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 Inc.
- SD™ is a trademark.
- SDHC™ 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.

*Please use battery with complete external seals.*
Do not use battery from which the seals have been damaged or removed. This may cause leakage, explosion, or injury.
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 and store it after no battery power is left. Stored for a long time in a fully charged condition, 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 battery according to the recycle instructions.
- Charge the rechargeable battery fully before using for the first time.
- To prevent short-circuiting or fire, keep the battery away from other metal objects when carrying or storing.

This symbol mark [crossed-out wheeled bin] indicates separate collection of waste batteries in the EU countries. The batteries provided with this product shall not be treated as household waste. Please use the return and collection systems available in your country for the disposal of the waste batteries.

If a chemical symbol is printed beneath the symbol mark, this chemical symbol means that the batteries contains a heavy metal at a certain concentration. It is indicated as follows:

Hg: mercury, Cd: cadmium, Pb: lead.
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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 14.0-megapixel CCD, this camera is capable of capturing images with a resolution of up to 4288 x 3216 pixels.

Package Contents

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

Common Product Components:
- Digital Camera
- Instruction manual
- Software CD-ROM
- USB cable
- AV cable
- Camera strap
- Camera pouch
- Rechargeable lithium-ion battery
- AC/DC adapter
GETTING TO KNOW YOUR CAMERA

Front View

<table>
<thead>
<tr>
<th>Item</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Shutter button</td>
</tr>
<tr>
<td>2.</td>
<td>ON/OFF Power button</td>
</tr>
<tr>
<td>3.</td>
<td>Flash</td>
</tr>
<tr>
<td>4.</td>
<td>Self-timer LED</td>
</tr>
<tr>
<td>5.</td>
<td>Microphone</td>
</tr>
<tr>
<td>6.</td>
<td>Speaker</td>
</tr>
<tr>
<td>7.</td>
<td>Lens</td>
</tr>
</tbody>
</table>

Rear View

<table>
<thead>
<tr>
<th>Item</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.</td>
<td>LCD monitor</td>
</tr>
<tr>
<td>B.</td>
<td>Status LED</td>
</tr>
<tr>
<td>C.</td>
<td>Strap holder</td>
</tr>
<tr>
<td>D.</td>
<td>USB and AV OUT terminal</td>
</tr>
<tr>
<td>E.</td>
<td>Battery / Memory card cover</td>
</tr>
<tr>
<td>F.</td>
<td>Tripod socket</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Item</th>
<th>Capture Mode</th>
<th>Video Mode</th>
<th>Playback Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Shutter button</td>
<td>Record button</td>
<td>Still image: to capture mode Video clip: to capture mode</td>
</tr>
<tr>
<td>3.</td>
<td>Switches to: Video mode &gt; Capture mode</td>
<td>Switches to: Capture mode &gt; Video mode</td>
<td>Still image: to capture mode Video clip: to capture mode</td>
</tr>
<tr>
<td>4.</td>
<td>Focus</td>
<td>Focus</td>
<td>Next 10th image</td>
</tr>
<tr>
<td>5.</td>
<td>Compensation π – π π</td>
<td>–</td>
<td>Previous Image</td>
</tr>
<tr>
<td>6.</td>
<td>Flash</td>
<td>–</td>
<td>Next Image</td>
</tr>
<tr>
<td>7.</td>
<td>If any scene mode is set: switches to scene mode selection screen</td>
<td>–</td>
<td>Still image: to display image Records voice memo (if &quot;Voice Memo&quot; is &quot;Record&quot;) Video clip: to play video clip</td>
</tr>
<tr>
<td>8.</td>
<td>Self-timer</td>
<td>Self-timer</td>
<td>Previous 10th image</td>
</tr>
<tr>
<td>9.</td>
<td>Playback mode</td>
<td>Playback mode</td>
<td>Still image: to capture mode Video clip: to capture mode</td>
</tr>
<tr>
<td>10.</td>
<td>Capture menu</td>
<td>Video menu</td>
<td>Playback menu</td>
</tr>
</tbody>
</table>
**LCD Monitor Display**

