

FCC STATEMENT (For customers in USA)

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.

For customers in Canada

This Class B digital apparatus meets all requirements of the Canadian Interference - Causing Equipment Regulations.

Pour les utilisateurs au Canada

Cet appareil numérique de la classe B respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

Thank you for purchasing the PENTAX Digital Camera.

Please read this manual before using the camera in order to get the most out of all the features and functions. Keep this manual safe, as it can be a valuable tool in helping you to understand all the camera's capabilities.

Regarding copyrights

Images taken using the PENTAX Digital Camera that are for anything other than personal enjoyment cannot be used without permission according to the rights as specified in the Copyright Act. Please take care, as there are even cases where limitations are placed on taking pictures even for personal enjoyment during demonstrations, performances or of items on display. Images taken with the purpose of obtaining copyrights also cannot be used outside the scope of use of the copyright as laid out in the Copyright Act, and care should be taken here also.

To users of this camera

- There is a possibility that recorded data may be erased or that the camera may not function correctly when used in surroundings such as installations generating strong electromagnetic radiation or magnetic fields.
- The liquid crystal panel used in the LCD display is manufactured using extremely high precision technology. Although the level of functioning pixels is 99.99% or better, you should be aware that 0.01% or fewer of the pixels may not illuminate or may illuminate when they should not. However, this has no effect on the recorded image.

Regarding trademarks

- PENTAX, Optio and smc PENTAX are trademarks of PENTAX Corporation.
- The SD logo () is a trademark.
- QuickTime and QuickTime logo are trademarks used under license. The QuickTime logo is registered in U.S. and other countries.
- All other brands or product names are trademarks or registered trademarks of their respective owners.



Regarding PictBridge

- PictBridge allows the user to connect the printer and digital camera directly, using the unified standard for the direct printout of images. You can print images directly from the camera through a few simple operations.
- There is a possibility that the illustrations and the display screen of the LCD monitor in this manual are different from the actual product.

This product supports PRINT Image Matching III. PRINT Image Matching enabled digital still cameras, printers and software help photographers to produce images more faithful to their intentions. Some functions are not available on printers that are not PRINT Image Matching III compliant.

FOR SAFE USE OF YOUR CAMERA

Sufficient attention has been paid to the safety of this product but please pay particular attention to the warnings indicated by the following symbols during use.



Warning These symbols indicate that it is possible that the user may experience serious difficulties if the warnings are not heeded.



Caution These symbols indicate that it is possible that the user may experience minor or middling difficulties or physical difficulties if the warnings are not heeded.

About the Camera



Warning

- Do not attempt to take the camera apart or remodel the camera. High voltages are present within the camera, and there is therefore a danger of electric shocks if the camera is taken apart.
- If the inside of the camera should become exposed as a result of, for example, the camera being dropped, please do not under any circumstances touch such exposed portions, as there is a danger of receiving an electric shock.
- Wrapping the strap of the camera around your neck is also dangerous. Please take care that small children do not hang the strap around their necks.
- To avoid the risk of it being swallowed by mistake, keep the SD Memory Card out of the reach of small children. Seek medical attention immediately if an SD Memory Card is accidentally swallowed.
- Use an AC adapter that is of the power and voltage specified for exclusive use with this product. The use of an AC adapter other than that specified exclusively for use with this product may cause fire or electric shocks.
- If the camera emits smoke or a strange smell, or in the event of any other irregularity, stop using the camera immediately, remove the battery or disconnect the AC adapter and contact your nearest PENTAX service center. Continued use of the camera may result in fire or electric shock.



Caution

- Never try to disassemble or short the battery. Also, do not dispose of the battery in fire, as it may explode.
- Do not charge any batteries other than rechargeable Ni-MH batteries. The battery could explode or catch fire. The batteries that can be used in this camera, only the Ni-MH battery can be recharged.
- Do not place your finger on the flash when it is discharging as there is a risk of burns.
- Do not discharge the flash while it is touching your clothing as there is a risk of discoloring.
- If any of the battery leakage should come in contact with your eyes, do not rub them. Flush your eyes with clean water and get medical attention immediately.
- If any of the battery leakage should come in contact with skin or clothes, wash the affected areas thoroughly with water.
- Remove the battery from the camera immediately if it becomes hot or begins to smoke. Be careful not to burn yourself during removal.
- Some portions of the camera heat up during use, so please take care, as there is a risk of low temperature burns if such portions are held for long periods of time.
- Should the LCD be damaged, be careful of glass fragments. Also, be careful not to allow the liquid crystal to get on your skin or in your eyes or in your mouth.

Handling precautions for batteries

- This camera uses two AA alkaline, AA lithium, AA Ni-MH or AA nickel manganese batteries. Do not use batteries other than those specified here. Using some other type of battery may cause the camera to function poorly, or the batteries may rupture or cause a fire.
- AA alkaline, AA lithium and AA nickel manganese cannot be recharged. Do not try to take the batteries apart. The batteries may rupture or leak if you try to charge them or take them apart.
- Do not replace the batteries with batteries that are different brands, types or capacities. Also, do not combine old batteries with new ones. Doing so may cause the batteries to rupture or cause a fire.
- Do not insert the batteries with the positive (+) and negative (-) poles in the wrong orientation. Doing so may cause the batteries to rupture or cause a fire.

About the AC Adapter



Caution

- Do not place heavy objects on the AC plug cord, allow heavy objects to drop onto it or allow the AC plug cord to become damaged due to excessive bending. If the AC plug cord becomes damaged, consult a PENTAX Service Center.
- Do not short or touch the output terminals of the product while it is still plugged in.
- Do not plug in the AC plug cord with wet hands. This can cause an electrical shock.
- Do not subject the product to strong impacts or allow it to drop onto a hard surface. This can cause a malfunction.

Care to be Taken During Handling

- Take the international warranty card with you when you travel abroad. Also take the Worldwide Service Network that is included in the package. This will be useful if you experience problems abroad.
- When the camera has not been used for a long time, confirm that it is still working properly, particularly prior to taking important pictures (such as at a wedding or during traveling). Contents of the recording cannot be guaranteed if recording, playback or transferring your data to a computer, etc. is not possible due to a malfunction of your camera or recording media (SD Memory Card), etc.
- The lens on this camera is not exchangeable. The lens is not removable.
- Do not clean the product with organic solvents such as thinner, alcohol or benzene.
- Places of high temperature and humidity should be avoided. Particular care should be taken regarding vehicles, which can become very hot inside.
- Storing the camera where pesticides and chemicals are handled should be avoided. Remove from case and store in a well-ventilated place to prevent the camera from becoming moldy during storage.
- Do not use the camera where it may come in contact with rain, water or any other liquid, because the camera is not weather, water, or liquid resistant.
- Ensure that the camera is not subjected to substantial vibrations, shocks or pressure. Place the camera on a cushion for protection when the camera is subjected to the vibrations of a motorbike, car, or ship, etc.
- **The temperature range in which the camera can be used is 0°C to 40°C (32°F to 104°F).**
- The liquid crystal display will become black at high temperatures but will return to normal when normal temperatures are returned to.
- The response speed of the liquid crystal display becomes slow at low temperatures. This is due to the properties of the liquid crystal and is not a fault.
- Periodic checks are recommended every 1 to 2 years in order to maintain high performance.
- If the camera is subjected to rapid temperature changes, condensation may form on the inside and outside of the camera. Therefore put the camera in a bag or plastic bag, and take the camera out when the difference in temperature has subsided.
- Avoid contact with garbage, dirt, sand, dust, water, toxic gases, salt, etc. as this may cause damage to the camera. If rain or drops of water get onto the camera, please wipe dry.

- Refer to “Precautions When Using an SD Memory Card” (EN-21, 22) regarding the SD Memory Card.
- Please do not press forcefully on the LCD monitor. This could cause breakage or malfunction.
- Be careful not to sit down with the camera in your back pocket as this may damage the exterior of the camera or the LCD monitor.
- When using a tripod with the camera, be careful not to overtighten the screw in the tripod socket on the camera.

CONTENTS

INTRODUCTION	11	PHOTOGRAPHY MODE	29
Package Contents.....	12	Shooting Images.....	29
GETTING TO KNOW YOUR CAMERA	13	Setting Image Resolution and Quality.....	30
Front View.....	13	Using the Zoom Function.....	31
Mode Dial.....	13	Using the Flash.....	32
Rear View.....	14	Setting Focus.....	33
LCD Monitor Information.....	15	DRIVE MODE	34
PREPARING THE CAMERA	18	High Speed Continuous.....	34
Installing the Batteries.....	18	Auto Bracket.....	35
Using the AC Adapter (Optional Accessory).....	19	Self-Timer.....	36
Inserting and Removing an SD Memory Card (Optional Accessory).....	20	Adjusting the Exposure (EV Compensation).....	38
Attaching the Camera Strap.....	23	Setting White Balance.....	39
GETTING STARTED	24	USING THE MODE DIAL	40
Turning the Power On/Off.....	24	Simple Mode.....	40
Choosing the Screen Language.....	25	Program Mode.....	40
Setting the Date and Time.....	26	Portrait Mode.....	41
Formatting an SD Memory Card or Internal Memory.....	27	Landscape Mode.....	41
Using the LCD Monitor.....	28	Sport Mode.....	42
		Night Scene Mode.....	42

PLAYBACK MODE - THE BASICS	43	EDITING SOFTWARE INSTALLATION	64
Viewing Images	43	Installing ACDSee for PENTAX	64
Magnifying Images.....	44	USING THE DIGITAL CAMERA AS A PC	
Thumbnail Display	45	CAMERA.....	65
Slideshow Display.....	46	Step 1: Install the PC camera driver	65
Resizing an Image.....	47	Step 2: Connect the digital camera to your computer.....	66
MOVIE MODE.....	48	Step 3: Run your application software (i.e. Windows NetMeeting).....	67
Recording Movie Clips.....	48	MENU OPTIONS.....	68
Playing Back Movie Clips	49	Camera Menu	68
PLAYBACK MODE - ADVANCED FEATURES .50		Movie Menu	73
Playing Back Still Images/Movie Clips on TV	50	Playback Menu	74
Deleting Images/Movie Clips	51	Setup Menu	77
Protecting Images/Movie Clips	52	CONNECTING THE DIGITAL CAMERA TO	
Setting the DPOF.....	53	OTHER DEVICES	81
Connecting to a PictBridge-Compatible Printer ...	55	SPECIFICATIONS	82
TRANSFERRING FILES FROM YOUR DIGITAL		APPENDIX	84
CAMERA TO COMPUTER.....	59	WARRANTY POLICY	88
Step 1: Install the USB driver.....	61		
Step 2: Connect the digital camera to your computer	62		

INTRODUCTION

Thank you for purchasing the new digital still camera!

