are correct, press the SET button.
     The setting will be stored and the screen will return to the [Setup 2] menu.
5. Select [Format] with / buttons, and press the SET button.
   - Select the date display format you want with / buttons.
   - If your choice is [Off], there is no date/time information displayed on the LCD monitor.
7. To exit from the [Setup 2] menu, press the MENU button.
Choosing the Language
Specify in which language menus and messages are to be displayed on the LCD monitor.

1. Slide the mode switch to [ ], and press the MENU button.
2. Select [Setup 2] menu with the button.
3. Select [Language] with the / buttons and press the SET button.
   ▬ The Language setting screen will be displayed.
4. Select the displayed language with the / buttons and press the SET button.
   ▬ The setting will be stored.

Formatting the 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 [ ], and press the MENU button.
2. Select [Setup 1] menu with button.
3. Select [Format] with the / buttons, then press the SET button.
4. Select [Execute] with the / buttons, and press the SET button.
   ▬ To cancel formatting, select [Cancel] and press the SET button.
CAPTURE MODE

Capturing Images

Your camera is equipped with a 3.0" full color LTPS-TFT LCD monitor to help you compose images, playback recorded images/video clips or adjust menu settings.

1. Press the POWER 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 last set.
   - If the power is turned on in [ ] or [ ] mode, the lens will extend forward and it is ready for shooting. In 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 in [ ] 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.
   - The focus area frame turns blue when the camera is in focus and the exposure is calculated.
   - When the focus or exposure is not suitable, the frame of the focus area turns yellow.
   - If the photographic preview is set to [2 sec.] / [4 sec.], the captured image will be displayed while the image is being recorded onto the SD/SDHC memory card.

① Press down halfway

② Press down fully
**Zoom Function**

Using a combination of 4 times optical zoom and 4.8 times digital zoom permits zoom photography at up to 19.2 times magnification. While the digital zoom can be a useful 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 ▲ / ▼ buttons, and press the **SET** button.
   d. Select [On] with the ▲ / ▼ buttons again, and press the **SET** button. The zoom bar becomes blue. If selecting digital zoom off, zoom bar becomes red.
   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. With the “extended zoom” function, the zoom will stop moving in the place where the image quality deterioration starts.
3. Press the shutter button to capture a “zoomed” image.

![Zoom Setting Diagram]

- Optical zoom 1X to 4X  Digital zoom 1X to 4.8X

- With the “extended zoom” cuts out a necessary size from the image of which it takes a picture by the maximum size for getting clear image quality. This function will only works if the digital zoom is activated. Color of the zoom bar is green at the "extended zoom" area.
- The zoom setting is automatically cancelled by either turning the camera off or the activation of the Auto Off function.
Setting the Scene Mode

By simply selecting one of the following 19 modes, you can capture the image with the most appropriate settings.

1. Press the **SCN** button.

2. Select the desired scene mode with the ◀/▶ buttons, and press the **SET** button.

3. Compose the image and press the shutter button.

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

<table>
<thead>
<tr>
<th>Scene mode</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>![camera]</td>
<td>Capture images without having to set special functions or manual adjustments.</td>
</tr>
<tr>
<td>![setting]</td>
<td>Manually set the camera’s parameters and these settings will be memorized.</td>
</tr>
<tr>
<td>![sport]</td>
<td>Capture fast-moving subjects.</td>
</tr>
<tr>
<td>![portrait]</td>
<td>Capture an image that makes a person stand out against a blurred background.</td>
</tr>
<tr>
<td>![nightportrait]</td>
<td>Capture people with an evening or night scene background. Keep your camera still!</td>
</tr>
<tr>
<td>![night]</td>
<td>Capture dark scenes such as night views. Keep your camera still!</td>
</tr>
<tr>
<td>![candlelight]</td>
<td>Capture images of candlelit scene, without spoiling the ambience. Keep your camera still!</td>
</tr>
<tr>
<td>![fireworks]</td>
<td>Capture fireworks clearly with optimal exposure. Using a tripod is recommended.</td>
</tr>
<tr>
<td>![landscape]</td>
<td>Capture landscape images with bright color.</td>
</tr>
<tr>
<td>![sunrise]</td>
<td>Capture the green scenery background such as forest.</td>
</tr>
<tr>
<td>![sunset]</td>
<td>Capture images of a beautiful sunset shot that vividly captures beautiful red colors.</td>
</tr>
<tr>
<td>![text]</td>
<td>Capture an image that contains black and white subjects like printed documents.</td>
</tr>
<tr>
<td>![blackwhite]</td>
<td>Capture a black &amp; white image.</td>
</tr>
<tr>
<td>![sepia]</td>
<td>Capture a sepia image.</td>
</tr>
<tr>
<td>![splashwater]</td>
<td>Capture images of splashing water.</td>
</tr>
<tr>
<td>![flowwater]</td>
<td>Capture the soft flowing water.</td>
</tr>
<tr>
<td>![pets]</td>
<td>Capture images of your pets. Shoot from the eye level of your pets.</td>
</tr>
<tr>
<td>![panorama]</td>
<td>Create a 360° panoramic images.</td>
</tr>
</tbody>
</table>
Exposure Compensation/Backlight Correction

Images can be captured with the overall scene intentionally made brighter or darker. These settings are used when a suitable brightness (exposure) cannot otherwise be obtained in circumstances where the difference in brightness between the subject and the background (the contrast) is large, or when the subject that you wish to capture is very small within the scene. Exposure can be set in 1/3 EV units.