**Capture mode**

1. Zoom status
2. Available number of shots
3. Storage media
   - Internal memory (no card)
   - SD/SDHC memory card
4. Battery condition
   - Full battery power
   - Medium battery power
   - Low battery power
   - No battery power
5. Focus setting
   - Auto
   - AF Tracking
   - Face Detect
   - Macro
   - Infinity
6. Flash mode
   - Auto
   - Flash On
   - Flash Off
   - Red-eye
   - Slow Sync
   - Pre-flash
7. Exposure compensation
   (It cannot be used in below modes: Smile Detection, Av, Tv, Portrait Man & Portrait Lady.)
   (It can only be used in Portrait Man and Portrait Lady.)
8. Self-timer & Self-portrait icon
   - Off
   - Self-portrait
   - 2 sec.
   - 10 sec.
   - 10+2 sec.
9. Histogram
10. Image size resolution
    - 4288 x 3216
    - 3264 x 2448
    - 2304 x 1728
    - 1600 x 1200
    - 640 x 480
11. Set key: SCN hint icon
12. Main focus area
13. Date and time
14. Quick shot
15. Capture mode icon
   - Single
   - Continuous
   - AEB (Auto Exposure Bracketing)
   - Burst
   - Cont.flash
   - Pre-shot
   - Coupl.shot
   - Burst 30fps
16. White balance
   - Auto
   - Incand.
   - Fluoresc.1
   - Fluoresc.2
   - Daylight
   - Cloudy
   - Manual WB
17. Image quality
   - Fine
   - Standard
   - Economy
18. ISO
    - Auto
    - ISO 100
    - ISO 200
    - ISO 400
    - ISO 800
    - ISO 1600
19. Slow shutter warning
20. Mode icon / Scene mode
   - Program AE
   - Auto
   - Tv
   - Av
   - Intelligent Scene
   - Smile Detection
   - Anti-shake
   - Panorama PanCapture
   - Skin Soften
   - De-blemish
   - Portrait Man
   - Portrait Lady
   - Landscape
   - Sports
   - Night Portrait
   - Night Scene
   - Candlelight
   - Fireworks
   - Text
   - Sunset
   - Sunrise
   - Splash Water
   - Flow Water
   - Snow
   - Beach
   - Pets
   - Natural Green
Video mode
1. Zoom status
2. Storage media
3. Battery condition
4. Focus setting
5. Flash off
6. Self-timer icon
7. Video resolution
8. Elapsed time/Available recording time
9. Main focus area
10. Date and time
11. Video quality
12. Audio off
13. Mode icon

Playback mode - Still image playback
1. Voice memo
2. DPOF icon
3. Protect icon
4. Folder / File number
5. Storage media
6. Battery condition
7. Image size resolution
8. Set key: Play hint icon
9. Date and time
10. Histogram
11. Aperture value/Shutter speed
12. Exposure value
13. Image quality
14. ISO
15. Mode icon

Playback mode - Video playback
1. Protect icon
2. Folder / File number
3. Storage media
4. Battery condition
5. Volume mode
6. Total recorded time
7. Video status bar
8. Video condition icon
9. Elapsed time
10. Set key: Play/Pause hint icon
11. Down key: Stop hint icon
12. Mode icon
**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. (label side back)
4. Insert an SD/SDHC memory card (Optional).
   - The camera has 32MB internal memory (10MB 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 battery is not fully charged at the time of purchase. Fully charge the battery and discharge it for at least one complete cycle before use to maximize its performance and lifetime.

1. Connect camera to AC/DC adapter with USB cable.
2. Insert the plug into a wall outlet.

<table>
<thead>
<tr>
<th>Status LED</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orange (blinks slowly)</td>
<td>Charging normally</td>
</tr>
<tr>
<td>Orange</td>
<td>Charging finished</td>
</tr>
<tr>
<td>Orange (blinks quickly)</td>
<td>Error</td>
</tr>
</tbody>
</table>

---

**Status LED**

- Orange (blinks slowly) - Charging normally
- Orange - Charging finished
- Orange (blinks quickly) - Error

---

The included AC/DC adapter differs depending on the region where you purchased the camera.

User can also charge the battery by connecting camera to computer with USB cable.

Charging time varies according to the ambient temperature and the status of battery.


**Initial Settings**

The language & date/time needs to be set if and 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.

1. Press the **ON/OFF** button to turn the power on.
2. Press any button to enter language setup. Select the displayed language with the ▲ / ▼ buttons and press the **SET** button.
3. Select the date format with the ▲ / ▼ buttons, and press the **SET** button.
4. Select the item's field with the ▲ / ▼ buttons and adjust the value for the date and time with the ▲ / ▼ buttons.
5. After confirming all settings are correct, press the **SET** button.
   - Half press the shutter button or press the **MENU** button will enter capture mode without saving the settings.