Equipped with a 6.0 Megapixels CCD sensor, your camera delivers high quality, 2816 x 2112 resolution images. Other features provided by the camera include the following:

- **6.0 Megapixels**

A high-resolution CCD sensor provides 6.0 megapixels for high quality of images.

- **Auto flash**

An auto flash sensor automatically detects the shooting (lighting) conditions and determines whether the flash should be used.

- **2.4" TFT color image LCD monitor**

- **Optical zoom: 1x~3x**

- **Digital zoom: 1x~4x**

- **Approx. 10MB internal (built-in) memory**

Images can be captured without using an SD memory card.

- **Support for SD memory card for memory expansion**

You may wish to expand the memory capacity (up to 1GB capacity) by using an additional SD memory card.

- **USB connection**

Still images or movie clips that you have recorded can be downloaded to your computer using the USB cable (A USB driver is required for Win 98 and Win98SE).

- **DPOF functionality**

DPOF can be used to print your images on a DPOF compatible printer by simply inserting the SD memory card.

- **PictBridge support**

You can connect the camera directly to printer that supports PictBridge and perform image selection and printing using the camera monitor screen and controls.

- **Provided editing software: ACDSee for PENTAX**

You can enhance and retouch your images on your computer by using the provided editing software.

Package Contents

Carefully unpack your kit box and ensure that you have the following items. In the event that any item is missing or if you find any mismatch or damage, promptly contact your dealer.

Common Product Components:

- Digital Camera
- Quick Start Guide
- Operating manuals (CD-ROM)
- Software CD-ROM (S-SW47)
- Camera Strap
- AV Cable
- USB Cable
- Two AA alkaline batteries (for checking the camera's functionality)

Common (Optional) Accessories (not included with the camera):

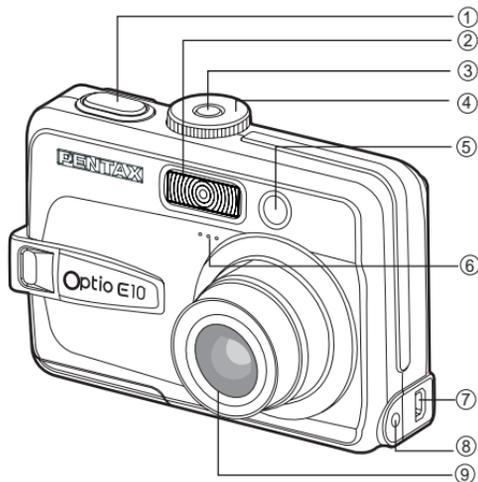
- AC adapter (supplied by PENTAX)
- SD memory card (commercially available)
- Batteries and battery charger (commercially available)



-
- Accessories and components may vary by retailer.

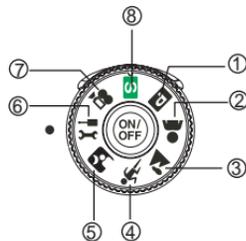
GETTING TO KNOW YOUR CAMERA

Front View



- | | |
|---------------------------|----------------------|
| 1. Shutter release button | 6. Microphone |
| 2. Flash | 7. PC / AV terminal |
| 3. Power switch | 8. DC input terminal |
| 4. Mode dial | 9. Lens |
| 5. Self-timer LED | |

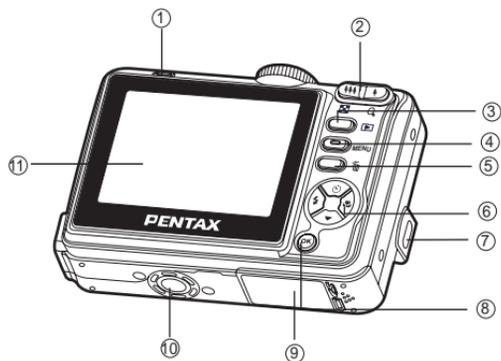
Mode Dial



Mode

- | |
|-----------------|
| 1. Program |
| 2. Portrait |
| 3. Landscape |
| 4. Sport |
| 5. Night Scene |
| 6. Setup |
| 7. Movie |
| 8. Simple |

Rear View



- | | |
|--|--|
| 1. LED indicator | 7. Strap holder |
| 2.  /  button
 /  button | 8.  button
DISPLAY button |
| 3.  button | 9. Battery / card cover |
| 4. MENU button | 10. Tripod socket |
| 5.  button | 11. LCD monitor |
| 6. Four-way controller
 /  button
 /  button
 /  button
 /  button | |

LCD Monitor Information

■ Camera Mode

1. Mode indication

- [] Program
- [] Portrait
- [] Landscape
- [] Sport
- [] Night scene
- [] Setup
- [] Movie
- [] Simple

2. Flash mode

- [] Auto
- [] Auto + Red-eye
- [] Flash on
- [] Flash off

3. Drive mode

- [] Standard
- [] High Speed Continuous
- [] Auto Bracket
- [] 2 sec. Self-timer
- [] 10 sec. self-timer
- [] 10+2 sec. Self-timer

4. Focus mode

- [**Std.**] Standard
- [] Macro
- [] Infinity

5. Possible number of shots

6. Memory status

- [] Built-in memory (without card)
- [] SD memory card

7. Battery and AC adapter

- [] Full battery power
- [] Medium battery power
- [] Low battery power
- [] No battery power
- [] AC adapter

8. Recorded pixels

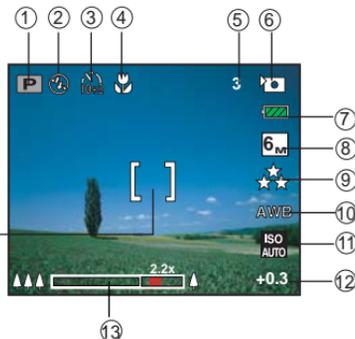
- [] 2816 x 2112
- [] 2272 x 1704
- [] 1600 x 1200
- [] 640 x 480

9. Image quality

- [] Best
- [] Better
- [] Good

10. White balance

- [**[AWB]**] Auto
- [] Daylight
- [] Cloudy
- [] Tungsten Light
- [] Fluorescent Light



11. ISO sensitivity

- [] Auto
- [] 64
- [] 100
- [] 200

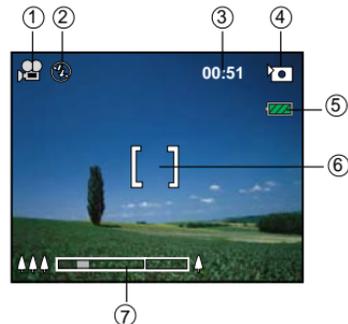
12. EV compensation

13. Zoom bar

14. Focus area

■ Movie Mode

1. Movie mode
2. Flash mode
3. Recordable movie time available
4. Memory status
5. Battery power and AC adapter indicator
6. Focus area
7. Zoom bar



■ Image Playback

1. Playback mode
2. Number of image
3. Memory status
4. Battery power and AC adapter indicator
5. Index number of total number
6. DPOF indicator
7. Protect indicator
8. Date
9. Time
10. EV compensation
11. ISO sensitivity
12. White balance
13. Image quality
14. Recorded pixels



■ Movie Playback

1. Playback mode
2. Movie mode
3. Number of movie
4. Memory status
5. Battery power and AC adapter indicator
6. Index number of total number
7. Elapsed time
8. Date
9. Time
10. Play/Pause indicator

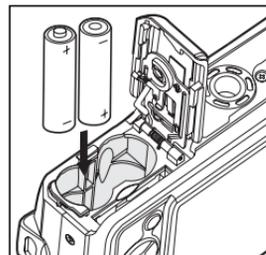


PREPARING THE CAMERA

Installing the Batteries

You can use 2 AA size batteries (alkaline or Ni-MH rechargeable) to power the camera. Make sure that the power of the digital camera is off before inserting or removing the batteries.

1. Make sure the camera is turned off.
2. Open the battery cover.
3. Insert the batteries in the correct orientation as shown in the illustration.
4. Close the battery cover.
 - To remove the batteries, turn the camera off before removing batteries and hold the camera with the battery cover facing upward, then open the battery cover.

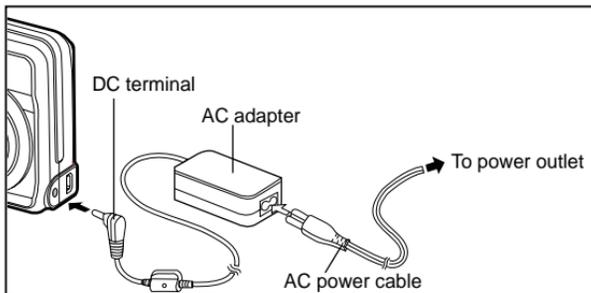


- Be careful not to drop the batteries when opening or closing the battery cover.
- Due to the characteristics of AA alkaline battery, camera performance may deteriorate. AA alkaline battery is not recommended except in emergencies and checking the camera's functionality.

Using the AC Adapter (Optional Accessory)

Use of the AC adapter is recommended if you intend to use the LCD monitor for a long time or connect the camera to a PC.

1. Make sure your camera is off.
2. Connect one end of the AC adapter to the camera DC input terminal labeled "DC IN 3V".
3. Connect the other end to a power outlet.

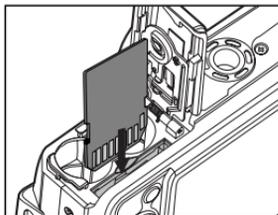


- Make sure to use only the AC adapter specified for the camera. Damage caused by the use of an incorrect adapter is not covered under the warranty.
- To prevent unexpected auto power off resulting from no battery power left during the process of transferring your images to the computer, use the AC adapter as a power supply.
- The AC adapter can only be used to power the camera. Batteries cannot be charged inside the camera.

Inserting and Removing an SD Memory Card (Optional Accessory)

The digital camera comes with approx. 10MB of internal memory, allowing you to store captured still images or movie clips in the digital camera. Moreover, you can also expand the memory capacity by using an optional SD (Secure Digital) memory card so that you can store more files.