1. Slide the mode switch to [ ].
2. Press the button.
   - Each press of the button displays the setting in the order of [ ] Backlight Correction and [ ] Exposure Compensation.
3. Set the exposure value with the 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 SET 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

<table>
<thead>
<tr>
<th>+ (positive) compensation</th>
<th>-(negative) compensation</th>
<th>Backlight correction (+1.3 EV, fixed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>* Printed matter with 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.</td>
<td>* People illuminated by a spotlight, in particular, against dark background. * Printed matter with white text on blackish paper. * Weak reflecting bodies such as evergreen trees or darkish leaves</td>
<td>* When the background is bright and the subject is dark. * When subjects (people) have a light source such as the sun to their backs.</td>
</tr>
</tbody>
</table>
Recording a Subject onto an Existing Background Image

Pre-Shot helps you get the background you want, even if you need to ask someone else to record the image for you. Basically, Pre-Shot is a two-step process. Higher resolution and higher quality images provide finer detail but cause the images’ file size to be larger.

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

Step 1: You compose the background you want and press the shutter button, which causes a semi-transparent image of the background to remain on the monitor screen.

Step 2: Ask someone else to record a shot of you against your original background, telling him/her to compose the image by using the semi-transparent monitor screen image as a guide. Camera stores the image produced by step 2 only.

Step 3: Depending on how the image is actually composed in step 2, its background may not be exactly the same as the one you composed in step 1.

Freeze the background on the monitor screen. Record the image, using the background on the monitor screen as a guide. Only the second image is recorded.

1. Slide the mode switch to [ ].
   a. Press the MENU button.
   b. Select [Function] with the ► button.
   c. Select [Capture Mode] with the ▲ / ▼ buttons, and press the SET button.
   d. Select [Pre-Shot] with the ▲ / ▼ buttons, and press the SET button.
   e. Press the MENU button to exit from the menu screen.

2. Compose the background you want on the monitor screen, and then press the shutter button to temporarily record it as a reference image. This operation causes a semi-transparent image of the background to appear on the monitor screen, but the displayed image is not actually saved in camera memory.

3. Now you can stand in front of the background and ask someone else to snap your picture, using the semi-transparent background on the monitor screen as a composition guide.

4. After composing the final image (using the semi-transparent background as a guide), the person with camera should press the shutter button to record. Note that the semi-transparent background image you temporarily record in step 2 is for composition purposes only. The final image contains only what is in front of camera when the shutter button is pressed in step 4.
Combining Shots of Two People into a Single Image

This mode lets you record images of two people and combine them into a single image. This makes it possible for you to include yourself in group images, even when there is no one else around to record the image for you.

1. Slide the mode switch to [ ].
   a. Press the MENU button.
   b. Select [Function] with the \( \uparrow \) button.
   c. Select [Capture Mode] with the \( \Delta / \downarrow \) buttons, and press the SET button.
   d. Select [Couple Shot] with the \( \Delta / \downarrow \) buttons, and press the SET button.
   e. Press the MENU button to exit from the menu screen.
2. Align the focus frame on the screen with the subject you want on the left side of the image.
3. Press the shutter button to record the left side of the image.
4. Next compose the subject you want in the right side of the image, taking care to align the actual background with the semi-transparent image of the background of the first image, which is shown on the screen.
5. When everything is aligned correctly, record the right side of the image.
Recording Shots into Multiple Image Layout

The Album Shot mode enables you to easily record images and combine three shots into a single image.

1. Slide the mode switch to [📸].
   a. Press the MENU button.
   b. Select [Function] with the ▶ button.
   c. Select [Capture Mode] with the ▲ / ▼ buttons, and press the SET button.
   d. Select [Album Shot] with the ▲ / ▼ buttons, and press the SET button.
   e. Press the MENU button to exit from the menu screen.
2. Press the shutter button to capture the first image.
3. Press the shutter button again to capture the second and third images.
   ■ Pressing the SET button during step 2 or 3 will delete the last captured image.
   ■ This shot can only be recorded if there are 3 shots recorded in each of the available frames.

Recording Voice Memos

A voice memo can be recorded once for 30 seconds at still image mode immediately following a still image capture.