**Setting the Date and 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. Press the **MODE** button, and set the camera mode to [ ] or [ ]; or press the button.
2. Press the **MENU** button.
3. Select the [Setup] at the end of the Menu with the ▲ / ▼ buttons, and press the **SET** button.
4. Select [Date/Time] with the ▲ / ▼ buttons, and press the **SET** button.
5. Select the date format 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.
   - After confirming all settings are correct, press the **SET** button.
6. To exit from the [Setup] menu, press the **MENU** button.
Choosing the Language
Specify in which language menus and messages are to be displayed on the LCD monitor.

1. Press the **MODE** button, and set the camera mode to [ ] or [ ]; or press the  button.
2. Press the **MENU** button.
3. Select the [Setup] at the end of the Menu with the ▲ / ▼ buttons, and press the **SET** button.
4. Select [Language] with the ▲ / ▼ buttons and press the **SET** button.
5. Select the displayed language with the ◀ / ▶ / ▲ / ▼ buttons and press the **SET** button.
   - The setting will be stored.
6. To exit from the [Setup] menu, press the **MENU** button.

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

1. Press the **MODE** button, and set the camera mode to [ ] or [ ]; or press the  button.
2. Press the **MENU** button.
3. Select the [Setup] at the end of the Menu with the ▲ / ▼ buttons, and press the **SET** button.
4. Select [Format] with the ▲ / ▼ buttons, then press the **SET** button.
5. Select [Execute] with the ◀ / ▶ buttons, and press the **SET** button.
   - To cancel formatting, select [Cancel] and press the **SET** button.
6. To exit from the [Setup] menu, press the **MENU** button.
CAPTURE MODE

Capturing Images

Your camera is equipped with a 2.7” full color 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.
2. Press the MODE button, and set the camera mode 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 zooms out on the subject, and 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 image.
   - The focus area frame turns green when the camera is in focus and the exposure is calculated.
   - When the focus is not suitable, the frame of the focus area turns red.
Setting the Scene Mode

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

1. Press the **MODE** button, and set the camera mode to [ ], and press the **SET** 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>Program AE</td>
<td>Select this mode when you want to set parameters manually other than the shutter speed and the aperture value.</td>
</tr>
<tr>
<td>Auto</td>
<td>Select this mode when you want to capture images without having to set special functions or manual adjustments.</td>
</tr>
<tr>
<td>Tv</td>
<td>Select this mode when you want to capture fast moving subjects in fast shutter speed, or capture still subjects in slow shutter speed.</td>
</tr>
<tr>
<td>Av</td>
<td>Select this mode when you want to capture images with the priority given to aperture.</td>
</tr>
<tr>
<td>Intelligent Scene</td>
<td>Select this mode when you want the camera to select an ideal shooting mode according to environment automatically.</td>
</tr>
<tr>
<td>Smile Detection</td>
<td>Select this mode to automatically capture an image when a smiling face is detected.</td>
</tr>
<tr>
<td>Anti-shake</td>
<td>Select this mode when you want to minimize the influences of hand shaking when capturing an image.</td>
</tr>
<tr>
<td>Panorama PanCapture</td>
<td>Select this mode when you want the camera to combine pictures in the camera automatically.</td>
</tr>
<tr>
<td>Skin Soften</td>
<td>Select this mode when you want the camera to reduce artifacts on faces.</td>
</tr>
<tr>
<td>De-blemish</td>
<td>Select this mode when you want the camera to reduce obvious blemishes and big spots on faces.</td>
</tr>
<tr>
<td>Portrait Man</td>
<td>Select this mode when you want to capture an image that makes a man stand out against a blurred background.</td>
</tr>
<tr>
<td>Portrait Lady</td>
<td>Select this mode when you want to capture an image that makes a lady stand out against a blurred background.</td>
</tr>
</tbody>
</table>
Taking Images with Intelligent Scene mode

In this Intelligent Scene mode, the camera can sense the ambient conditions and automatically select the ideal shooting mode.

1. Press the **MODE** button, and set the camera mode to [ ], and press the **SET** button.
2. Select [Intelligent Scene] with the button, and press the **SET** button.
3. Compose the image, and press the shutter button down fully.