1. Make sure your camera is turned off before inserting or removing an SD memory card.
2. Open the SD memory card cover.
3. Insert an SD memory card in the correct orientation as shown in the illustration.
4. Close the SD memory card cover.
 - To remove the SD memory card, make sure the camera is turned off. Press lightly on the edge of the SD memory card and it will eject.



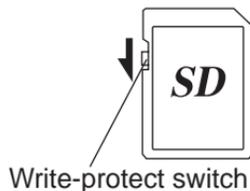
-
- Be sure to format an SD memory card with this digital camera before using it. Refer to section in the manual titled “**Formatting an SD Memory Card or Internal Memory**” (EN-27) for further details.

Data Backup

Very occasionally, malfunction of the camera may cause data stored in the built-in memory to become unreadable. As a backup measure, we recommend that you download important data to a PC or store the data in a media other than the built-in memory.

Precautions When Using an SD Memory Card

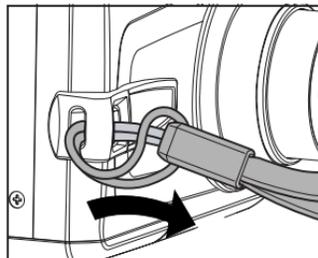
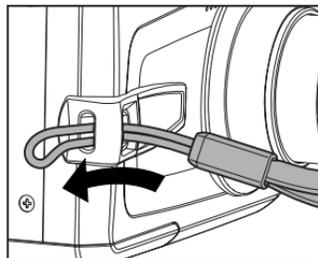
- Make sure that the camera is turned off before opening or closing the card cover.
- The SD memory card is equipped with a write-protect switch. Setting the switch to [LOCK] protects the existing data by prohibiting recording of new data, deletion of existing data or formatting of the card. [Card locked] appears on the LCD monitor in recording mode when the card is write-protected.
- Care should be taken if you remove the SD memory card immediately after using the camera, as the card may be hot.
- Do not remove the SD memory card or turn the camera off while data is being recorded on the card, images or voice memos are being played back, or the camera is connected to a PC with the USB cable as this may cause the data to be lost or the card to be damaged.
- Do not bend the SD memory card or subject it to violent impact. Keep it away from water and store away from high temperature.
- Do not remove the SD memory card during formatting as this may damage the card and render it unusable.



- The data on the SD memory card may be deleted in the following circumstances. PENTAX does not accept any liability for data that is deleted
 - (1) when the SD memory card is mishandled by the user.
 - (2) when the SD memory card is exposed to static electricity or electrical interference.
 - (3) when the card has not been used for a long time.
 - (4) when the card is ejected, the AC adapter is disconnected or the batteries are removed while the data on the card is being recorded or accessed.
- The SD memory card has a limited service life. If it is not used for a long time, the data on the card may become unreadable. Be sure to make a backup of important data on a PC.
- Avoid using or storing the card where it may be exposed to static electricity or electrical interference.
- Avoid using or storing the card in direct sunlight or where it may be exposed to rapid changes in temperature or to condensation.
- When using an SD memory card with a slow recording speed, recording may stop while you are taking movies even when there is adequate space in the memory, or shooting and playback may take a long time.
- If you are going to discard, give away or sell your SD memory card you should ensure that the data on the card is completely deleted or the card itself is destroyed if it contains any personal or sensitive information. Please note that formatting the SD card will not necessarily delete the data so that it cannot be recovered using off the shelf data recovery software. There are off the shelf secure data deletion software programs available that will completely delete the data. In any case the data on your SD memory card should be managed at your own risk.
- For information on compatible memory cards, contact your nearest PENTAX customer service center.

Attaching the Camera Strap

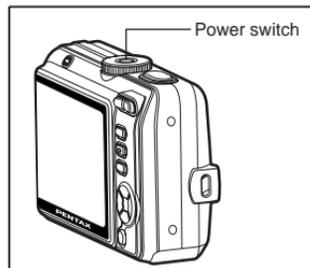
- Attach the strap as shown in the illustrations.



GETTING STARTED

Turning the Power On/Off

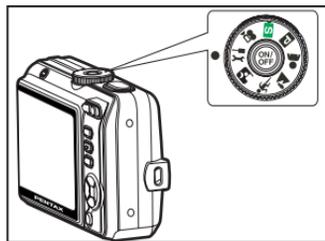
- Press the power switch until the digital camera turns on.
- To turn the power off, press the power switch again.



Choosing the Screen Language

Follow the steps below to choose the desired language.

1. Rotate the mode dial to  and turn your camera on by pressing the power switch.
2. [Set-up1] is displayed.
3. Use the four-way controller (▼) to select [Language], then press the  button.
4. Use the four-way controller (▲▼) to select the language you want.
5. Press the  button to confirm.



Setting the Date and Time

Follow the steps below to set the date display style, current date and time.

1. Rotate the mode dial to  and turn your camera on by pressing the power switch.
2. [Set-up1] is displayed.
3. Use the four-way controller (▼) to select [Date Adjust] and the four-way controller (◀▶) to switch the date types, then press the  button.
4. Press the four-way controller (◀▶) to select Day, Month, Year and Time fields.
 - To increase a value, press the four-way controller (▲).
 - To decrease a value, press the four-way controller (▼).
 - The time is displayed in 24-hours format.
5. Press the  button after all fields are set.

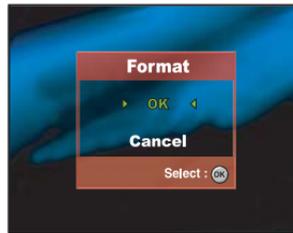


- The date illustration shown is for the purpose of explanation and may differ from the actual setting of your camera.

Formatting an SD Memory Card or Internal Memory

The term “Formatting” means preparing an “SD memory card” to record images; this process is also called “initialization”. This utility formats an SD memory card or the internal memory and erases all stored images and data.

1. Rotate the mode dial to  and turn your camera on by pressing the power switch.
 - [Set-up1] is displayed.
2. Use the four-way controller (▼) to select [Format], then press the  button.
3. Use the four-way controller (▲▼) to select [OK], then press the  button to confirm.

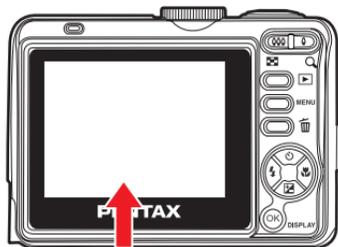


- When you format an SD memory card, be aware that all data on the SD memory card will be erased. Protected images are also erased.
- To format the internal memory, do not insert an SD memory card into the camera. Otherwise, you will format the SD memory card.
- An SD memory card having any problem cannot be properly formatted.

Using the LCD Monitor

Your camera is equipped with a 2.4" full color TFT LCD monitor to help you compose images, replay recorded images/movie clips or adjust menu settings. The mode icons, text and numbers displayed on the monitor may vary according to the current settings.

1. Rotate the mode dial to **S**, **P**, **A**, **M**, **S**, **M** or **M**.
2. Press the power switch to turn on the power.
3. Compose your scene on the LCD monitor.
4. Press the shutter release button.

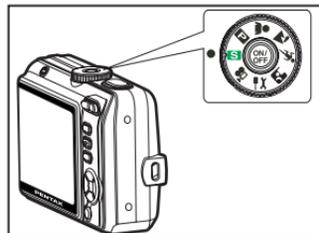


- The LCD monitor darkens in strong sunlight or bright light. This is not a malfunction.
- To prevent your images from being blurred while pressing the shutter release button, always hold it carefully. This is especially important when you are shooting under low lighting conditions, since your camera may decelerate the shutter speed to ensure your images are properly exposed.

PHOTOGRAPHY MODE

Shooting Images

1. Rotate the mode dial to **S**, **P**, **A**, **M**, **SR** or **FR** and turn your camera on by pressing the power switch.
2. Compose the image on the LCD monitor screen so that the main subject is within the focus frame.
3. Press the shutter release button down halfway to focus the image.
 - When you press the shutter release button down halfway, the camera's Auto Focus feature automatically focuses the image. The focus frame turns green if the subject is in focus. Proper exposure is determined and locked at the same time.
4. Press the shutter release button the rest of the way down to capture the image.



- The actual captured image appears to be larger than the one displayed by the LCD monitor screen after the image has been captured.
- Pressing the **DISPLAY** button switches the LCD monitor display mode. Each time you press the **DISPLAY** button, the display changes in the following order: Normal Display → Information Display → No Icons → LCD Off.

Setting Image Resolution and Quality

As you get to know the digital camera, you can set the image resolution (number of vertical and horizontal pixels) and image quality (compression ratio) based on the types of images you want to shoot. These settings affect the number of images that can be stored in the internal memory, or on an SD memory card.

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:

1. Rotate the mode dial to , , , or and turn your camera on by pressing the power switch.
2. Press the **MENU** button.
 - [Menu1] is displayed.
 - In the **S** mode, [Menu] is displayed.
3. Use the four-way controller () to select [Recorded Pixels], then press the button.
4. Use the four-way controller () to select the desired setting, then press the button to confirm.
5. Follow the step 3 and 4 above to set the [Quality Level].



- The possible number of shots and recording time depend on the storage size, resolution and quality settings and the subject of the image to be captured.
- You can resize the images later. Please refer to the section in this manual titled “Resizing an Image” (EN-47) for further detail.



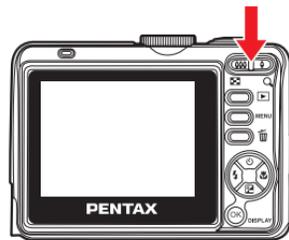
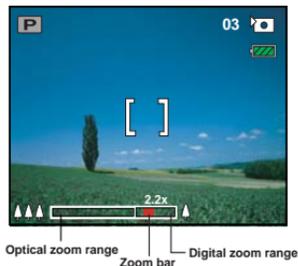
Using the Zoom Function

This camera is equipped with 3x optical zoom. The lens moves during the optical zoom photography, allowing you to capture telephoto and wide-angle shots. By using the optical zoom function; images appear closer by pressing the  button, or smaller away by pressing the .

The zoom bar indicates the current level of magnification. When the digital zoom is within 3x magnification, the zoom bar is within the optical zoom range. When the digital zoom function is set to On, you can further enlarge the subjects with 4x digital zoom by pressing continuously the  button. It is activated after your camera reaches its maximum optical zoom factor (3x) and the zoom bar is within the digital zoom area. You can enlarge the subject to a maximum magnification equivalent to 12 times. A useful feature as it is, however, the more the image is enlarged, the more pixelated the image will appear.