1. Slide the mode switch to [📸].
2. Press the MENU button, and select the [Function] menu with the ▶ button.
3. Select [Dub] with the ▲ / ▼ buttons, and press the SET button.
4. Select [On] with the ▲ / ▼ buttons, and press the SET button.
5. Press the MENU button to exit from the menu.
   ■ An [_dropdown> icon is displayed on the screen.
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 [_dropdown> icon is displayed with images that have been recorded with a voice memo.
VIDEO MODE

Recording Video Clips

This mode allows you to record video clips at a resolution of 320 x 240 / 640 x 480 pixels.

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.
   - The zoom function cannot be used during video recording.

   - When recording a video clip, the flash cannot be used.
   - If the write speed of your SD/SDHC memory card is not fast enough for recording video clips in the currently selected quality, a warning icon [ ] will appear, and then the video recording will stop. In this case, select a video quality lower than the current one.

Playing Back Video Clips

You can play back recorded video clips on the camera. You can also play back sound if recorded with the video.

1. Slide the mode switch to [ ].
   - The last image appears on the screen.
2. Select the desired video clip with the / 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.
   - By pressing the shutter button with a movie in pause mode, you can capture a still image from the video.

   - Video clips cannot be displayed rotated or enlarged.
PLAYBACK MODE

Playing Back Still Images

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

1. Slide the mode switch to [ ].
   - The last image appears on the screen.
2. The images can be displayed in forward or reverse sequence with the + / - 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.
   - Pressing the + button enlarges the image.
   - To return to normal magnification, press the - button.

- An [ ] 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.
**Thumbnail Display**

This function allows you to view 9 or 16 thumbnail images on the LCD monitor at the same time, which can let you quickly search for the image that you want.

1. Slide the mode switch to [ ].
   ■ The last image appears on the screen.
2. Press the button.
   ■ The images are displayed in the thumbnail display. If you want to view 16 thumbnail images, press the button again.
   ■ Images that have been selected with the / / / buttons will be indicated by a green frame.
   ■ When there are ten or more images, scroll the screen with the / buttons.
3. Press the / / / buttons to select the image to be displayed at regular size.
4. Press the button.
   ■ The selected image is displayed at its regular size.

**Page Jump Function**

1. Slide the mode switch to [ ].
2. Press the button to enter thumbnail display.
3. Press the button to enter page jump function and the image is indicated by a red frame.
4. For page selection, follow the steps below:
   ■ Pressing the button jumps to the first image.
   ■ Pressing the button jumps to the last image.
   ■ Pressing the button jumps to the previous thumbnail page.
   ■ Pressing the button jumps to the next thumbnail page.
5. Press the button to resume normal thumbnail display.
   ■ To select the image to be displayed at regular size, follow the steps 3-4 in the above section.

![Thumbnail Display](image1.png)

![Page Jump Function](image2.png)

- Only in the 9-thumbnail mode, an [ ], [ ], [ ], [ ] icon may be displayed in a thumbnail.
Attaching Voice Memos

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

1. Slide the mode switch to [ 
2. The last image appears on the screen.
3. Select the image to which you want to attach the voice memo with the ▲ / ▼ buttons.
4. Press the MENU button.
5. Select [Voice Memo] with the ▲ / ▼ buttons, and press the SET button.
7. Press the MENU button to exit from the menu.
8. Press the shutter button.
   ■ [VOICE RECORDING] is displayed on the screen and recording starts.
8. To stop recording a voice memo as it is being recorded, 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.
- If a voice memo has already been recorded (either by dub recording or attaching voice memo afterwards), the voice memo can not be replaced or recorded again.

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 [ 
2. Press the MENU button.
3. Select [Slide Show] and press the SET button.
   ■ The slideshow starts.
4. To stop the slide show during playback, press the SET button.
   ■ The image is displayed on screen when you press the SET button.

- The Auto Off function does not operate during slide show.
- All still images in the folder are automatically played back.
Protecting Images

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

1. Slide the mode switch to [ 
2. Select the image that you want to protect with the 
   buttons.
3. Press the MENU button.
4. Select [Protect] with the ▲/▼ buttons, and press the SET button.
5. Select [Single] or [All] with the ▲/▼ buttons, and press the SET button.
6. 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 on which 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 ▲/▼ buttons, and press the SET button.
3. Select [Cancel Protect] with the ▲/▼ 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 ▲/▼ buttons from the playback menu, and press the SET button.
2. Select [Select] with the ▲/▼ buttons, and press the SET button.
   • The images are displayed in the thumbnail display.
3. Select the image you want to protect with the ▲/▼ buttons, and press the SET button.
   • The protect icon [ ] is displayed with protected images. Selecting a protected image
     and pressing the SET button again will cancel the protection. This procedure is repeated to select multiple images.
4. Press the SET button.
   • Protection and cancellation of 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.
Changing Camera Start Logo Image

You can specify the start logo image for camera. You can select the new start logo image from among the captured still images.

1. Slide the mode switch to [ ].
2. Select the image that you want to be a new start up screen with the ◀ / ▶ buttons.
3. Press the MENU button.
4. Select [Setup 1] with the ▶ button.
5. Select [Start Logo] with the ▲ / ▼ buttons, and press the SET button.
6. Select [User Image] with the ▲ / ▼ buttons, and press the SET button.
7. Select [Execute] with the ▲ / ▼ buttons, and press the SET button.

