

EPSON®

English

EPSON PhotoPC™ L-410

User's Guide

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of Seiko Epson Corporation. The information contained herein is designed only for use with this Epson product. Epson is not responsible for any use of this information as applied to other products.

Neither Seiko Epson Corporation nor its affiliates shall be liable to the purchaser of this product or third parties for damages, losses, costs, or expenses incurred by the purchaser or third parties as a result of accident, misuse, or abuse of this product or unauthorized modifications, repairs, or alterations to this product, or (excluding the U.S.) failure to strictly comply with Seiko Epson Corporation's operating and maintenance instructions.

Seiko Epson Corporation shall not be liable for any damages or problems arising from the use of any options or any consumable products other than those designated as Original Epson Products or Epson Approved Products by Seiko Epson Corporation.

Seiko Epson Corporation shall not be held liable for any damage resulting from electromagnetic interference that occurs from the use of any interface cables other than those designated as Epson Approved Products by Seiko Epson Corporation.

EPSON is a registered trademark and EPSON Stylus is a trademark of Seiko Epson Corporation.

Microsoft and Windows are registered trademarks of Microsoft Corporation.

Apple and Macintosh are registered trademarks of Apple Computer, Inc.

SD is a trademark.

General Notice: Other product names used herein are for identification purposes only and may be trademarks of their respective owners. Epson disclaims any and all rights in those marks.

Copyright © 2004 by Seiko Epson Corporation, Nagano, Japan

Contents

Introduction

Main Features	7	Warnings, Cautions, and Notes	8
Safety Instructions	7		

Chapter 1 Getting Started

Unpacking Your L-410	14	Opening and closing the battery/ memory card cover	19
Camera Parts and Their Function	15	Installing the battery	20
Front/top view	15	Installing/removing the memory card	21
Bottom/rear view	16	Turning On/Off Your Camera	23
Back view	16	Making the Initial Settings	23
Functions of buttons	17	Releasing the Shutter	24
Installing the Battery and Memory Card ...	19		

Chapter 2 Taking Photos

Before Taking Photos	25	Selecting the resolution and compression	26
Camera range	25	Number of photos that can be taken	27
About the photography modes	25	Taking Photos Using the LCD Monitor ...	28

Information on the LCD monitor	29	Portrait mode	37
Taking Photos Using the Viewfinder Only	31	Setting White Balance	37
Capturing an Image in the Focus Frame . . .	32	Automatic white balance	37
Using the Optical and Digital Zoom	32	Manual white balance	38
Controlling the Flash	33	Setting Light Sensitivity	38
Using the Self Timer	34	Setting Exposure	39
Taking Photos Continuously	35	Resetting the File Numbers	40
Using Macro Mode	35	Recording Movies	40
Selecting the Scene Mode	36	Making Additional Settings	42
Normal mode	36	How to change the settings	42
Landscape mode	37	Available settings	43

Chapter 3 Viewing and Managing Your Photos

Viewing Photos with the LCD Monitor	45	Putting Photos on Your Computer	51
Viewing a slide show of your photos . . .	46	Exporting photos to a computer	52
Playing movies	46	Working with photos on a computer	52
Setting quick photo review	47		
Viewing the Properties of Photos	47		
Saving Photos in DPOF	49		
Deleting Photos	49		
Deleting a single photo	50		
Deleting all photos	50		
Deleting a group of images	50		
Formatting the memory card	51		

Chapter 4 **Using Direct Print**

Connecting Your Camera to the Printer . . .	53	Changing print settings	57
Printing Photos	54	Selecting paper size	58
Available types of paper	54	Selecting print borders	58
Printing the photo seen on the LCD monitor	54	Printing the date	58
Printing all the photos in memory	55	Printing at high speed	58
Printing selected photos	55	Using Printer Utilities	59
Album printing	56	Checking the amount of ink left	59
Printing photos taken in P.I.F. mode . . .	57	Checking the print head nozzles	59
Making Print Settings	57	Cleaning the print head nozzles	60
		Aligning the print head	60