<table>
<thead>
<tr>
<th>Scene mode</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Landscape</td>
<td>Select this mode when you want to capture an image with infinity focus, hard sharpness and high saturation.</td>
</tr>
<tr>
<td>Sports</td>
<td>Select this mode when you want to capture fast-moving subjects.</td>
</tr>
<tr>
<td>Night Portrait</td>
<td>Select this mode when you want to capture people with an evening or night scene background.</td>
</tr>
<tr>
<td>Night Scene</td>
<td>Select this mode when you want to capture dark scenes such as night views.</td>
</tr>
<tr>
<td>Candlelight</td>
<td>Select this mode when you want to capture photos of candlelight scene, without spoiling the ambience.</td>
</tr>
<tr>
<td>Fireworks</td>
<td>Select this mode when you want to capture fireworks clearly with optimal exposure. The shutter speed becomes slower, so using a tripod is recommended.</td>
</tr>
<tr>
<td>Text</td>
<td>Select this mode when you want to capture an image that contains black and white subjects like printed documents.</td>
</tr>
<tr>
<td>Sunset</td>
<td>Select this mode when you want to capture a sunset. This mode helps keep the deep hues in the scene.</td>
</tr>
<tr>
<td>Sunrise</td>
<td>Select this mode when you want to capture a sunrise. This mode helps keep the deep hues in the scene.</td>
</tr>
<tr>
<td>Splash Water</td>
<td>Select this mode when you want to capture photos of splashing water.</td>
</tr>
<tr>
<td>Flow Water</td>
<td>Select this mode when you want to capture the soft flowing water.</td>
</tr>
<tr>
<td>Snow</td>
<td>Select this mode when you want to capture clear snow scenes without darkened subjects and bluish tint.</td>
</tr>
<tr>
<td>Beach</td>
<td>Select this mode when you want to capture bright beach scenes and sunlit water surfaces.</td>
</tr>
<tr>
<td>Pets</td>
<td>Select this mode when you want to capture your pets. Shoot from their eye level.</td>
</tr>
<tr>
<td>Natural Green</td>
<td>Select this mode when you want to capture the green scenery background such as forest. This mode helps to brighten the colors.</td>
</tr>
</tbody>
</table>
Taking and Combining Panoramic Pictures

Pictures are manually shot, and the camera automatically combines pictures in the camera.
1. Press the **MODE** button, and set the camera mode to [ ]., and press the **SET** button.
2. Select [Panorama PanCapture] with the ◀ / ▶ / ▲ / ▼ buttons, and press the **SET** button.
3. Select the photographic direction with the ◀ / ▶ buttons.
4. Shoot the first image.
   - The next image appears beside the previous image.
5. Orient the camera so that the second frame overlaps a small portion of the photographic subject of the first image and press the shutter button to capture the next image.
6. Follow the same steps to capture subsequent images in the sequence.
7. After the third picture is taken, the pictures are automatically combined.

Taking Images When the Smile Feature Is On

With the camera’s new “smile detection” function, this camera detects smiles so you do not miss those special moments in life.

1. Press the **MODE** button, and set the camera mode to [ ], and press the **SET** button.
2. Select [Smile Detection] with the ◀ / ▶ / ▲ / ▼ buttons, and press the **SET** button.
3. Compose the image, and press the shutter button down fully.
4. Once the camera detects a smile, it will automatically capture 3 images (by default, the flash mode setting is set to ).
   - If the [Capture Md.] is set to [Single], the camera will only capture an image after it detects a smile.
   - When capturing group shots (if the number of people is more than 1), the camera will automatically capture the image(s) when it detects two smiles.
   - If the camera does not detect a smile within 5 seconds, the camera returns to preview display.
   - Press the shutter button once again to reactivate this function.
Mode of Skin Soften and De-blemish

In order to make face taken look better and younger, mode of Skin Soften is added to reduce artifacts on faces, while the mode of De-blemish is to reduce obvious blemishes and big spots on faces.

1. Press the **MODE** button, and set the camera mode to [ ], and press the **SET** button.
2. Select [Skin Soften] or [De-blemish] with the ***/** / ***/** / ***/** buttons, and press the **SET** button.
3. Compose the image, and press the shutter button down fully.

Recording Shots using Face Detection Technology

Face Detection Technology can identify and focus on the human faces in the image.

1. Press the **MODE** button, and set the camera mode to [ ].
2. Press the **Face Detection** button, and select [ ] icon with the ***/** / ***/** buttons. Press the **SET** button.
   - With Face Detection turned on, the camera identifies main face (white frame) and subsidiary faces (gray frames).
   - If the camera cannot detect and track any faces, there will be no frame shown on the screen.
3. Press the shutter button halfway down to lock the focus.
   - When the main face is in focus, the white frame simultaneously turns green. Otherwise, it turns red.
4. Press the shutter button down fully to capture your image.