To capture a zoomed image, perform the following steps:

1. Rotate the mode dial to , , , ,  or  and turn your camera on by pressing the power switch.
2. Adjust the magnification ratio by using the  button.
 - To exit the zoom photography, press continuously the  button.
 - The status of digital magnification is displayed on the LCD monitor.
3. Compose your scene and press the shutter release button.



- To enable digital zoom feature, set the [Menu2- Digital Zoom] to [On] in the , , , ,  or  mode. (Refer to EN-71 for further details).

Using the Flash

The flash is designed to function automatically when lighting conditions warrant the use of flash. You can take an image using a desired flash mode to suit your circumstances.

1. Rotate the mode dial to **S**, **P**, **A**, **M**, **S&L** or **Fn**.
2. Press the power switch to turn on the power.
3. Press the four-way controller (◀/⚡). The flash mode changes each time the button is pressed. You can also change the setting using the four-way controller (▲▼).
4. Press the **OK** button to confirm the setting.
5. Compose your scene and press the shutter release button.



The camera has four flash modes: Auto, Auto + Red-eye, Flash on and Flash off.

The table below will help you to choose the appropriate flash mode:

Flash mode	Description
⚡A Auto	The flash fires automatically according to the photographic conditions.
⚡A Auto + Red-eye	Use this mode to reduce the red-eye phenomenon when you want to take natural-looking photographs of people and animals in low-light conditions. When taking photographs, the red-eye phenomenon can be reduced by asking the subject (person) to look at the digital camera or get as close to the digital camera as possible.
⚡ Flash On	The flash will always fire regardless of the surrounding brightness.
⚡/ Flash Off	The flash will not discharge, regardless of the brightness. Use this mode when taking pictures using indoor lighting, for stages and indoor competitions, and when the subject is too far away for the flash to be effective.

Setting Focus

Images can be captured with the focus determined automatically using auto focus. You may over-ride the auto focus and specify [M] macro or [∞] infinity.

1. Rotate the mode dial to **S**, **P**, **A**, **M**, **S&** or **A**.
2. Press the power switch to turn on the power.
3. Press the four-way controller (▶/⬆). The focus mode changes each time the button is pressed. You can also change the setting using four-way controller (▲▼).
4. Press the **OK** button to confirm the setting.
5. Compose your scene and press the shutter release button.

The camera has three focus modes: Standard, Macro and Infinity.

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



Focus mode	Description
Std. Standard	Select Standard-focus setting for most occasions when you want the camera to automatically determine the focus setting. When using Standard-focus setting, any object at a range of focus is 50 cm or greater can be in focus.
 Macro	Select Macro-focus setting to capture close-up images. When the lens is zoomed to its widest position you may focus objects as close as 5 cm. When the lens is zoomed to its telephoto position (3x zoom) you may focus objects as close as 35 cm.
 Infinity	Select Infinity-focus setting when you want to capture images of subject at a distance of infinity. The flash mode will be set to Flash Off automatically.

DRIVE MODE

High Speed Continuous

This mode is used for continuous shooting. 3 pictures are taken continuously once the shutter release button is pressed. Secure the camera to a tripod or place it on a stable surface.

1. Rotate the mode dial to **S**, **P**, **A**, **M**, **S&** or **A+**.
2. Press the power switch to turn on the power.
3. Press the four-way controller (▲/☺) and use (▲) to select [High Speed Continuous]. You can also change the setting using four-way controller (◀▶).
4. Press the **OK** button to confirm the setting. The  indicator is displayed on the monitor screen.
5. Press the shutter release button halfway to lock the focus.
6. Press the shutter release button to capture a sequence of images.



- In High Speed Continuous mode, the flash mode will be set to **Flash Off** automatically.

Auto Bracket

In this mode, the camera automatically changes the exposure within a set range to take three shots after you press the shutter release button once. Auto Bracket settings can be combined with exposure compensation settings to extend the adjustment range.

1. Rotate the mode dial to **S**, **P**, **A**, **M**, **S&L** or **Fn**.
2. Press the power switch to turn on the power.
3. Press the four-way controller (▲/☺) and use (▲) to select [Auto Bracket]. You can also change the setting using the four-way controller (◀▶).
4. Press the **OK** button to confirm the setting. The  indicator is displayed on the LCD monitor screen.
5. Press the shutter release button to capture the three images.



- In Auto Bracket mode, the flash mode will be set to **Flash Off** automatically.

Self-Timer

The self-timer can be used in situations such as group shots. When using this option, you should either mount the camera on a tripod (recommended) or rest it on a flat, level surface.

1. Secure the camera to a tripod or place it on a stable surface.
2. Rotate the mode dial to **S**, **P**, **A**, **M**, **S&L** or **A/S**.
3. Press the power switch to turn on the power.
4. Press the four-way controller (**▲/☺**) and use (**▲**) to select your desired self-timer mode. You can also change the setting using four-way controller (**◀▶**).
5. Press the **OK** button to confirm the setting.
6. Compose your scene and press the shutter release button.
 - The self-timer function is activated.
 - The photograph is then taken after the preset time.
 - To cancel the self-timer at any time, press the four-way controller (**▲/☺**) or press the shutter release button halfway.



The table below will help you choose the appropriate self-timer mode:

Self-timer mode	Description
 2 sec. Self-timer	The image is captured about 2 seconds after the shutter is pressed. This mode is useful for preventing camera shake.
 10 sec. Self-timer	The image is captured about 10 seconds after the shutter is pressed. This mode is suitable for the shots in which the photographer has to be included.
 10+2 sec. Self-timer	The first image is captured about 10 seconds after the shutter release button is pressed, and then the second image is captured 2 seconds later. This mode is convenient when capturing group images in succession. Flash does not fire in this mode.

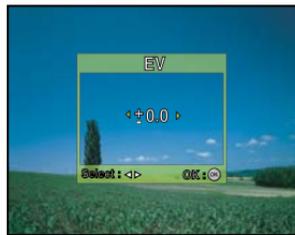


-
- After one shot is taken, the self-timer mode is turned off.
 - If you wish to take another image using the self-timer, repeat these steps.

Adjusting the Exposure (EV Compensation)

You can manually adjust the exposure determined by the digital camera. Use this mode when the proper exposure cannot be obtained, for example, when the contrast (difference between bright and dark areas) between the subject and the background is extremely high. The EV compensation value can be set in the range from -2.0EV to +2.0EV.

1. Rotate the mode dial to , , , , or .
2. Press the power switch to turn on the power.
3. Press the four-way controller (/) and use   to set the range of EV compensation value from -2.0EV to +2.0EV.
4. Press the  button to confirm the setting.



Setting White Balance

This feature lets you make adjustments to compensate for different lighting types according to your shooting conditions.

1. Rotate the mode dial to , , ,  or .
2. Press the power switch to turn on the power.
3. Press the **MENU** button. [Menu1] is displayed.
4. Use the four-way controller () to select [White Balance], then press the  button.
5. Use the four-way controller () to select the desired white balance setting, then press the  button to confirm.
6. To cancel the setting, press the **MENU** button and exit the menu.

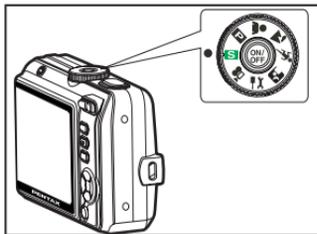


USING THE MODE DIAL

Simple Mode [S]

S (Simple) mode is the simplest way which allows you to take still pictures without having to set special functions or manual adjustments. The camera sets the optimal focusing and exposure.

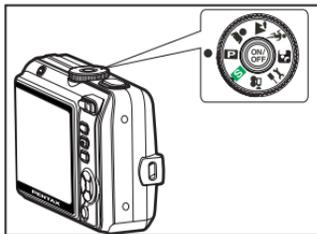
1. Rotate the mode dial to **S** and turn your camera on by pressing the power switch.
2. Compose your subject within the focus frame.
3. Press the shutter release button down halfway to focus the image.
 - When you press the shutter release button down halfway, the camera's Auto Focus feature automatically focuses the image. Proper exposure is determined and locked at the same time.
4. Press the shutter release button the rest of the way down to capture the image.



Program Mode [P]

In the **P** (Program) mode, the camera automatically sets the shutter speed and aperture for taking still images. You can adjust other functions, such as flash mode or continuous shooting mode.

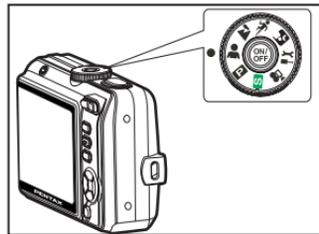
1. Rotate the mode dial to **P** and turn your camera on by pressing the power switch.
2. Compose your subject within the focus frame.
3. Press the shutter release button to capture the image.



Portrait Mode []

Select this mode to make people stand out with the background out-of-focus.

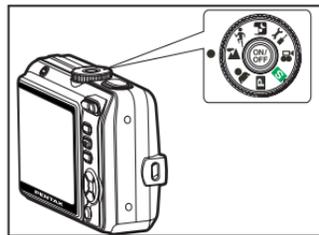
1. Rotate the mode dial to  and turn your camera on by pressing the power switch.
2. Compose your subject within the focus frame.
3. Press the shutter release button to capture the image.



Landscape Mode []

This mode allows you to take photographs of distant scenery or landscapes.

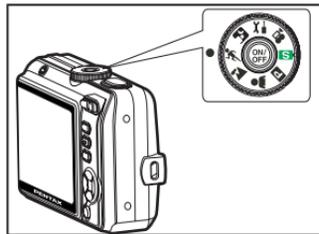
1. Rotate the mode dial to  and turn your camera on by pressing the power switch.
2. Compose your subject within the focus frame.
3. Press the shutter release button to capture the image.



Sport Mode []

This mode allows you to shoot fast moving objects.

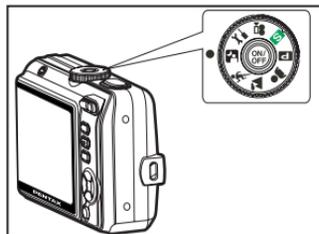
1. Rotate the mode dial to  and turn your camera on by pressing the power switch.
2. Compose your subject within the focus frame.
3. Press the shutter release button to capture the image.