Chapter 5 **Using PRINT Image Framer (P.I.F.)**

Taking Photos in P.I.F. Mode	61	Using the CD-ROM	63
Changing the Frames	62	Downloading from the web	63
Replacing Frames Stored in the Camera or Memory Card	63	Deleting Frames	64

Chapter 6 **Operating the Software**

Introduction	65	Finding More Information	69
System Requirements	66		
Installing the Software	67		
Starting EPSON Photo!4	68		

Chapter 7 Maintenance and Troubleshooting

Maintenance	70	Camera problems	72
Resetting your camera's defaults	70	Image problems	76
Cleaning your camera	70	Printing problems	78
Storing your camera	71	List of Error Messages	79
Problems and Solutions	72	Contacting Customer Support	83

Appendix A Appendix

Standards and Approvals	87	AC adapter (EU-37)	90
Specifications	87	Using the AC adapter	90
About Optional Accessories	90		

Glossary

Index

Introduction

Main Features

With the L-410, you can easily take, view, and print photos. The main features are described below.

- ❑ You can take technical photos with simple operations. Various settings that can be used with simple operation are preset in this camera. You can easily take the photos you want with this camera.
- ❑ The L-410 can connect directly to an Epson printer without a computer and print high quality photos.
- ❑ You can use the PRINT Image Framer (P.I.F.) function. You can select various frames stored in the L-410 and add them to your photos.
- ❑ You can catch those special moments everytime. The L-410 can take photos continuously 3 scenes per second.

Safety Instructions

Read all of these instructions before using the L-410, and keep this guide handy for later reference. Follow all warnings and instructions marked on the L-410 and the options.

Warnings, Cautions, and Notes



Warnings

must be followed carefully to avoid bodily injury.



Cautions

must be observed to avoid damage to your equipment.

Notes

contain important information and useful tips on the operation of your product.

When using the L-410

- ❑ Do not expose the L-410 to severe impact, doing so may cause malfunctions especially while the camera is operating.
- ❑ Follow all warnings and instructions marked on this product.
- ❑ Do not insert objects into the slots or openings on this product.
- ❑ Do not touch the components inside this product unless instructed to do so in the user documentation. Never force this product's components into place. Although this product is designed to be sturdy, rough handling can damage it.
- ❑ Never spill liquid onto this product.
- ❑ If this product emits unusual noises, odors, or smoke, cancel the current operation and turn it off immediately. Remove the batteries and disconnect the AC adapter from the product, then unplug the AC adapter from the power outlet. Contact our Customer Support.
- ❑ To prevent fire or electric shock, do not cover this product with a blanket or other covering that may give off a static electric shock.

- ❑ To prevent fire or electric shock, do not expose this product or its options to rain or moisture.
- ❑ To prevent fire or explosion, do not use this product where flammable or volatile gas is stored.
- ❑ Do not use this product outdoors during a thunderstorm.
- ❑ Do not use this product after moving it between extreme temperatures, which may cause condensation to form on electronic parts.
- ❑ Use only the recommended AC adapter (EU-37) for this product.

When using the battery

- ❑ If battery acid gets into your eyes or on your skin, immediately rinse the affected area thoroughly with water and seek medical treatment. If a battery is swallowed, seek medical treatment immediately.
- ❑ Use only AA-size batteries or a CR-V3 type battery for the L-410 according to the directions in the user documentation.
- ❑ Do not use the battery that comes with this product for other devices.
- ❑ To protect against short-circuiting, do not remove the outside sleeve of the battery.
- ❑ Do not handle the battery with wet hands or use it near water.
- ❑ Do not expose the battery to water or high humidity.
- ❑ Do not drop, puncture, disassemble, mutilate, or short-circuit the battery.
- ❑ Do not place the battery near or into fire or water.
- ❑ Do not use a battery that is leaking or damaged in any way.
- ❑ Keep the battery away from heat sources.