- User selected image is saved in the special area of the internal memory. In case of formatting the internal memory, the user selected start logo image will not be lost.
- "NO IMAGE" message is displayed when "User Image" is selected and no images are stored in the SD/SDHC memory card or internal memory.
- If the image recorded voice memo is selected to be the start logo image, the voice memo can only be played back in the playback mode.
- The capacity for saving user image is only one. The previous start logo image will not be recovered if you select another one as a new start logo image.

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 [ ].
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 of the TV set.
4. Turn on the TV and the camera.
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.
Resizing an Image

Resizes a previously saved image. Resizing replaces the original image with the changed image. Only resizing to a smaller size is available.

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 [ ].
2. Select the image that you want to resize with the / buttons.
3. Press the MENU button.
4. 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 not possible to resize into a different aspect ratio (i.e. [13M] cannot be resized to [Wide 3.7M]).

Compressing an Image

Changes the quality (compression) of a recorded image. Compresses images down to half of their size or more, overwrites an old size image with a newly compressed image. Only quality changing to the lower quality level is available.

The following images cannot be resized:
- (Economy) quality images
- Images captured with another camera
- Protected images
- Video clips
- Images cannot be changed quality when the SD/SDHC memory card is write-protected

1. Slide the mode switch to [ ].
2. Select the image that you want to change its quality.
3. Press the MENU button.
4. Select [Quality Change] with the / buttons, and press the SET button.
5. Select the compression that you want to change with the / buttons, and press the SET button.
   - To quit compression, press the MENU button.
   - When compression 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.
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 [ ].
2. Select the image that you want to set DPOF with the / buttons.
3. Press the MENU button.
4. Select [DPOF] with the / buttons, and press the SET button.
   ■ The DPOF setting screen is displayed.
5. 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.
6. Select [Print Num] with the / buttons, and press the SET button.
   ■ This displays the number of prints setting screen.
7. Set the number of prints with the / buttons, and press the SET button.
   ■ You can set up to 9 prints for each image.
8. Select [Date Print] with the / buttons, and press the SET button.
   ■ The date setting screen appears.
9. 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 / 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.
Erasing Images

Erasing in 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 [ ] or [ ].
2. Press the button.
   - The last image and quick delete menu appear on the screen.
4. Press the SET button to confirm the deletion.
   - To not delete, select [Cancel], and press the SET button.
Erasing in Playback Mode

Erasing single image / Erasing all images

1. Slide the mode switch to [ ].
   - The last image will be displayed on the screen.
2. Select the image you want to erase with the / 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. To delete single file with voice memo, select [Delete Voice Memo] or [Delete Single File] with the / buttons, and press the SET button.
   - [Delete Voice Memo]: Erases only the recorded voice memo on the selected image.
   - [Delete Single File]: Erases the selected image.
6. Select [Execute] with the / buttons, and press the SET button.
   - To not erase, select [Cancel], and press the SET button.

Erasing selected images

This erases a number of selected images.

1. Slide the mode switch to [ ].
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.
4. Select the image you want to erase with the / buttons, and press the button.
   - The [ ] icon will be displayed. One more press of the button will cancel the operation.
   - Repeat this procedure and select all the images that you want to erase.
5. 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.
MENU OPTIONS

Capture Menu

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, and select the [Capture]/ [Function]/ [AE/AWB/AF] menu with the ◀ / ▶ button. (AE/AWB/AF] menu is only available on [User Setting] and [Panorama] modes.)
3. Select the desired 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.

Size

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

* [7M] 3040 x 2280
* [5M] 2560 x 1920
* [3M] 2048 x 1536
* [1.3M] 1280 x 960
* [0.3M] 640 x 480
* [Wide 5M] 3040 x 1712
* [Wide 3.7M] 2560 x 1440

- [Wide 5M] and [Wide 3.7M] are only available when [16:9] is set to [On].

Quality

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

* [ ]Fine
* [ ]Standard
* [ ]Economy

Sharpness

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

* Hard / Normal / Soft

Contrast

This sets the difference between the bright and dark portions of the images that will be captured.

* Hard / Normal / Soft

Color

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

* Standard / Vivid / Sepia / Monochrome / Red / Green / Blue / Yellow / Purple / Orange / Pink / Cyan
16:9
This sets the aspect ratio of the recorded image to 16:9.
* On / Off

Capture Mode
This sets the recording method at the time of capturing images.
* [Blank] Single: Captures one image at a time.
* [ ] Continuous: Permits continuous capture of up to 3 images.
* [AEB] AEB: Permits 3 consecutive images in the order of standard exposure, underexposure and overexposure compensation.
* [ ] Burst: Permits continuous photography while pressing holding the shutter button. As long as you hold the shutter button pressed, images are captured until the memory capacity is exhausted.
* [ ] Series + flash: Permits continuous capture of up to 3 images with flash.
* [ ] Pre-Shot: Pre-shot helps you get the background you want, even if you need to ask someone else to record the image for you. Basically, Pre-shot is a two-step process.
* [ ] Couple Shot: This mode lets you record images of two people and combine them into a single image. This makes it possible for you to include yourself in group images, even when there is no one else around to record the image for you.
* [ ] Album Shot: Creates an album-like layout to combine 3 shots into a single image.