Night Scene Mode []

This mode allows you to take photographs of people against a dusk or night-time background.

1. Rotate the mode dial to  and turn your camera on by pressing the power switch.
2. Compose your subject within the focus frame.
3. Press the shutter release button to capture the image.



PLAYBACK MODE - THE BASICS

Viewing Images

You can display the still images one by one.

1. Rotate the mode dial to **S**, **P**, **A**, **M**, **Av**, **Sv** or **Mv** and turn your camera on by pressing the power switch.
2. Press the **▶** button.
 - The last recorded image appears on the LCD monitor screen.
 - Basic information is shown by indicators on the LCD monitor screen. To see full information display, press the **Ⓢ/DISPLAY** button.
3. Use the four-way controller (**◀▶**) to select the desired images.
 - To view the previous image, press the four-way controller (**◀**).
 - To view the next image, press the four-way controller (**▶**).



- For protected images/movie clips, **Ⓢ** mark will be displayed. Refer to the section in this manual titled “**Protecting Images/Movie Clips**” (EN-52) for further details.
- For images selected for printing with DPOF setting, **Ⓢ** mark will be displayed. (Refer to the section in this manual titled “**Setting the DPOF**” (EN-53, 54) for further details.)
- If there is no image stored in the internal memory or on the SD memory card, [No image] message will appear on the LCD monitor screen.
- You cannot enter the Playback mode from the Setup mode.

Magnifying Images

While reviewing your images, you may enlarge a selected portion of an image. This magnification allows you to view fine details. The zoom factor displayed on the screen shows the current magnification ratio.

1. Press the  button.
 - The last recorded image appears on the LCD monitor screen.
 - To view the previous image, press the four-way controller (◀).
 - To view the next image, press the four-way controller (▶).
2. Adjust the zoom ratio by using the /  button.
 - To enlarge the selected image, press the  button.
 - To return to the normal image, press the  button.
 - The magnification factor is displayed on the LCD monitor screen.
3. To view different portions of the images, press the four-way controller (▲▼◀▶) to adjust the display area.



- The magnification factors range from 1.5X to 4X (within 6 stages: 1.5X, 2.0X, 2.5X, 3.0X, 3.5X and 4.0X).

Thumbnail Display

This function allows you to view 9 thumbnail images on the LCD monitor screen simultaneously so you may search for a particular image.

1. Press the  button.
 - The last recorded image appears on the LCD monitor screen.
2. Press the  button once.
 - Nine thumbnail images are displayed simultaneously.
 - For recorded movie clips, the  movie mode icon will be displayed.
 - For protected images/movie clips,  mark will be displayed.
(Refer to the section in this manual titled “**Protecting Images/ Movie Clips**” (EN-52) for further details.)
3. Use the four-way controller (   ) to move the cursor to select the image to be displayed at regular size.
4. Press the  or  button to display the selected image on full screen.



Slideshow Display

The slideshow function enables you to play your images back automatically in sequential order. This is very useful and entertaining feature for reviewing recorded images and for presentations.

1. Press the  button.
 - The last recorded image appears on the LCD monitor screen.
2. Press the **MENU** button to access the Playback menu. Then use the four-way controller () to select [Slideshow] and press the  button.
 3. Use the four-way controller ( ) to set the playback interval, then press the  button.
 - The slideshow starts.
 - The movie clips display the first frame image, and the movie is not played back.
 - To stop slide show, press the  button.



- You can adjust the slideshow display interval within the range of 3 sec., 5 sec., 10 sec..

Resizing an Image

You can change the image size of a captured image to one of the following sizes: 2272 x 1704 pixel, 1600 x 1200 pixel and 640 x 480 pixel.

1. Press the  button.
 - The last recorded image appears on the LCD monitor screen.
2. In the  mode, use the four-way controller () to select the desired images.
 - To view the previous image, press the four-way controller ().
 - To view the next image, press the four-way controller ().
3. Press the **MENU** button to access the Playback menu. Press the four-way controller () to select [Playback2] and press () to select [Resize] and press the  button.
4. Use the four-way controller () to select the desired setting, then press the  button to confirm.



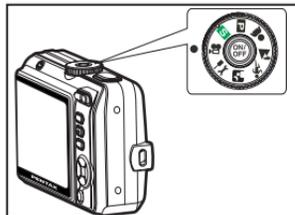
- You can only choose a smaller size image; you cannot increase the resolution of an image.
- Movie cannot be resized.

MOVIE MODE

Recording Movie Clips

This mode allows you to record movie clips with sound via built-in microphone.

1. Rotate the mode dial to  and turn your camera on by pressing the power switch.
2. Press the shutter release button to start recording.
3. To stop recording, press the shutter release button again.



- The optical zoom function (3X) can be activated before you start recording the movie clips
- The digital zoom function can be activated before and during the recording.
- Pressing the /DISPLAY button switches the LCD monitor screen display mode. Each time you press the /DISPLAY button, the display changes in the following order: Normal Display → No Icons → LCD Off.

Playing Back Movie Clips

You can play back the recorded movie clips on the LCD monitor screen. However, the sound recorded with movie clips can only be played back on a TV or on a computer.

1. Press the  button.
2. Use the four-way controller ( ) to go through the images until the movie clip you want to play back is displayed.
 - To view the previous image, press the four-way controller ().
 - To view the next image, press the four-way controller ().
3. Press the  button to start playing back the movie clips.
 - To pause or resume movie playback, press the  button again.



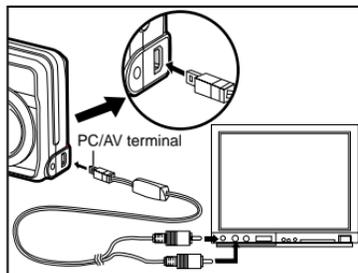
- The index number, date and time indicators displayed on the LCD monitor screen will disappear after a few seconds.
- The zoom function cannot be activated when playing back movie clips.
- To playback the movie clips on the computer, we recommend you to use Windows Media Player 9.0 or later (WMP 9.0 or later). You can download WMP version from the website at www.microsoft.com.

PLAYBACK MODE - ADVANCED FEATURES

Playing Back Still Images/Movie Clips on TV

You can also playback your images on a TV screen. Before connecting to any device, make sure to select NTSC/PAL system to match the video output system of the video equipment you are going to connect to the digital camera, then turn off all devices to be connected.

1. Connect one end of the AV cable to the AV terminal of the digital camera.
2. Connect the other end to the AV input socket of the TV set.
3. Turn the TV and digital camera on.
4. Playback the images/movie clips.
 - The method of operation is the same as playing back still images and movie clips on the digital camera.

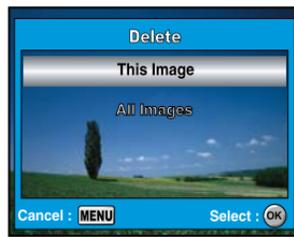


- The sound recorded with movie clips can only be played back on a TV or on a computer.

Deleting Images/Movie Clips

Use this function to delete one or all images/movie clips stored in SD memory card or the internal memory. Please note that the deleted images or movie clips cannot be recovered. Exercise caution before deleting a file.

1. Rotate the mode dial to , , , , , or and turn your camera on by pressing the power switch.
2. Press the button.
 - The last recorded image/movie clip appears on the LCD monitor screen.
3. Use the four-way controller () to select the image/movie clip you want to delete.
4. Press the button to delete.
5. Use the four-way controller () to select [This Image] or [All Images] by your preference, then press the button.
6. When the delete message appears, use the four-way controller () to select [OK], then press the button to confirm the deletion.
 - If you wish to cancel the deletion, select [Cancel].



- Protected images cannot be deleted with the delete function.

Protecting Images/Movie Clips

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

1. Press the  button.
 - The last recorded image appears on the LCD monitor screen.
2. In the  mode, use the four-way controller ( ) to select the desired images.
 - To view the previous image, press the four-way controller (.
 - To view the next image, press the four-way controller (.
3. Press the **MENU** button, then use the four-way controller () to select [Protect] and press the  button.
4. Use the four-way controller ( ) to choose the desired setting, then press the  button.
 - [This Image]: Protect one image/movie.
 - [All Images]: Protect all images/movies (at once).
5. Use the four-way controller ( ) to select [Protect], then press the  button to confirm.
 - Press the **MENU** button to return to the  mode. The  indicator appears on the selected image.
 - If you wish to cancel the protect function of a protected image, select [Unprotect].



Setting the DPOF

DPOF (Digital Print Order Format) allows you to embed printing information on your SD memory card. By using DPOF, you can select an image to be printed and then specify how many prints or which image you would like. Take your SD memory card to a DPOF enabled printer that accepts SD memory cards. The DPOF/card-compatible printer will read the embedded information on the SD memory card and print your images as specified.

To configure print settings for a single image / all images.

1. Press the  button, then use the four-way controller () to select the desired image you want to print.
2. Press the **MENU** button. Use the four-way controller () to select [DPOF], then press the  button.
3. Use the four-way controller () to select by your preference, then press the  button.
[This Image]: To configure print settings for a single image.
[All Images]: To configure print settings for all images.
[Reset All]: Resets all DPOF settings.



4. Use the four-way controller (▲▼) to select by your preference, then press the **OK** button.
 [Copies]: Allows you to select image quantity (0~10). Use the four-way controller (◀▶) to set the image quantity.
 [Date]: The date of recording can be printed directly on the images. Select [With] or [Without] with the four-way controller (◀▶).
5. Press the **MENU** button to return to the image playback mode.
 - The print icon  is marked on the displayed image.
 - To cancel the DPOF settings for a single image, go back to step 3 to select [This Image] and select 0 in [Copies] in the next step. For resetting all the DPOF settings, go back to step 3 to select [Reset All].



- Before you perform the DPOF settings on your camera, always remember to copy your images from the internal memory to an SD memory card first.
- The  print icon will appear on the LCD monitor screen indicating images selected for printing.
- You cannot print movies.
- Depending on the printer or printing equipment at the photo processing lab., the date may not be imprinted on the pictures even if the DPOF settings are made.



Connecting to a PictBridge-Compatible Printer

Even if you do not have a computer, you can connect the camera directly to a printer that supports PictBridge to perform image selection and printing using the camera screen and controls. DPOF support also lets you specify which images you want to print and how many copies of each should be printed.