Subjects that are not suitable with this function:
- A person is wearing glasses, sunglasses, or face is covered with hat or hair.
- A person turns sideways.
Self-portrait Function

Use this function to take pictures of yourself or include yourself in pictures.
1. Press the MODE button, and set the camera mode to [ ].
2. Press the button, and select [ ] icon with the / buttons. Press the SET button.
3. Press the shutter button.
4. If the camera detect and track any faces, after twice blinking of the self-timer LED, one image will be captured.
   - Press the shutter button to exit.
   - If it does not detect any face within 30 seconds, the camera will automatically capture an image and return to preview display.
   - Select [ ] to reactivate this function.

AF Tracking Mode

Use this option to take pictures of moving subject.
1. Press the MODE button, and set the camera mode to [ ].
2. Press the button, and select [ ] icon with the / buttons. Press the SET button.
3. To lock the desired tracking subject, press the button.
   - The frame automatically tracks the subject movement to focus on it continuously.
4. Press the shutter button down fully to capture your image.
   - When the camera fails to recognize or track the subject, the frame will turns red and blinks. After blinking of the red frame, the camera returns to unlock display.
   - Press the button, to returns to unlock display.
VIDEO MODE

Recording Video Clips

This mode allows you to record video clips at a resolution of 320 x 240 / 640 x 480 / 720p pixels.

1. Press the MODE button, and set the camera mode 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 and "10+2 sec." self-timer function 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, 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. Press the button.
   - 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.

Video clips cannot be displayed rotated or enlarged.
Windows Media player or QuickTime Player is recommended to play back the video clip 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.
PLAYBACK MODE

Playing Back Still Images
You can play back the still images on the LCD monitor.
1. Press the " button.
   ■ 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 ♪ 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.

Playback Display
This function allows you to search quickly for the image that you want and playback images on the LCD monitor sequentially.
1. Press the " button.
   ■ The last image appears on the screen.
2. Press the ▲ button to display the next 10th image.
   ■ If the 1st image taken is displayed, press the ▲ button to playback the 11th image taken.
   Press the ▲ button again to playback the 21th image taken and so forth.
3. Press the ▼ button to display the previous 10th image.
4. Press and hold the ◀ / ▶ buttons to display the previous or next images automatically in sequential order.
   ■ Release the ◀ / ▶ buttons if you wish to stop the automatic playback.

If the total number of images is less than 10, press the ▼ button jumps to the first image and press the ▲ button jumps to the last image.
Video clips will be displayed with an [ ] icon.
Removing Red-eye
You can use this function to remove the red-eye effect after an image is taken.

1. Press the button.
   - The last image appears on the screen.
2. Select the image that you want to edit with the / buttons.
3. Press the MENU button.
4. 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.

Dynamic Lighting Feature
This feature compensates for the unfavorable lighting conditions by brightening underexposed areas and balancing overexposed areas.

1. Press the button.
   - The last image appears on the screen.
2. Select the image that you want to edit with the / buttons.
3. Press the MENU button.
4. Select [Dynam. Light.] with the / buttons, and press the SET button.
5. Select [High] or [Low] 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.
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. Press the  button.
   ▪ The last image appears on the screen.
2. Select the image to which you want to attach the voice memo with the ◀ / ▶ buttons.
3. Press the MENU button.
4. Select [Voice Memo] with the ▲ / ▼ buttons, and press the SET button.
5. Press the SET button.
   ▪ [VOICE RECORDING] is displayed on the screen and recording starts.
6. To stop recording a voice memo as it is being recorded, press the SET button again.
   ▪ [VOICE RECORD END] will be displayed momentarily and the recording will end. An [ ] icon is displayed with images that have been recorded with a voice memo.

RE-REC mode can only be used for the recorded and selected file, and it can record voice memo repeatedly to replace the previous recordings.

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.
Protecting Images

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

1. Press the  button.
   - The last image appears on the screen.
2. Select the image that you want to protect with the  /  buttons.
3. Press the  button.
4. Select [Protect] with the  /  buttons, and press the  button.
5. Select [Single] or [All] with the  /  buttons, and press the  button.
6. Select [Set] with the  /  buttons, and press the  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. Press the  button.
   - The last image appears on the screen.
2. Select the image that you want to cancel protection with the  /  buttons.
3. Press the  button.
4. Select [Protect] with the  /  buttons, and press the  button.
5. Select [Single] or [All] with the  /  buttons, and press the  button.
6. Select [Cancel Protect] with the  /  buttons, and press the  button.
   - The removal of image protection is executed and the camera returns to the 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. Press the  button.
   - The last image appears on the screen.
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.
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.