- In [Continuous], [AEB], [Burst], [Series + flash], [Pre-Shot], [Couple Shot] and [Album Shot] capture mode, the [Dub] is automatically fixed at [Off].
- In [Album Shot], the image size is automatically fixed at [7M] 3040 x 2280.

Dub
Refer to section in this manual titled "Recording Voice Memos" for further details.
* On / Off

- If you set [Dub] to [On] at "preview off", the camera automatically change the [Preview] setting from [Off] to [2 sec.].

LCD Bright.
Select a brightness level for the LCD monitor.
The LCD becomes brighter with the ▲ button and darker with the ▼ 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

- When [Digital Zoom] is set to [On], the zoom bar becomes blue. If selecting digital zoom off, zoom bar becomes red.
Preview
This sets the preview interval when displaying the captured image on the screen immediately after the image is captured.
* 2 sec. / 4 sec. / 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.
* On / Off

Beep
This sets whether or not to mute the camera’s buttons.
* On / Off

White Balance
This sets the white balance for a variety of lighting conditions and permits images to be captured that approach the conditions that are seen by the human eye.
* [ Blank ] Auto
* [ ] Incandescent
* [ ] Fluorescent 1
* [ ] Fluorescent 2
* [ ] Daylight
* [ ] Cloudy
* [ ] 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 select [Execute] determine the subject (such as a white paper) that will be used to set the white balance.
* 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 / 100 / 200 / 400 / 800 / 1600

Metering
This sets the metering method for calculating the exposure.
* [ ] Multi: The entire area of the screen is measured, and the exposure is calculated.
* [ ] Spot: A very small portion of the center of the screen is measured, and the exposure is calculated.
* [ ] Average: Averages the light metered from the entire frame, but gives greater weight to the subject matter at the center.

Focus Area
This sets the focusing area.
* Multi: The function of auto focus finds the best proper position from 9 blocks of focus area.
* Center: The function of auto focus adjusts focus at the center of image.

Real Time AF
This sets the real time focus function at image during the preview mode.
* On/Off

Flash Offset
This sets the flash strength. The flash power becomes strong when selecting “+” values. The flash power becomes soft when selecting “-” values.
* +2 / +1 / 0 / -1 / -2
**Video Menu**

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, and select the [Capture]/[Function]/[AE/AWB/AF] menu with the ▲ / ▼ button.
3. Select the desired 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.

**Size**
This sets the size of the video clip that will be captured.
- [VGA] 640 x 480
- [QVGA] 320 x 240

**Quality**
This sets the quality (compression) at which the video clip is captured.
- [ ] Fine
- [ ] Standard

**Contrast**
This sets the difference between the bright and dark portions of the video clip that will be captured.
- * Hard / Normal / Soft

**Color**
This sets the color of the video clip that will be captured.
- Standard / Vivid / Sepia / Monochrome / Red / Green / Blue / Yellow / Purple / Orange / Pink / Cyan

**LCD Bright.**
Refer to section in this manual titled “LCD Bright.” in Capture Menu for further details.

**Digital Zoom**
Refer to section in this manual titled “Digital Zoom” in Capture Menu for further details.

**Beep**
Refer to section in this manual titled “Beep” in Capture Menu for further details.

**White Balance**
Refer to section in this manual titled “White Balance” in Capture Menu for further details.

**Manual WB**
Refer to section in this manual titled “Manual WB” in Capture Menu for further details.

**Focus Area**
Refer to section in this manual titled “Focus Area” in Capture Menu for further details.

**Real time AF**
Refer to section in this manual titled “Real Time AF” in Capture Menu for further details.
Playback Menu

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

1. Slide the mode switch to [ ].
2. Press the MENU button.
3. Select the desired 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.

Slide Show
Refer to section in this manual titled “Slideshows 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.

Voice Memo
Refer to section in this manual titled “Attaching Voice Memos” for further details.

Resize
Refer to section in this manual titled “Resizing an Image” for further details.

Quality Change
Refer to section in this manual titled “Compressing an Image” for further details.
Setup Menu

Set your camera’s operating environment.

1. Slide the mode switch to [ ].
2. Press the MENU button, and select the [Setup 1]/ [Setup 2] menu with the ▲ / ▼ button.
3. Select the desired 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.

LCD Bright.
Refer to section in this manual titled “LCD Bright.” in Capture Menu for further details.