Connecting the camera to the printer

1. Rotate the mode dial to  and turn your camera on by pressing the power switch.
2. Press the four-way controller (▶) to select the [Set-up2] menu, then use the four-way controller (▼) to select [USB Con.]. Press the  button.
3. Use the four-way controller (▲▼) to select [PictBridge], then press the  button.
4. Connect your camera and the printer via a supplied USB cable.
 - The message "Data being processed" will appear on the on the LCD monitor screen.



- On Windows 98/98SE/ME/2000, if the camera is connected to your computer and you unintentionally set the camera's USB connection to PictBridge, the "Install Driver" message will appear. Ignore this message and click "Cancel".

Printing images

When the camera is properly connected to a PictBridge-compatible printer, the [Select Printing Mode] screen is displayed on the LCD monitor screen. Use the four-way controller (▲▼) to select the print mode.

In [Print] Mode:

Lets you print the specified image with PictBridge.

1. Use the four-way controller (▲▼) to select the [Print] mode, then press the  button.
2. Use the four-way controller (◀▶) to select the image you want to print, then press the four-way controller (▼) to set more detailed settings.
3. Use the four-way controller (▲▼) to select by your preference, then press the  button.
[Copies]: Specifies the number of prints. You can select the number up to 10.
[Date]: If you select [With], images are printed with the date.
[File Name]: If you select [With], images are printed with the file name.



4. After Print Setting is set, the print icon  is marked on the displayed image. You can still use the four-way controller (◀▶) to change the image by your preference, then press the  button to print.

5. Use the four-way controller (▲▼) to access the paper selection setting, then press the  button to confirm.

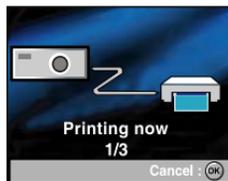
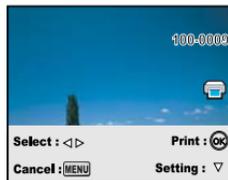
[Paper Size]: You may select the desired item depending on the type of printer being used.

[Border status]: You may select the desired item depending on the type of printer being used.

6. This starts printing and displays the message “Printing now” on the LCD monitor screen. The message will disappear after the printing is finished. Then the screen returns to [Select Printing Mode].

■ To cancel printing:

Pressing the  button during print data transfer displays the screen for selecting whether to [Continue] or [Cancel] printing.



In [Print All] Mode:

Lets you print all images with PictBridge.

1. If you wish to print all the images stored in the camera, you may choose [Print All] in [Select Printing Mode].
2. To set Print Settings, follow steps 2 to 6 in [Print] Mode.(EN-56)



In [DPOF AUTOPRINT] Mode:

This function only lets you print the specified image based on the previous DPOF settings.

1. If you wish to print images with DPOF setting, you may choose [DPOF AUTOPRINT] in [Select Printing Mode].
2. To set Print Settings, follow steps 2 to 6 in [Print] Mode.(EN-56)



- When connecting a printer which is not compatible with DPOF, [DPOF AUTOPRINT] cannot be selected.

TRANSFERRING FILES FROM YOUR DIGITAL CAMERA TO COMPUTER

For transferring files to PC, you can use either the provided USB cable or a card reader. When using the USB cable, installing the supplied USB driver is necessary for Windows 98/98SE for users.

EDITING SOFTWARE REQUIREMENTS

The supplied software (ACDSee for PENTAX) is needed to be installed on your computer to view transferred images.

Check the system requirements below before installing the software.

	Windows	Macintosh
OS	Windows 98SE/Me/NT/2000/XP	Mac OS 9.2 or later
CPU	Pentium or later (Pentium III 500MHz or later)	PowerPC 266MHz or later
Memory	64MB or more (128MB or more)	8MB or more
HDD volume	40MB or more (50MB or more)	6MB or more
Other	Requires CD-ROM drive, Internet Explorer 5.0 or later, Quick Time 6* or later, DirectX 9.0 or later, and Windows Media Player 7.1 or later.	Requires CD-ROM drive and QuickTime 6.0 (and the latest version of CarbonLib if using OS 9.2).

- OS should be pre-installed and updated to the latest version.
- Working status is not guaranteed for all qualifying PCs.
- Figures within parenthesis above represent the minimum system requirements for using the "ACD Showtime! for PENTAX".
- "ACD Showtime! for PENTAX" is compatible with Windows only.
- * QuickTime 7 available on the provided CD (S-SW47) cannot be installed on Windows OS other than 2000/XP. QuickTime 6 is required to see QuickTime-compatible movies on Windows 98/98SE/Me/NT. You can download QuickTime 6 from the web site at www.apple.com.

Step I: Install the USB driver

■ Installation on Windows 98 & 98SE

The USB driver on the supplied CD-ROM (S-SW47) is exclusively for Windows 98 and 98SE. Windows 2000/ME/XP users don't need to install the USB driver.

1. Insert the enclosed CD-ROM (S-SW47) into your CD-ROM drive.
2. Connect the camera to the PC with the USB cable.
3. The **"Add New Hardware Wizard"** will appear on screen as shown on the right. Click on "Next".

4. Select "Search for the best driver for your device". Click on "Next".

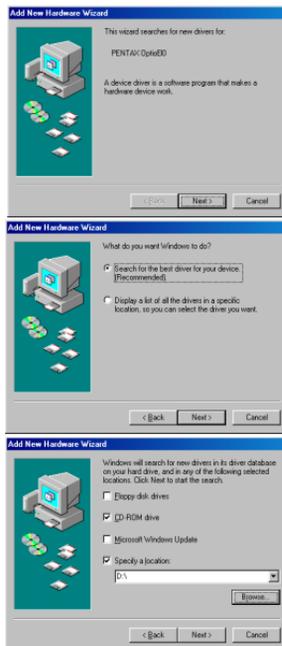
5. Select "CD-ROM drive" and "Specify a location" as shown on the right. Click on "Next".

Follow the on-screen instructions to complete the installation.

6. After the USB driver has been installed, restart your computer.

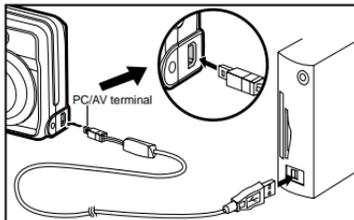
■ Installation on MAC OS 9.2

For Mac OS 9.2 or higher, the computer will automatically recognize the digital camera and load its own USB drivers.



Step 2: Connect the digital camera to your computer

1. Rotate the mode dial to  and turn your camera on by pressing the power switch.
2. Press the four-way controller (▶) to select the [Set-up2] menu, then use the four-way controller (▼) to select [USB Con.].
3. Press the  button.
4. Use the four-way controller (▼) to select [PC], then press the  button.
5. Turn off your camera.
6. Connect your camera and the computer via the supplied USB cable.
7. Turn your camera on by pressing the power switch.
8. There will be a new "Removable Disk" icon detected in "My Computer", which contains your recorded images or movie clips. (For Mac users, double-click [untitled] or [unlabeled] disk drive icon on our desktop.)



Step 3: Download images or movie clips

When the digital camera is turned on and connected to your computer, it is considered to be a disk drive, just like a floppy disk or CD. You can download (transfer) images by copying them from the “Removable disk” (“untitled” or “unlabeled” disk on a Macintosh) to your computer hard drive.

■ Windows

Open the “removable disk” and double click on the DCIM folder to open it to find more folders. Your images are inside these folder(s). Select the desired still images or movie clips and then choose “Copy” from the “Edit” menu. Open the destination location (folder) and choose “Paste” from the “Edit” menu. You may also drag and drop image files from the digital camera to a desired location.

■ Macintosh

Open the “untitled” disk icon, and the destination location on your hard disk. Drag and drop from the digital camera to the desired destination.



-
- SD memory card users may prefer to use an SD memory card reader (highly recommended).

EDITING SOFTWARE INSTALLATION

Installing ACDSee for PENTAX

With ACDSee for PENTAX, you can find, organize, and preview images and media files on your computer, and efficiently acquire images from digital cameras, scanners, and other devices. ACDSee for PENTAX's full-featured image viewer and media player quickly generates high-quality displays of your images and media files.

Also, ACDSee for PENTAX includes a wide variety of image editing tools you can use to create, edit, and touch-up your digital images. Use tools such as red-eye reduction, crop, sharpen, blur, and emboss to enhance or correct your images. Image management tools, such as exposure adjustment, convert, resize, rename, and rotate, can be used to adjust multiple files at the same time.

1. Insert the enclosed CD-ROM (S-SW47) into your CD-ROM drive.
2. When the welcome screen appears, select "**Application Software**".
3. Select the desired language.

Follow the on-screen instructions to complete the installation.



- For more information about the operation of ACDSee for PENTAX application software, refer to its respective help documentation.
- For Windows 2000/XP users, please make sure to install and use the ACDSee for PENTAX in "Administrator" mode.



USING THE DIGITAL CAMERA AS A PC CAMERA

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

- Microphone
- Sound card
- Speakers or headphones
- Network or Internet connection



- Video conferencing software is not included with the digital camera.
- This mode is not supported for Mac.

Step 1: Install the PC camera driver

The PC-camera driver included in the CD-ROM (S-SW47) is exclusively for Windows. The PC camera function is not supported for Mac platforms.

1. Insert the enclosed CD-ROM (S-SW47) into your CD-ROM drive.
2. When the welcome screen appears, select "**PC Camera Driver**".
3. Select the desired language.

Follow the on-screen instructions to complete the installation.

4. After the driver installation is completed, restart your computer.



Step 2: Connect the digital camera to your computer

1. Rotate the mode dial to  and turn your camera on by pressing the power switch.
2. Press the four-way controller (▶) to select the [Set-up2] menu, then use the four-way controller (▼) to select [USB Con.].
3. Press the  button.
4. Use the four-way controller (▲▼) to select [PC Camera], then press the  button.
5. Connect your camera and the computer via the supplied USB cable.
6. Position the digital camera steadily on top of your computer monitor or use a tripod.



Step 3: Run your application software (i.e. Windows NetMeeting)

To use Windows NetMeeting for videoconferencing:

1. Go to **Start → Programs → Accessories → Communications → NetMeeting** to launch the NetMeeting program.
2. Click the Start Video button to view live video.
3. Click the Place Call button.
4. Type the e-mail address or the network address of the computer that you are calling.
5. Click Call. The person that you are calling must also have Windows NetMeeting running and be willing to accept your call to start the videoconference.