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 the section in this manual titled “Setting the Date and Time” for further details.
Erasing Images

Erasing a single image / Erasing all images

1. Press the 7 button.
   - The last image appears on the screen.
2. Select the image you want to erase with the ◀/▶ buttons.
3. Press the MENU button.
4. Select [Delete] with the ▲/▼ buttons, and press the SET button.
5. 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.
6. Select [Execute] with the ◀/▶ buttons, and press the SET button.
   - To not erase, select [Cancel], and press the SET button.
7. To exit from the menu, press the MENU 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. Press the ON/OFF button to turn the power on.
2. Press the MODE button, and set the camera mode to any scene mode.
3. Press the MENU button to enter the [Capture] menu.
4. Select the desired option item with the ▲ / ▼ buttons, and press the SET button to enter its respective menu.
   ■ The selectable items may vary in different capture modes.
5. Select the desired setting with the ◀ / ▶ buttons, and press the SET button.
6. To exit from the menu, press the MENU button.

Size
This sets the size of the image that will be captured.
* 14M / 8M / 4M / 2M / VGA

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 / ISO100 / ISO 200 / ISO 400 / ISO 800 / ISO 1600

Quality
This sets the quality (compression) at which the image is captured.
* Fine / Standard / Economy

W. 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.
*Auto / Incand. / Fluoresc.1 / Fluoresc.2 / Daylight / Cloudy / Manual WB

Sharpness
This sets the sharpness of the image that will be captured.
* Hard / Standard / Soft

Color
This sets the color of the image that will be captured.
* Standard / Vivid / Sepia / B&W / Blue / Red / Green / Yellow / Purple

Saturation
This sets the saturation of the image that will be captured.
* High / Standard / Low
Metering
This sets the metering method for calculating the exposure.

* Center: Averages the light metered from the entire frame, but gives greater weight to the subject matter at the center.

* Spot: A very small portion of the center of the screen is measured to calculate the correct exposure.

* Average: The exposure is measured all of the image area.

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

* Single: Captures one image at a time.

* Continuous: Permits continuous capture of up to 3 images.

* AEB: Permits 3 consecutive images in the order of standard exposure, underexposure and overexposure compensation.

* Burst: Permits continuous photography while pressing and holding the shutter button. As long as you hold the shutter button pressed, images are captured until the memory capacity is exhausted.

* Cont. flash: Permits continuous capture of up to 3 images with flash.

* Pre-shot: Select a background by 1st shot, the image shown on display will be transparent, then take the 2nd shot on the basis of 1st image. Image of 1st shot is only a guiding tool, it won't be saved on SD card. Normally this function is used when taking a portrait picture and the background is selected by the model instead of the photographer.

* Coupl.shot: Uses separate areas to combine two shots. You can include yourself in the shot.

* Burst 30fps Permits continuous capture of up to 30 images in the resolution 640 x480 within 1 second.

Quick Shot
If this function is set to “On”, the camera takes a quick shot without focusing.

* On / Off

Digi. 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.

* On / Off

Setup
Refer to the section in this manual titled “Setup Menu” for further details.
**Video Menu**

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

1. Press the **MODE** button, and set the camera mode to [ ].
2. Press the **MENU** button to enter the [Video] menu.
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 / QVGA / HD

**Quality**

This sets the quality (compression) at which the video clip is captured.
* Fine / Standard

**Color**

This sets the color of the video clip that will be captured.
* Standard / Vivid / Sepia / B&W / Blue / Red / Green / Yellow / Purple

**Audio**

This sets whether or not to record audio at the time of video recording.
* On / Off

**Digi. Zoom**

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

**Setup**

Refer to the section in this manual titled “Setup Menu” for further details.
Playback Menu

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

1. Press the button.
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.

Delete
Refer to the section in this manual titled “Erasing Images” for further details.

Fix Red Eyes
Refer to the section in this manual titled “Removing Red-eye” for further details.

Dynam. Light.
Refer to the section in this manual titled “Dynamic Lighting Feature” for further details.

Slide Show
This function enables you to play back your still images automatically in order one image at a time.
* 3 Sec. / 5 Sec. / 10 Sec.

Rotate
If you wish to rotate a still image 90 degrees to the right, select +90°; if you wish to rotate it 90 degrees to the left, select -90°. Video clips cannot be rotated.
* +90° / -90°

DPOF
Refer to the section in this manual titled “DPOF Settings” for further details.

Protect
Refer to the section in this manual titled “Protecting Images” for further details.

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

Resize
Resizes a previously saved image. Resizing replaces the original image with the changed image. It is only possible to resize to a smaller size.
Qual. Change
Changes the quality (compression) of a recorded image. Compress images down to half of their size or less, overwrite 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 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. All files remain in the internal memory, even after copy to the SD/SDHC memory card from the internal memory.
* Cancel / Execute

Setup
Refer to the section in this manual titled “Setup Menu” for further details.
Setup Menu

Set your camera’s operating environment.