- ❑ Do not insert objects into any openings as they may touch dangerous voltage points or short-circuit components.
- ❑ Prevent the battery from coming into contact with metal objects that could short-circuit it, such as coins or keys.
- ❑ Do not use the battery if its terminals are soiled.
- ❑ Do not insert the battery into power outlets or other power sources such as car cigarette lighter sockets.
- ❑ Do not solder wires or terminals directly to the battery.
- ❑ Do not touch the battery terminals.
- ❑ Keep the battery away from open flame.
- ❑ If overheating, discoloration, or distortion occur, remove the battery from this product and do not use it.
- ❑ When using a rechargeable battery, recharge the battery after discharging it completely. To discharge the battery, play the slide show until the battery power runs out. The power save mode turns off while the slide show is playing so that the camera displays images until the battery runs out.

When storing the battery

- ❑ When not using this device for a long period, remove the battery from the product and store it separately.
- ❑ Do not store the battery where the temperature or humidity is very high.
- ❑ Store the battery out of children's reach.

When disposing of the battery

Before disposing of the battery, make sure you discharge it completely.



Warning:

- Be sure to completely cover the ends of the battery with tape to prevent combustion or explosion when disposing of it.*
- Do not dispose of the battery as ordinary refuse. Instead, dispose of it in a collection or recycle box in accordance with local laws.*

For the Netherlands users:

Do not dispose of the batteries with ordinary refuse. Instead, dispose of them as small chemical waste in accordance with local laws, and the following Dutch Government Gazette 45, KCA

Marking:



Bij dit produkt zijn batterijen geleverd. Wanneer deze leeg zijn, moet u ze niet weggooien maar inleveren als KCA.

For German users:

Do not dispose of batteries with ordinary refuse. Instead, dispose of them in a recycle box in accordance with local laws.

When using a memory card

- Only memory cards designed for the product's specifications can be used.

- ❑ The methods for using memory cards vary according to card type. Be sure to refer to the documentation included with your memory card for details.
- ❑ Turn the camera off before installing or removing the memory card.

When using the LCD monitor

- ❑ The LCD monitor on this product may contain a few small bright or dark spots. These are normal and do not mean that your LCD monitor is damaged in any way.
- ❑ If the LCD monitor on this product is damaged, consult your dealer.
- ❑ If the liquid crystal solution contained in the LCD monitor on this product leaks out and gets onto your hands, wash them thoroughly with soap and water. If it gets into your eyes, flush them immediately with water. If discomfort or vision problems remain after a thorough flushing, see a doctor immediately.
- ❑ Only use a soft, dry cloth to clean the display. Do not use liquid or chemical cleaners.

When storing, maintaining, or transporting the L-410

- ❑ Do not store this product outdoors.
- ❑ Do not store this product near water.
- ❑ Do not store this product in a location subject to high temperature or humidity.
- ❑ Do not store this product in a location subject to rapid changes in temperature or humidity.
- ❑ Do not store this product in a location subject to direct sunlight or strong light sources.
- ❑ Unplug this product from the power outlet before cleaning it. Use a damp cloth for cleaning and do not use liquid or aerosol cleaners.

- ❑ Remove the batteries from and unplug this product and refer servicing to qualified service personal under the following conditions: The power cord or plug is damaged; liquid has entered this product or its options; this product or its options have been dropped or the case is damaged; this product or its options do not operate normally or exhibit a distinct change in performance.

Safety information for United Kingdom users

The following safety information applies to the AC adapter.



Warning:

Refer to the rating plate for the voltage and check that the appliance voltage corresponds to the supply voltage.

Important:

The wires in the mains lead fitted to this appliance are colored in accordance with the following code:

Blue — Neutral

Brown — Live

As the colours of the wires in the mains lead of this appliance may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows;

The blue wire must be connected to the terminal in the plug marked with the letter N.