-
- The video resolution for videoconferencing applications is generally 320 x 240.
 - For more information about the operation of videoconference application software, refer to its respective help documentation.
 - Use of AC adapter is recommended while the camera is used as a PC camera.

MENU OPTIONS

Camera Menu

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



1. Rotate the mode dial to **S**, **P**, **A**, **M**, **S&L** or **Fn** and turn your camera on.
2. Press the **MENU** button, then use the four-way controller (◀▶) to select the [Menu1] / [Menu2] / [Menu3] menu.
 - In **S** Mode, press the **MENU** button to access the [Menu] menu directly.
3. Use the four-way controller (▲▼) to select the option item, then press the **OK** button.
4. Press the four-way controller (▲▼) to select the desired setting, then press the **OK** button.

■ In the **S** Mode

Item	Functional Description
<p>Recorded Pixels</p> 	<p>Sets the size of the image that will be captured. Refer to the section in this manual titled "Setting Image Resolution and Quality" (EN-30) for further details.</p> <ul style="list-style-type: none">  2816x2112  2272x1704  1600x1200  640x480
<p>Quality Level</p> 	<p>Sets the quality (compression rate) at which the image is captured. Refer to the section in this manual titled "Setting Image Resolution and Quality" (EN-30) for further details.</p> <ul style="list-style-type: none">  Best  Better  Good

■ In the , , ,  or  Mode.

■ **Menu1 settings**

Item	Functional Description
Recorded Pixels 	Refer to the section in this manual titled “ Setting Image Resolution and Quality ” (EN-30) for further details.
Quality Level 	Refer to the section in this manual titled “ Setting Image Resolution and Quality ” (EN-30) for further details.
White Balance 	Sets the white balance when shooting under a variety of lighting conditions and permits photographs to be taken that approach the conditions that are seen by the human eye. AWB Auto  Daylight  Cloudy  Tungsten Light  Fluorescent Light
Sensitivity 	Sets the sensitivity for taking pictures. When the sensitivity is raised (and the ISO figure is increased), photography will become possible even in dark locations, but the more pixelated (grainier) the image will appear. Auto / 64 / 100 / 200

■ Menu2 settings

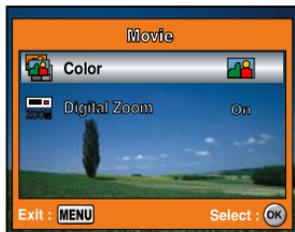
Item	Functional Description
<p>AE Metering</p> 	<p>You can select the metering mode that sets which part of the subject to measure to determine the exposure.</p> <ul style="list-style-type: none"><input checked="" type="checkbox"/> Center-weighted: Averages the light metered from the entire frame, but gives greater weight to the subject matter at the center.<input type="checkbox"/> Spot: The exposure is determined by the small area in the center of the screen only.
<p>Digital Zoom</p> 	<p>This sets whether or not to use digital zoom at the time of shooting. Refer to the section in this manual titled “Using the Zoom Function” (EN-31) for further details.</p>
<p>Instant Review</p> 	<p>Set to display a photographed image on LCD monitor screen immediately after you have taken the shot.</p>

■ Menu3 settings

Item	Functional Description
Color 	Sets the color of the image that will be captured.  Full Color  B&W  Sepia
Sharpness 	Sets the level of image sharpness.  High  Medium  Low
Saturation 	To capture an image, your camera offers you three different degrees of color to match with your preference. Your images will demonstrate different impression by selecting different degrees of color. This is called "Saturation".  High  Medium  Low
Date Imprint 	The date of recording can be printed directly on the still images. This function must be activated before the image is captured. The date appears on the right bottom of the captured picture. When images are shot with date imprint feature, the date cannot be removed later.

Movie Menu

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

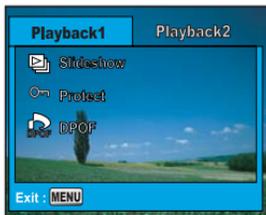


1. Rotate the mode dial to  and turn your camera on.
2. Press the **MENU** button.
3. Press the four-way controller (▲▼) to select the option item. Then press the  button
4. Press the four-way controller (▲▼) to select the desired setting, then press the  button.
5. To exit the movie menu, press the **MENU** button.

Item	Functional Description
 Color	Refer to the Camera Menu's option item (the  ,  ,  ,  or  Mode) for further details. (EN-72)
 Digital Zoom	Refer to the Camera Menu's option item (the  ,  ,  ,  or  Mode) for further details. (EN-71)

Playback Menu

In the  menu, set the settings used for playback.



1. Press the  button.
 - The last recorded image appears on the LCD monitor screen.
2. Press the **MENU** button, then use the four-way controller ( ) to select the [Playback1] / [Playback2] menu.
3. Use the four-way controller ( ) to select the option item, then press the  button.
4. Press the four-way controller ( ) to select the desired setting, then press the  button.
5. To exit the playback menu, press the **MENU** button.

■ Playback1

Item	Functional Description
<p>Slideshow</p> 	<p>You can play back recorded images in order with a selected interval time. This function is useful for checking your images or for presentations, etc. Refer to the section in this manual titled “Slideshow Display” (EN-46) for further details. 3 sec. / 5 sec. / 10 sec.</p>
<p>Protect</p> 	<p>Set the data to read-only to prevent images from being erased by mistake. Refer to the section in this manual titled “Protecting Images/Movie Clips” (EN-52) for further details.</p>
<p>DPOF</p> 	<p>Allows you to select the desired pictures to be printed and set the number of prints and whether or not to imprint the data in DPOF format. You can print images easily just by inserting the SD memory card to a DPOF-compatible printer or taking it to a print shop. Refer to the section in this manual titled “Setting the DPOF” (EN-53) for further details.</p>

■ Playback2

Item	Functional Description						
<p data-bbox="127 182 192 199">Resize</p> 	<p data-bbox="288 182 656 199">Changes the size of a recorded image.</p> <p data-bbox="288 211 1112 283">Resizing replaces the original image with the changed image. Only resizing to a smaller size is available. Refer to the section in this manual titled “Resizing an Image” (EN-47) for further details</p> <table data-bbox="303 291 454 366"><tbody><tr><td> 4.M</td><td>2272x1704</td></tr><tr><td> 2.M</td><td>1600x1200</td></tr><tr><td> 640</td><td>640x480</td></tr></tbody></table>	 4.M	2272x1704	 2.M	1600x1200	 640	640x480
 4.M	2272x1704						
 2.M	1600x1200						
 640	640x480						
<p data-bbox="127 382 274 399">Quality Change</p> 	<p data-bbox="288 382 864 399">Changes the quality (compression rate) of a recorded image.</p> <p data-bbox="288 411 1126 428">Compresses images and overwrites an old size images with a newly compressed image. Only quality changing to a lower quality level is available.</p> <ul data-bbox="309 464 404 508" style="list-style-type: none">✧ Better☆ Good						
<p data-bbox="127 527 243 544">Image Copy</p> 	<p data-bbox="288 527 1126 599">Allows you to copy your files from the digital camera's internal memory to an SD memory card. You can only do this if you have an SD memory card installed and some files in internal memory.</p>						

Setup Menu

This feature allows you to set up the default settings by preference for using your camera.



1. Rotate the mode dial to  mode and turn your camera on.
2. Press the four-way controller (◀▶) to select the [Set-up1] / [Set-up2] / [Set-up3] menu.
3. Use the four-way controller (▲▼) to select the desired option item, then press the  button.
4. To exit the setup menu, rotate the mode dial to another mode.

■ Set-up1 settings

Item	Functional Description
Format 	Erases all images and reformats the SD memory card loaded in your camera. Protected images are also erased. SD memory card cannot be formatted if it is write-protected. Refer to the section in this manual titled “ Formatting an SD Memory Card or Internal Memory ” (EN-27) for further details.
Sound 	This sets whether or not to mute the startup sound, and the camera sound each time you press a camera button. Loud / Soft / Off
Date Adjust 	This sets the date and the time. Refer to the section in this manual titled “ Setting the Date and Time ” (EN-26) for further details. d/m/y m/d/y y/m/d
Language 	Sets the language that is displayed on the LCD monitor screen. Refer to the section in this manual titled “ Choosing the Screen Language ” (EN-25) for further details. English/ Français / Español / Deutsch / Italiano / Svenska / Nederlands / Русский / 日本語 / 繁體中文

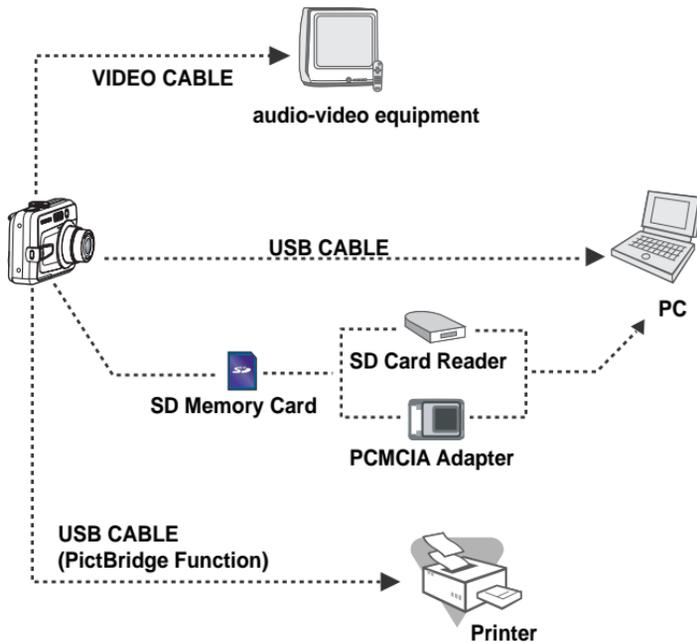
■ Set-up2 settings

Item	Functional Description
USB Con. 	Selects to choose one of the following modes for further settings. PC / PictBridge / PC Camera
Video Out 	Sets video output of the camera for matching the video output system of the equipment that you are going to connect to the camera. PAL / NTSC
Brightness 	This sets the brightness of the LCD monitor screen. The adjustment range is from -5 to +5.
Auto Power Off 	If no operation is performed for a specific period of time, the power to the camera is automatically turned off. This feature is useful to reduce battery wear. 2 min. / 3 min. / 5 min. / Off

■ Set-up3 settings

Item	Functional Description
Reset No. 	Sets whether or not to reset the file number when you take photographs. This creates a new folder. The captured images are recorded to the newly created folder from number 0001. If you want to reset the file number, be sure that no images are recorded in the internal memory or the SD memory card.
Reset 	Returns all basic settings to the digital camera's default settings. The time setting will not be reset.
Version 	This displays the current firmware version of the camera.