Copy
Allows you to copy your files from the camera’s internal memory to an SD/SDHC memory card. Of course, you can only do this if you have a memory card installed and some files in internal memory.
* Cancel / Execute

Fr. No. Reset
This creates a new folder. The captured images are recorded to the newly created folder from number 0001.
* Cancel / Execute

Format
Refer to section in this manual titled “Formatting the Memory Card or Internal Memory” for further details.

Beep
Refer to section in this manual titled “Beep” in Capture Menu for further details.

Start Logo
Refer to section in this manual titled “Changing Camera Start Logo Image” for further details.

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 for reducing battery usage.
* 1 min. / 3 min. / 5 min.
**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**
Refer to section in this manual titled “Choosing the Language” for further details.

**Video Output**
This sets your camera to match the system of the equipment that you are going to connect to the camera.
* PAL/NTSC

**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.
TRANSFERRING FILES TO YOUR COMPUTER

System Requirement

<table>
<thead>
<tr>
<th>Windows</th>
<th>Macintosh</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pentium III 600 MHz or higher</td>
<td>PowerPC G3/G4/G5</td>
</tr>
<tr>
<td>Windows 2000/XP/Vista</td>
<td>OS 9.0 or later</td>
</tr>
<tr>
<td>128MB RAM</td>
<td>128MB RAM</td>
</tr>
<tr>
<td>128MB hard disk space</td>
<td>128MB hard disk space</td>
</tr>
<tr>
<td>CD-ROM drive</td>
<td>CD-ROM drive</td>
</tr>
<tr>
<td>Available USB port</td>
<td>Available USB port</td>
</tr>
</tbody>
</table>

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 ▲ / ▼ buttons and press the SET button.
5. From the Windows desktop, double click on “My Computer”.
   - 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 our desktop. iPhoto may automatically launch.

- Formatting the internal memory or SD/SDHC memory card by computer (via USB connection) as NTFS file system, the stored data will be automatically deleted by the camera.
- Do not format the internal memory or SD/SDHC memory card as NTFS file system.
EDITING SOFTWARE INSTALLATION

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

**Ulead® Photo Explorer** - lets you spend more time enjoying photos, music and videos and less time finding them. It is the all-in-one solution for owners of digital cameras, camcorders, scanners or anyone who wants to make it easier to keep track of their media.

**Ulead® Photo Express** - makes it easy to edit and share digital photos and create fun photo projects. Edit and enhance images, browse your photo collection and express your creativity with stunning special effects and creative photo projects.

**Ulead® COOL 360™** - 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.
2. 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 users, please make sure to install and use the software in "Administrator" mode.
- The software is not supported by Mac.
- The software is not supported by Windows Vista.
### SPECIFICATIONS

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Image sensor</td>
<td>1/2.5&quot; CCD sensor (7.0 megapixels)</td>
</tr>
</tbody>
</table>
| Image resolution      | *Still image* 3040 x 2280, 2560 x 1920, 2048 x 1536, 1280 x 960, 640 x 480, 3040 x 1712, 2560 x 1440  
                          *Video clip* 640 x 480 (30/15 fps), 320 x 240 (30/15 fps)                                                                                     |
| LCD monitor           | 3.0" full color LTPS-TFT LCD (230K pixels)                                                                                                    |
| Recording media       | 32MB internal memory (26MB available for image storage) Supports SD/SDHC memory card (up to 4GB) (optional)                                      |
| File format           | JPEG, DCF 1.1, EXIF 2.2, DPOF, Motion JPEG                                                                                                   |
| Lens                  | 4x optical zoom lens  
                          Aperture range: 2.8(W) - 5.6(T)  
                          Focal length: 4.6mm - 18.4mm (equivalent to 28mm - 112mm on a 35mm camera)                                                               |
| Focus Range           | Standard  
                          Wide: 0.3m to infinity  
                          Tele: 0.5m to infinity  
                          Macro  
                          Wide: 0.05m to 0.5m  
                          Tele: 0.35m to 1.0m                                                                                                                        |
| Shutter speed         | 1 - 1/1500 sec.                                                                                                                                |
| Digital zoom          | 4.8x (Capture mode)  
                          2x, 4x & 8x (Playback mode)                                                                                                                   |
| Flash effective range | 0.5m - 2.7m  
                          0.5m - 2.0m                                                                                                                                     |
| Terminal              | DC IN 5V  
                          USB 2.0 (High speed) / AV OUT                                                                                                                  |
| Power supply          | Rechargeable Lithium-ion battery (3.7V)  
                          AC power adapter (5V)                                                                                                                        |
| Dimensions            | Approx. 94.5 x 55 x 23.1mm (without protruding parts)                                                                                         |
| Weight                | Approx. 124g (without battery and memory card)                                                                                               |