The brown wire must be connected to the terminal in the plug marked with the letter L.

If damage occurs to the plug, replace the cord set or consult a qualified electrician.

For United Kingdom, Hong Kong, and Singapore users

Replace fuses only with fuses of the correct size and rating.

Chapter 1

Getting Started

Unpacking Your L-410

Make sure that all of the items shown below were included in the box with your L-410.



Camera body



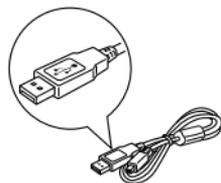
User's Guide (this guide)



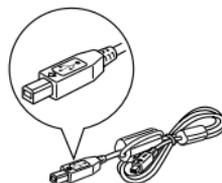
CR-V3 type battery



Software CD-ROM



PC cable

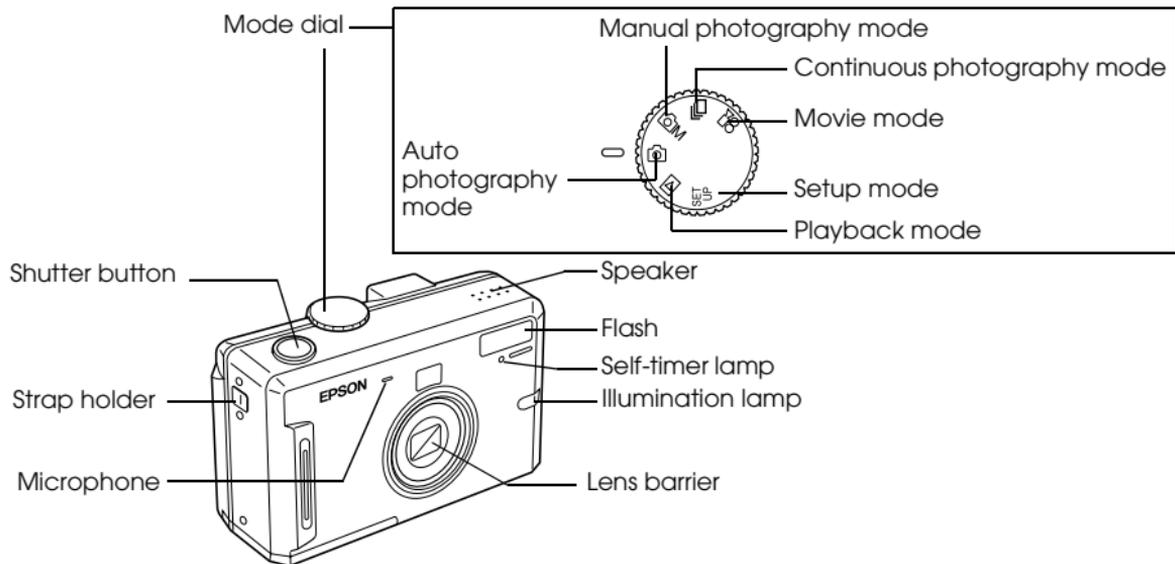


Printer cable

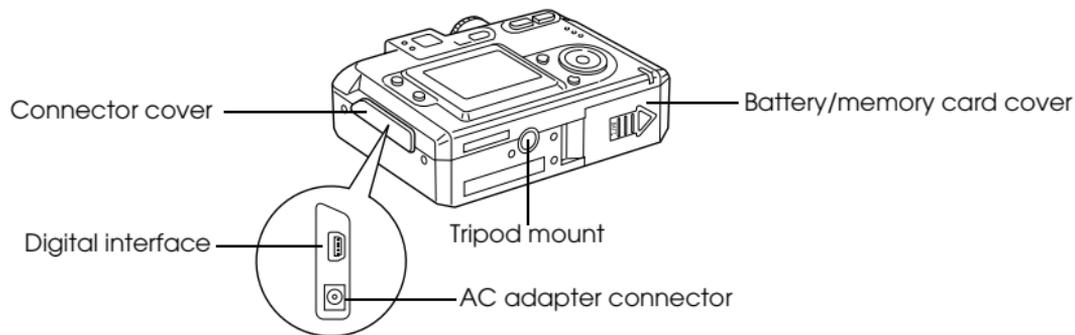
Camera Parts and Their Function

See “Functions of buttons” on page 17 for details about the functions of buttons and indicators.