1. Press the **MODE** button, and set the camera mode to [ ] or [ ]; or press the button.
2. Press the **MENU** button.
3. Select the [Setup] at the end of the Menu with the ▲ / ▼ buttons, and press the **SET** button.
4. Select the desired option item with the ▲ / ▼ buttons, and press the **SET** button to enter its respective menu.
5. Select the desired setting with the ◀ / ► buttons, and press the **SET** button.
6. To exit from the menu, press the **MENU** button.

**Date/Time**
Refer to the section in this manual titled “Setting the Date and Time” for further details.

**Language**
Refer to the section in this manual titled “Choosing the Language” 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.
* Off / 1 Min. / 2 Min. / 3 Min.

**Beep**
This sets whether or not to mute the camera sound each time you press the camera’s buttons.
* On / Off

**Display**
This sets the image information display state.
* Default / All / Off

**Video Out**
This sets your camera to match the system of the equipment that you are going to connect to the camera.
* NTSC / PAL
Fr. No. Reset
This creates a new folder. The captured images are recorded to the newly created folder from number 0001.
* Cancel / Execute

Light Freq.
This camera supports different lighting frequencies: 50 Hz and 60 Hz. When photographing under fluorescent lighting, select the correct frequency setting depending on your local area’s voltage.
* 50 Hz / 60 Hz

LCD Bright.
Select a brightness level for the LCD monitor.
* Standard / Bright

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

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

Sys. Info.
This displays the firmware version of the camera.

Sys. Reset
This returns all basic settings to the camera’s default settings.
* Cancel / Execute
TRANSFERRING FILES TO YOUR COMPUTER

System Requirement

<table>
<thead>
<tr>
<th>Windows</th>
<th>Macintosh</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Pentium III 1GHz or equivalent</td>
<td>• PowerPC G3/G4/G5</td>
</tr>
<tr>
<td>• Windows 7/XP/Vista</td>
<td>• OS 10.3.9 or later</td>
</tr>
<tr>
<td>• 512MB RAM</td>
<td>• 256MB RAM (512 MB recommended)</td>
</tr>
<tr>
<td>• 150MB available hard disk space</td>
<td>• 128MB available 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. Turn on your camera.
2. Connect the camera to your computer with the USB cable.
3. Select [PC] using the ▲ / ▼ buttons and press the SET button.
4. From the Windows desktop, double click on “My Computer”.
5. Look for a new “removable disk” icon.
6. Double click on the removable disk and locate the DCIM folder.
   • Your recorded images and video clips will be inside the folders of DCIM folder.
   • 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. Your computer system must include the items, Microphone, Sound card, Speakers or headphones, Network or Internet connection.

Using the camera as a PC camera, Service Pack 3 is suggested to the users of Windows XP, Service Pack 3 can be downloaded by visiting http://www.microsoft.com/.
EDITING SOFTWARE INSTALLATION

Software is included on the CD-ROM:

ArcSoft MediaImpression™ - Easily, creatively, and productively manage your multimedia files. Create your own movies or photo slide shows, and share your photo, video and music files easily through simple email attachments or popular photo printing and video sharing websites.