* Design and specifications are subject to change without notice.*
## APPENDIX

### Possible Number of Shots

#### 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.

<table>
<thead>
<tr>
<th>Size</th>
<th>Quality</th>
<th>Internal Memory</th>
<th>SD/SDHC memory card capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>32MB</td>
</tr>
<tr>
<td><strong>7M</strong></td>
<td>Fine</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>3040 x 2280</td>
<td>Standard</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Economy</td>
<td>14</td>
<td>16</td>
</tr>
<tr>
<td><strong>5M</strong></td>
<td>Fine</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>2560 x 1920</td>
<td>Standard</td>
<td>13</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>Economy</td>
<td>19</td>
<td>21</td>
</tr>
<tr>
<td><strong>3M</strong></td>
<td>Fine</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>2048 x 1536</td>
<td>Standard</td>
<td>17</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>Economy</td>
<td>24</td>
<td>27</td>
</tr>
<tr>
<td><strong>1.3M</strong></td>
<td>Fine</td>
<td>19</td>
<td>21</td>
</tr>
<tr>
<td>1280 x 960</td>
<td>Standard</td>
<td>33</td>
<td>37</td>
</tr>
<tr>
<td></td>
<td>Economy</td>
<td>49</td>
<td>55</td>
</tr>
<tr>
<td><strong>0.3M</strong></td>
<td>Fine</td>
<td>62</td>
<td>70</td>
</tr>
<tr>
<td>640 x 480</td>
<td>Standard</td>
<td>106</td>
<td>118</td>
</tr>
<tr>
<td></td>
<td>Economy</td>
<td>154</td>
<td>172</td>
</tr>
<tr>
<td><strong>Wide 5M</strong></td>
<td>Fine</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>3040 x 1712</td>
<td>Standard</td>
<td>11</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>Economy</td>
<td>17</td>
<td>19</td>
</tr>
<tr>
<td><strong>Wide 3.7M</strong></td>
<td>Fine</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>2560 x 1440</td>
<td>Standard</td>
<td>16</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>Economy</td>
<td>23</td>
<td>26</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Size</th>
<th>Quality</th>
<th>Internal Memory</th>
<th>SD/SDHC memory card capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>32MB</td>
</tr>
<tr>
<td><strong>VGA</strong></td>
<td>Fine</td>
<td>0:28</td>
<td>0:31</td>
</tr>
<tr>
<td>640 x 480</td>
<td>Standard</td>
<td>0:39</td>
<td>0:43</td>
</tr>
<tr>
<td><strong>QVGA</strong></td>
<td>Fine</td>
<td>0:47</td>
<td>0:53</td>
</tr>
</tbody>
</table>

* We recommend a memory card of at least 10MB/Sec write speed to prevent auto stop or unexpected results. If you experience an error using a slower SD/SDHC memory card, you can set your camera’s video recording to QVGA (320 x 240) and standard quality.
**Flash Setting**

The available flash settings in different photography modes:

<table>
<thead>
<tr>
<th>Photography Modes</th>
<th>Auto Flash</th>
<th>🏛️</th>
<th>🌅</th>
<th>🌒</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Scene Mode</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Auto</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>User Setting</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Sport</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>O</td>
</tr>
<tr>
<td>Portrait</td>
<td>X</td>
<td>O</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Night Portrait</td>
<td>X</td>
<td>O</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Night</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>O</td>
</tr>
<tr>
<td>Candlelight</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>O</td>
</tr>
<tr>
<td>Firework</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>O</td>
</tr>
<tr>
<td>Landscape</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>O</td>
</tr>
<tr>
<td>Natural Green</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>O</td>
</tr>
<tr>
<td>Sunrise</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>O</td>
</tr>
<tr>
<td>Sunset</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>O</td>
</tr>
<tr>
<td>Text</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>O</td>
</tr>
<tr>
<td>Black &amp; White</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Sepia</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Splash Water</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Flowing Water</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>O</td>
</tr>
<tr>
<td>Pets</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Panorama</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td><strong>Capture Mode</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Continuous</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>O</td>
</tr>
<tr>
<td>AEB</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>O</td>
</tr>
<tr>
<td>Burst</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Series + flash</td>
<td>X</td>
<td>X</td>
<td>O</td>
<td>X</td>
</tr>
<tr>
<td>Pre-Shot</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Couple Shot</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Album Shot</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td><strong>Focus Mode</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Auto focus</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Macro</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>O</td>
</tr>
<tr>
<td>Infinity</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>O</td>
</tr>
</tbody>
</table>

* This table is for reference only and varies according to different combination of photography modes.
* O: Available X: Unavailable
# 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.