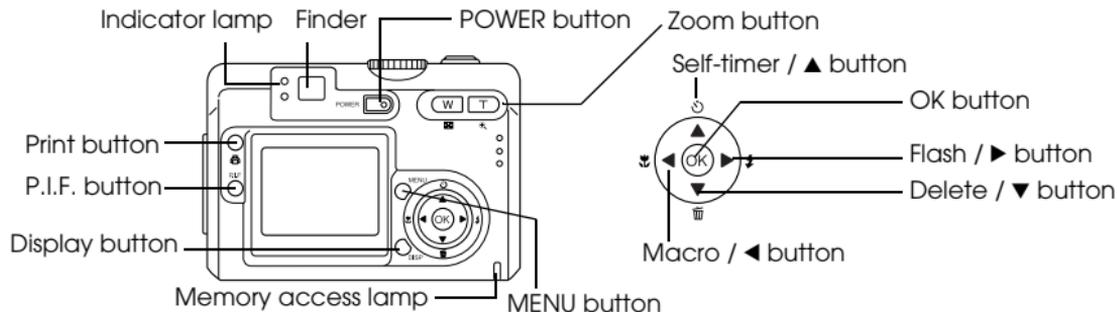
Front/top view



Bottom/rear view



Back view



Functions of buttons

Name	Function
Mode dial	Switch the camera modes by turning this dial. The modes can be switched while the camera is on.
Shutter button	Press the shutter button to take a photo.
Illumination lamp	On while the camera is on. Flashes while the camera is connected to a computer or a printer.
Two Indicator lamps	<p>Indicates the status of the camera.</p> <p>Green lamp (upper lamp) is on when the focus is locked. Green lamp flashes when:</p> <ul style="list-style-type: none"> • The camera is in the power save mode • Shooting a movie • The camera is processing the data • The camera detects the camera shake warning • The focus is not locked <p>Red lamp (lower lamp) flashes when:</p> <ul style="list-style-type: none"> • The battery power is low • The camera cannot determine the exposure setting • The memory card is full
Self-timer lamp	Flashes when taking a photo with self-timer function.
 PRINT button	Press this button to print photos using the direct print feature.

Name	Function
 P.I.F. button	Press this button to make the P.I.F. settings.
POWER button	Press this button to turn the camera on or off.
 Zoom buttons	Press this button to change the zoom.
MENU button	Displays/cancels the menu. This button does not function when taking photos in auto photography mode.
▲ button	Press to select menu items. Sets the self-timer in the auto or manual photography mode.
▼ button	Press to select menu items. Deletes the selected photo in the playback mode.
▶ button	Press to select menu items. Sets the flash mode in the auto or manual photography mode.
◀ button	Press to select menu items. Sets the Macro mode in the auto or manual photography mode.
OK button	Accepts the setting or menu items that is selected currently.
Memory access lamp	Lights while accessing the memory card or computer.
DISPLAY button	Turns the LCD monitor on or off.

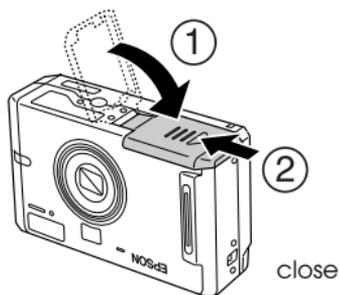
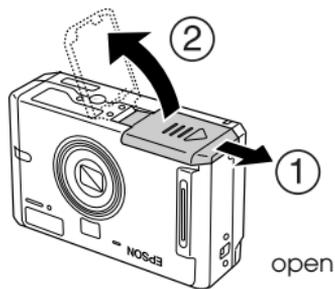
Installing the Battery and Memory Card

This section describes how to install a battery and a memory card.