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 7/XP/Vista users, please make sure to install and use the software in “Administrator” mode.
The software is not supported by Mac.
<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Image sensor</td>
<td>1/2.33” CCD sensor (14.0 megapixels)</td>
</tr>
<tr>
<td>Image resolution</td>
<td>Still image 14M(4288 x 3216), 8M(3264 x 2448), 4M(2304 x 1728), 2M(1600 x 1200), VGA(640 x 480)</td>
</tr>
<tr>
<td></td>
<td>Video clip HD(720p)/30fps, VGA(640 x 480)/30fps, QVGA(320 x 240)/30fps</td>
</tr>
<tr>
<td>LCD monitor</td>
<td>2.7” full color TFT LCD (230K pixels)</td>
</tr>
<tr>
<td>Recording media</td>
<td>32MB internal memory (10MB available for image storage)</td>
</tr>
<tr>
<td></td>
<td>Supports SD/SDHC memory card (up to 32GB) (optional)</td>
</tr>
<tr>
<td>File format</td>
<td>DCF, JPEG (EXIF 2.2), DPOF, Motion-JPEG (AVI), HD720p/30fps</td>
</tr>
<tr>
<td>Lens</td>
<td>4x optical zoom lens</td>
</tr>
<tr>
<td></td>
<td>Aperture range: 3.0(W) - 5.8(T)</td>
</tr>
<tr>
<td></td>
<td>Focal length: 5.0mm - 20.0mm (equivalent to 28mm - 112mm on a 35mm camera)</td>
</tr>
<tr>
<td>Focus Range</td>
<td>Macro: 0.05m~Inf.(W)</td>
</tr>
<tr>
<td></td>
<td>Normal: 0.5m~Inf.(T)</td>
</tr>
<tr>
<td>Shutter speed</td>
<td>1~1/2000 Sec.</td>
</tr>
<tr>
<td>Digital zoom</td>
<td>6x (Capture mode)</td>
</tr>
<tr>
<td></td>
<td>4x (Playback mode)</td>
</tr>
<tr>
<td>Terminals</td>
<td>USB/AV OUT (2 in 1 terminal)</td>
</tr>
<tr>
<td>Power supply</td>
<td>Rechargeable Lithium-ion battery (3.7V)</td>
</tr>
<tr>
<td>Battery Charging</td>
<td>Temperature 0°C - 40°C (32°F to 104°F) (Charging)</td>
</tr>
<tr>
<td>environment</td>
<td></td>
</tr>
<tr>
<td>Dimensions</td>
<td>Approx. 95.3 x 55.7 x 19.5mm (without protruding parts)</td>
</tr>
<tr>
<td>Weight</td>
<td>Approx. 112g (without battery and memory card)</td>
</tr>
</tbody>
</table>

* Design and specifications are subject to change without notice.
**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 SD/SDHC memory card.

<table>
<thead>
<tr>
<th>Size</th>
<th>Quality</th>
<th>SD/SDHC memory card capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1GB</td>
</tr>
<tr>
<td>4288 x 3216</td>
<td>Fine</td>
<td>147</td>
</tr>
<tr>
<td></td>
<td>Standard</td>
<td>281</td>
</tr>
<tr>
<td></td>
<td>Economy</td>
<td>349</td>
</tr>
<tr>
<td>3264 x 2448</td>
<td>Fine</td>
<td>264</td>
</tr>
<tr>
<td></td>
<td>Standard</td>
<td>467</td>
</tr>
<tr>
<td></td>
<td>Economy</td>
<td>577</td>
</tr>
<tr>
<td>2304 x 1728</td>
<td>Fine</td>
<td>657</td>
</tr>
<tr>
<td></td>
<td>Standard</td>
<td>860</td>
</tr>
<tr>
<td></td>
<td>Economy</td>
<td>1042</td>
</tr>
<tr>
<td>1600 x 1200</td>
<td>Fine</td>
<td>1358</td>
</tr>
<tr>
<td></td>
<td>Standard</td>
<td>1763</td>
</tr>
<tr>
<td></td>
<td>Economy</td>
<td>2188</td>
</tr>
<tr>
<td>640 x 480</td>
<td>Fine</td>
<td>5015</td>
</tr>
<tr>
<td></td>
<td>Standard</td>
<td>5127</td>
</tr>
<tr>
<td></td>
<td>Economy</td>
<td>5551</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Size</th>
<th>Quality</th>
<th>SD/SDHC memory card capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1GB</td>
</tr>
<tr>
<td>HD 1280 x 720</td>
<td>Fine</td>
<td>00:06:15</td>
</tr>
<tr>
<td></td>
<td>Standard</td>
<td>00:06:24</td>
</tr>
<tr>
<td>VGR 640 x 480</td>
<td>Fine</td>
<td>00:08:59</td>
</tr>
<tr>
<td></td>
<td>Standard</td>
<td>00:10:46</td>
</tr>
<tr>
<td>VGA 320 x 240</td>
<td>Fine</td>
<td>00:28:01</td>
</tr>
<tr>
<td></td>
<td>Standard</td>
<td>00:32:28</td>
</tr>
</tbody>
</table>

* The table above shows the approximate maximum recording times. These are the total times for all clips. Continuous shooting is possible for approximately 25 minutes or 4GB.
* 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.
* SDHC Class 6 or above is required for HD movie recording.
## 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></td>
<td>The battery is not used for an extended period of time after being charged.</td>
<td></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 press the shutter button, the camera does not take a picture.</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 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 on the memory card cannot be played back.</td>
<td>You played back a memory card that was not formatted by this camera.</td>
<td>Insert a memory card that was formatted on this camera.</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 are 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 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>Recharge the battery.</td>
</tr>
</tbody>
</table>
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.