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Cause</th>
<th>Solutions / Corrective Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>The power does not come on.</td>
<td>The battery is not inserted.</td>
<td>Insert the battery correctly.</td>
</tr>
<tr>
<td></td>
<td>The battery is exhausted.</td>
<td>Recharge the battery.</td>
</tr>
<tr>
<td>The battery runs out quickly.</td>
<td>The battery is not fully charged.</td>
<td>Fully charge the battery and discharge it for at least one complete cycle before use to maximize its performance and lifetime.</td>
</tr>
<tr>
<td>The battery or camera feels warm.</td>
<td>Long period of continuous use of the camera or the flash.</td>
<td></td>
</tr>
<tr>
<td>Even if I press the shutter button, the camera does not shoot.</td>
<td>The shutter button is not pressed all the way down.</td>
<td>Press the shutter button all the way down.</td>
</tr>
<tr>
<td></td>
<td>The memory card does not have any free capacity.</td>
<td>Insert a new memory card, or delete unwanted files.</td>
</tr>
<tr>
<td></td>
<td>The flash is charging.</td>
<td>Wait until the status LED is off.</td>
</tr>
<tr>
<td></td>
<td>The memory card is write-protected.</td>
<td>Remove the write-protection.</td>
</tr>
<tr>
<td>Images do not appear on the LCD monitor.</td>
<td>LCD monitor is dark.</td>
<td>Adjust the brightness of the LCD monitor in the menu.</td>
</tr>
<tr>
<td>Although it is set to auto focus, it does not focus.</td>
<td>The lens is dirty.</td>
<td>Wipe clean with a soft, dry cloth or lens paper.</td>
</tr>
<tr>
<td></td>
<td>The distance to the subject is smaller than the effective range.</td>
<td>Get your subject within the effective focus range.</td>
</tr>
<tr>
<td>The contents of memory card cannot be played back.</td>
<td>You played back a memory card that was not formatted by this device.</td>
<td>Insert a memory card that was formatted and stored on by this device.</td>
</tr>
<tr>
<td>Files cannot be deleted.</td>
<td>The file is protected.</td>
<td>Cancel protection.</td>
</tr>
<tr>
<td></td>
<td>The memory card is write-protected.</td>
<td>Remove the write-protection.</td>
</tr>
<tr>
<td>Even when the camera’s buttons are pressed, it does not operate.</td>
<td>The battery is running low.</td>
<td>Recharge the battery.</td>
</tr>
<tr>
<td>The date and time is wrong.</td>
<td>The correct date and time is not set.</td>
<td>Set the correct date and time.</td>
</tr>
<tr>
<td>Cannot download images.</td>
<td>The free space on the hard disk in your computer may be insufficient.</td>
<td>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.</td>
</tr>
<tr>
<td></td>
<td>No power supply.</td>
<td>Use an AC power adapter.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Recharge the battery.</td>
</tr>
</tbody>
</table>
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 your camera.
2. Connect the other end of the USB cable to the USB port on the printer.
3. Turn on your camera.
4. The [USB] screen is displayed. Select [PRINTER] with the ▲ / ▼ 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. You can select [Default], [L], [2L], [Postcard], [8”*10”] or [A4].
   - [Layout]: Select the desired printing layout according to the printer type. You can select [Default], [1 up], [2 up], [4 up], [Borderless] or [Print Index].
   - [Print]: After all settings are configured, select this item to start printing.
2. If you select [Images] in the previous step, the figure shown on the right hand side will appear. Select [Single] or [All] with the ▲ / ▼ buttons, and press the SET button.
   - [Single]: Select to print one specific image.
   - [All]: Select to print all images.
   - [Exit]: Exit from Images option.
3. If you select [Single] in the previous step, the figure shown on the right hand side will appear.
   - Select the image that you want to print with the ◀ / ▶ buttons.
   - 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.
   - The [Complete] will be displayed temporarily, reminding you that the printing procedure is finished.
   - If a print error is detected, the [Print Error] will be displayed.

- The image printing may be failed if the power to the camera is cut off.
- We recommend that you use the AC power adapter when connecting the camera to the printer.
A. Information on Disposal for Users (private households)

1. In the European Union
Attention: If you want to dispose of this equipment, please do not use the ordinary dust bin!
Used electrical and electronic equipment must be treated separately and in accordance with legislation that requires proper treatment, recovery and recycling of used electrical and electronic equipment.
Following the implementation by member states, private households within the EU states may return their used electrical and electronic equipment to designated collection facilities free of charge*. In some countries* your local dealer may also take back your old product free of charge if you purchase a similar new one.
*) Please contact your local authority for further details.
If your used electrical or electronic equipment has batteries or accumulators, please dispose of these separately beforehand according to local requirements.
By disposing of this product correctly you will help ensure that the waste undergoes the necessary treatment, recovery and recycling and thus prevent potential negative effects on the environment and human health which could otherwise arise due to inappropriate waste handling.

2. In other Countries outside the EU
If you wish to discard this product, please contact your local authorities and ask for the correct method of disposal.
For Switzerland: Used electrical or electronic equipment can be returned free of charge to the dealer, even if you don’t purchase a new product. Further collection facilities are listed on the homepage of www.swico.ch or www.sens.ch.

B. Information on Disposal for Business Users

1. In the European Union
If the product is used for business purposes and you want to discard it: Please contact your local dealer who will inform you about the take-back of the product. You might be charged for the costs arising from take-back and recycling. Small products (and small amounts) might be taken back by your local collection facilities.
For Spain: Please contact the established collection system or your local authority for take-back of your used products.

2. In other Countries outside the EU
If you wish to discard of this product, please contact your local authorities and ask for the correct method of disposal.