Opening and closing the battery/memory card cover

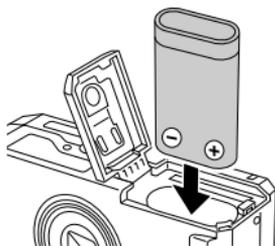
To open the battery/memory card cover, slide it and raise it.

To close the battery/memory card cover, lower it then slide it closed firmly.

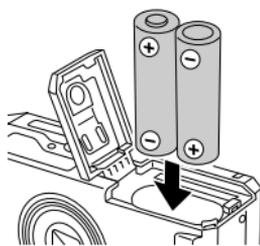


Installing the battery

Insert the battery into the compartment, positioning the + and - ends with those on the inside of the battery/memory card cover.



When installing the CR-V3 battery



When installing two AA-type batteries



Warning:

Do not carry loose batteries in your pockets.

About the battery life

As the battery loses power, the icon on the LCD monitor will change from  to . When  is flashing, the power is low and you can no longer take photos. Then the indicator lamp is red, the camera will automatically shut down. Replace the battery.

Installing/removing the memory card

You can use memory cards that are commercially available. This camera can store photos without a memory card, but when using a memory card, you can store more photos.

Available memory cards are as follows:

- ❑ SD memory card (512 MB or smaller)
- ❑ Multimedia card (MMC V 2.1 or later, made by Hitachi or SanDisk) (512 MB or smaller)

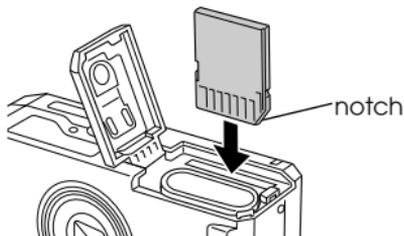


Caution:

- ❑ *Avoid using or storing the card in direct sunlight, or in places that are extremely hot, humid, or dusty.*
- ❑ *Make sure that the camera is turned off before installing the memory card.*

Installing the memory card

You can confirm the top and bottom and the front and back sides of the memory card by noting the position of the notch.



**Caution:**

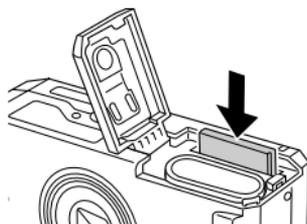
Insert memory cards in the correct orientation. Otherwise, the memory card and the L-410 may be damaged.

Note:

- Turn the camera off before installing or removing the memory card.*
- When using a new memory card, it is necessary to format the card before using it. For details, see “Formatting the memory card” on page 51.*

Removing the memory card

1. Push the memory card to release the lock. The memory card pops out.



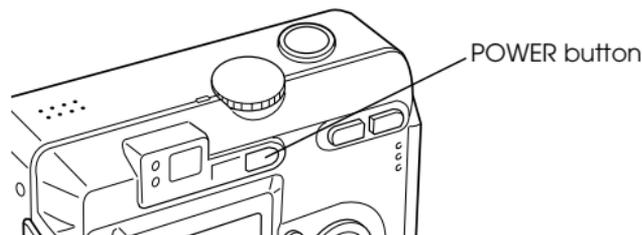
2. Pull out the memory card.

Note:

You can protect the data in the memory card by sliding the notch on the side of the memory card. However, you cannot store photos or format a write protected memory card.

Turning On/Off Your Camera

Press the POWER button once to turn on the power. The lens cover opens and the lens extends. To turn off the power, press the POWER button once. The lens retracts and the lens cover closes.