CONNECTING THE DIGITAL CAMERA TO OTHER DEVICES



SPECIFICATIONS

Item	Description
Image Sensor	CCD
Effective pixels	6.0 Mega pixels
Image size	Still image: 2816x 2112, 2272 x 1704, 1600 x 1200, 640 x 480 Movie clip: 320 x 240
Image quality	Still image: Best, Better, Good Movie image: Good
Recording media	Approx. 10MB internal memory SD memory card (Optional, up to 1 GB)
File format	JPEG (Exif 2.2), DCF, Motion JPEG (AVI)
Lens	F-no.: Wide-angle: 2.8 / Telephoto: 4.8 Focal length: 5.5mm-16.5mm (Equivalent to 35mm Camera: 34~102 mm)
Focus range	Normal: 0.5m to infinity Macro :0.05m to 0.4m (Wide-angle) :0.35m to 0.4m (Telephoto)
Flash effective range	Wide-angle: Approx. 0.5 m - Approx.3.4 m (at the standard output sensitivity of 200) Telephoto: Approx. 0.5 m - Approx. 2.0 m (at the standard output sensitivity of 200)
LCD monitor	2.4" TFT color LCD Approx. 110K pixels display

Item	Description
Self-timer	10 sec self-timer, 2 sec self-timer, 10+2 sec self-timer
Exposure compensation	-2.0EV~ +2.0EV (in 0.3EV increments)
White balance	Auto, Daylight, Cloudy, Tungsten, Fluorescent
ISO	Auto, 64, 100, 200
Interface	DC input terminal, PC/AV terminal
Power	2 x AA (alkaline or Ni-MH rechargeable) batteries (Two alkaline batteries allow approximately 80 shots to be taken*) (Two Ni-MH rechargeable batteries (2500mAh) allow approximately 300 shots to be taken*) AC-DC Adapter (3V/2.5A) (Optional)
Dimension	Approx. 87 x 60 x 32 mm
Weight	Approx. 130g (without batteries and SD memory card)
Others	PictBridge support, DPOF, PC-CAM support (QVGA around 20 f/s), PRINT Imaging Matching III

* Recording capacity shows approximate number of shots recorded during CIPA-compliant testing. Actual performance may vary according to operating conditions.

* Design and specifications are subject to change without notice.

APPENDIX

■ Troubleshooting Guide

Symptom	Possible causes	Solutions / Corrective Actions
Power does not turn on.	<ul style="list-style-type: none">* The battery has run out.* The battery is not oriented correctly.* The battery cover is not closed properly.* The AC adapter (optional) is disconnected.	<ul style="list-style-type: none">* Load new or fully charged battery.* Load the battery in the correct direction.* Close the battery cover correctly.* Properly connect the AC adapter.
Camera suddenly powers down.	<ul style="list-style-type: none">* The function of [Auto Power Off] in the  mode has been activated.* The battery has run out.	<ul style="list-style-type: none">* Turn the power back on and set the option of [Auto Power Off] to [Off].* Load new or fully charged battery.
Image is not captured when the shutter release button is pressed.	<ul style="list-style-type: none">* The camera is in the  or  mode.* Memory is full.	<ul style="list-style-type: none">* Rotate the mode dial to , , , ,  or .* Transfer the desired files to your computer and then delete unnecessary files, or use a different memory card.

Symptom	Possible causes	Solutions / Corrective Actions
Flash does not fire.	<ul style="list-style-type: none"> * Flash off is selected in flash mode. * 10+2 sec. Self-timer is selected in self-timer mode. * The [Drive Mode] is set to [High Speed Continuous] or [Auto Bracket]. * The camera is in the  (movie) mode. 	<ul style="list-style-type: none"> * Select a different flash mode. * Select [Standard] in the [Drive Mode]. * Switch the mode dial to another mode.
Continuous shooting is not possible.	<ul style="list-style-type: none"> * The capacity of the built-in memory or SD memory card is full. 	<ul style="list-style-type: none"> * Insert SD memory card with available space or delete unwanted images.
Cannot transfer files over a USB connection.	<ul style="list-style-type: none"> * USB cable is not connected securely. * USB driver is not installed. * Camera is turned off. 	<ul style="list-style-type: none"> * Check all connections. * Install the USB driver on your computer. * Turn on the camera.

■ Possible Number of Recordable Images

The frame counter indicates the approximate number of images that can be stored on the internal memory and the SD memory card. The number of recordable images may vary depending on the recorded subject, the capacity of the memory card, if there are files other than images or when the recording is made while switching the picture quality or resolution.

Resolution	Quality	Internal Memory	SD Memory Card					
			32MB	64MB	128MB	256MB	512MB	1GB
2816 x 2112 6M	Best	3	8	16	33	66	128	256
	Better	6	16	32	66	132	256	512
	Good	7	19	40	82	164	318	636
2272 x 1704 4M	Best	4	12	25	50	101	196	392
	Better	9	24	50	101	202	392	785
	Good	11	30	62	126	251	487	975
1600 x 1200 2M	Best	9	24	50	101	202	392	785
	Better	18	48	99	200	400	774	1550
	Good	22	61	124	252	503	974	1950
640 x 480 640	Best	54	145	297	602	1200	2324	4650
	Better	101	270	553	1118	2229	4317	8636
	Good	142	378	774	1566	3120	6044	12091

- The above data shows the standard testing results. The actual capacity varies according to the shooting conditions and settings.

■ Approximate Duration of Recording Time

The table below indicates the approximate duration of recording time depending on the capacity of the internal memory and the SD memory card.

Image size	Internal Memory	SD Memory Card					
		32MB	64MB	128MB	256MB	512MB	1GB
320 x 240	00:51	02:19	04:47	09:42	19:20	37:29	01:15:01

- The values for the recording time may vary depending on the shooting conditions and settings.
- The frame rate is 20 fps (frames per second).

WARRANTY POLICY

All PENTAX cameras purchased through authorized bona fide photographic distribution channels are guaranteed against defects of material or workmanship for a period of twelve months from date of purchase. Service will be rendered, and defective parts will be replaced without cost to you within that period, provided the equipment does not show evidence of impact, sand or liquid damage, mishandling, tampering, battery or chemical corrosion, operation contrary to operating instructions, or modification by an unauthorized repair shop. The manufacturer or its authorized representatives shall not be liable for any repair or alterations except those made with its written consent and shall not be liable for damages from delay or loss of use or from other indirect or consequential damages of any kind, whether caused by defective material or workmanship or otherwise; and it is expressly agreed that the liability of the manufacturer or its representatives under all guarantees or warranties, whether expressed or implied, is strictly limited to the replacement of parts as hereinbefore provided. No refunds will be made on repairs by non-authorized PENTAX service facilities.

Procedure during 12-month Warranty Period

Any PENTAX which proves defective during the 12-month warranty period should be returned to the dealer from whom you purchased the equipment or to the manufacturer. If there is no representative of the manufacturer in your country, send the equipment to the manufacturer, with postage prepaid. In this case, it will take a considerable length of time before the equipment can be returned to you owing to the complicated customs procedures required. If the equipment is covered by warranty, repairs will be made and parts replaced free of charge, and the equipment will be returned to you upon completion of servicing. If the equipment is not covered by warranty, regular charges of the manufacturer or of its representatives will apply. Shipping charges are to be borne by the owner.

If your PENTAX was purchased outside of the country where you wish to have it serviced during the warranty period, regular handling and servicing fees may be charged by the manufacturer's representatives in that country. Notwithstanding this, your PENTAX returned to the manufacturer will be serviced free of charge according to this procedure and warranty policy. In any case, however, shipping charges and customs clearance fees to be borne by the sender. To prove the date of your purchase when required, please keep the receipt or bills covering the purchase of your equipment for at least a year. Before sending your equipment for servicing, please make sure that you are sending it to the manufacturer's authorized representatives or their approved repair shops, unless you are sending it directly to the manufacturer. Always obtain a quotation for the service charge, and only after you accept the quoted service charge, instruct the service station to proceed with the servicing.

- * **This warranty policy does not affect the customer's statutory rights.**
- * **The local warranty policies available from PENTAX distributors in some countries can supersede this warranty policy. Therefore, we recommend that you review the warranty card supplied with your product at the time of purchase, or contact the PENTAX distributor in your country for more information and to receive a copy of the warranty policy.**



The CE Mark is a Directive conformity mark of the European Union.

Declaration of Conformity
According to 47CFR, Parts 2 and 15 for
Class B Personal Computers and Peripherals

We: PENTAX IMAGING COMPANY
A Division of PENTAX of America, Inc.
Located at: 600 12 Street, Suite 300
Golden, Colorado 80401 U.S.A.
Phone: 303-799-8000 FAX: 303-790-1131

Declare under sole responsibility that the product identified herein, complies with 47CFR Parts 2 and 15 of the FCC rules as a Class B digital device. Each product marketed is identical to the representative unit tested and found to be compliant with the standards.

Records maintained continue to reflect the equipment being produced can be expected to be within the variation accepted, due to quantity production and testing on the statistical basis as required by 47CFR §2.909. 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. The above named party is responsible for ensuring that the equipment complies with the standards of 47CFR §15.101 to §15.109.

Product Name: PENTAX Digital Still Camera
Model Number: Optio E10
Contact person: Customer Service Manager
Date and Place: January 2006, Colorado

Information on Disposal for users



1. In the European Union

If your product is marked with this symbol, it means that used electrical/electronic products should not be mixed with general household waste. There exists a separate collection system for these products.

Used electric/electronic equipment must be treated separately and in accordance with legislation that requires proper treatment, recovery and recycling of these products.

Following the implementation by member states, private households within the EU states may return their used electrical/electronic equipments to designated collection facilities free of charge*. In some countries your local retailer 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.

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/electronic equipment can be returned free of charge to the dealer, even when you don't purchase a new product. Further collection facilities are listed on the home page of www.swico.ch or www.sens.ch.