Making the Initial Settings

When you turn on the L-410 the first time, you need to set which language to use and the date and time.

Selecting a language

Select the language you want to use with the ▲ ▼ ◀ ▶ buttons, then press the OK button.

Setting the date and time

After you select the language, the Date/Time screen is displayed. Set the date and time.

Note:

- ❑ *You can change the settings later from the Setup Menu. For details, see “Making Additional Settings” on page 42.*
 - ❑ *You can also select the time format from 24 hr. and 12 hr.. 24 hr. is set as a default when you turn on your camera the first time.*
1. Press the ▲ ▼ buttons to change the value of the selected item.
 2. After you finish making settings, select a different item by pressing the ◀ ▶ buttons.
 3. Repeat steps 1 and 2 until you finish making the date and time settings, then press the OK button.

Releasing the Shutter

The shutter button has a two-step function.

Half position

When pressing the shutter button halfway, the indicator lamp (green) is on. The camera automatically sets the focus and shutter speed.

Full position

After the focus and shutter speed are set by pressing the shutter button halfway, press it completely to release the shutter. The photo is taken.

Taking Photos

Before Taking Photos

Camera range

When taking photos, you must stand more than 50 cm (19.6 inches) away from the object. In the macro mode, you can take photos in a range of 11 cm (4.3 inches) to 50 cm (19.6 inches).

About the photography modes

Auto photography mode

In this mode, the camera settings are made previously so that you can take a clear photo by just pressing the shutter button.

Manual photography mode

You can make detailed camera settings manually. It allows you to take more sophisticated photos.

Selecting the resolution and compression

You can select the quality of the photos depending on the various ways you use them. Follow the procedure below to select the resolution and compression.

Note:

- ❑ *This setting cannot be used when taking photos in the auto photography mode.*
 - ❑ *The higher the quality is set, the larger the size of the data for the photo becomes.*
1. Turn the Mode dial to M manual photography mode, then press the MENU button to display the Photography Menu.
 2. Select Quality by using the ▲ ▼ buttons, then press the OK button.
 3. Select the desired quality by using the ▲ ▼ buttons, then press the OK button.

Number of photos that can be taken

Quality	When using the SD memory card (16 MB)	When using the SD memory card (128 MB)	When using the internal memory (default)	When using the internal memory (after deleting all the data)
★★★ F2304	6	62	3	7
★★★ N2304	13	125	6	14
★★ F1600	13	129	6	15
★★ N1600	28	251	13	30
★ F640	84	710	38	88
★ N640	148	1303	71	163

Unit: sheets

* The values shown here may differ from those for SD memory cards produced by other manufacturers.

Note:

The total number of photos varies according to the quality, compression, amount of memory left on the memory card and the shooting conditions.

Taking Photos Using the LCD Monitor

You can take photos while viewing the subject on the LCD monitor.

Note:

Use the LCD monitor in the following cases:

When using the digital zoom feature.

When taking photos in the macro mode.

When taking photos in P.I.F. mode.

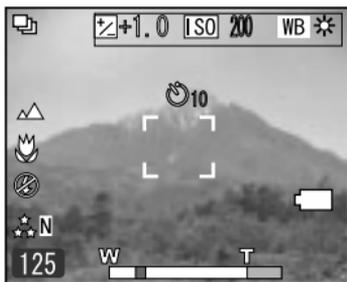
1. Turn the Mode dial to  auto photography mode or M manual photography mode.
2. Center the subject in the middle of the focus frame of the LCD monitor.
3. Press the shutter button halfway. The focus frame turns green and the focus is set.
4. Press the shutter button fully. The photo is taken.

Note:

- ❑ *The shutter sound can be heard when you press the shutter button. This sound can be changed or deleted from the Sound menu. See “Making Additional Settings” on page 42 for details.*
- ❑ *When the quick view setting is on, the photo is displayed on the LCD monitor after you take a photo.*
- ❑ *The LCD monitor may turn off when the camera enters the auto power off mode. Press any button or turn the Mode dial to turn on the LCD monitor again.*

Information on the LCD monitor

You can confirm the status of the camera settings by the icons displayed on the LCD monitor.



Self-timer	(2 seconds, 10 seconds)
Focus frame	Place the subject within the focus frame when taking photos. When pressing the shutter button halfway, the focus frame turns green. If the focus cannot be locked, the focus frame turns red. Release the shutter button and press it again.
Battery life	
Zoom bar	The digital zoom indicator appears when using digital magnification.
Scene mode	Normal mode, Landscape mode, Portrait mode

Exposure	 (+2.0 to -2.0)
Sensitivity	 (Auto, 100, 200, 400)
White balance	 (Auto,  Daylight,  Cloudy,  Incandescent,  Fluorescent,  Mercury)
Quality	 ★★★F2304,  ★★F1600,  ★F640,  ★★★N2304,  ★★N1600,  ★N640
Macro mode	 Macro
Flash	 Auto-flash,  Flash off,  Auto red-eye reduction,  Fill-in flash,  Slow synchro
Shooting mode	 Continuous photography mode,  Movie mode
Number of the photos that can be taken	125 (example)
Available time to shoot a movie	125 (example)
Displayed when taking a photo	 Camera shake warning

Taking Photos Using the Viewfinder Only

You can take photos without using the LCD monitor. When not using the LCD monitor, you can confirm the picture using the viewfinder. This uses less battery power than using the LCD monitor to take your pictures.

1. Turn the Mode dial to M manual photography mode.
2. Press the DISPLAY button to turn off the LCD monitor.
3. Center the subject in the middle of the viewfinder.
4. Press the shutter button halfway. The indicator lamp (green) turns on and the focus is set.
5. Press the shutter button fully. The photo is taken.

Note:

- You cannot take photos using the viewfinder only if the camera is in the macro mode or when using the self-timer.*
 - The shutter sound can be heard when you press the shutter button. This sound can be changed from the Setup Menu. See “Making Additional Settings” on page 42 for details.*
 - The photo is stored in the memory card while the memory access lamp is on. After the lamp turns off, the camera is ready to use again.*
6. When you finish taking photos, press the POWER button to turn the camera off.

Capturing an Image in the Focus Frame

The automatic focus works only if the subject is in the focus frame while the shutter button is first pressed halfway down. After the focus is locked on the subject, you can adjust the frame to the desired composition and release the shutter.

Using the Optical and Digital Zoom

This camera has a 3× optical zoom, a 2× and 3× digital zoom (2 separate frames). As digital zoom is available when taking photos with the LCD monitor, a maximum 9× zoom is possible.

Optical zoom

When using telephotographic zoom, press the **T** button. When using wide-angle zoom, press the **W** button.

Digital zoom

To activate the digital zoom, first press the **T** button to maximize the optical zoom and release it, then press it again. The digital zoom changes to 2× and 3× each time you press the **T** button. To return to the optical zoom mode, press the **W** button.

Note:

- You can enable the digital zoom mode from the Setup menu. See “Making Additional Settings” on page 42 for details.*

- When using digital magnification, the digital zoom indicator will appear at the right side of the  T bar. When 2× on the center, 3× on the right side of  T.

Controlling the Flash

You can change the flash setting by pressing the  Flash button. The flash mode changes each time you press the  Flash button.

	Auto-flash (default setting)	The camera detects the brightness automatically and sets off the flash if necessary. In a dark setting, the flash is used automatically.
	Flash off	Turns off the flash even in dark settings.
	Auto red-eye reduction	Use this setting when photographing people with a flash at night or indoors. The flash will go off once and will go off again when the photo is taken. This will help to reduce the red-eye phenomenon.
	Fill-in flash	The flash will go off no matter the brightness. Use it when the background is bright or when you are shooting against the sun.
	Slow synchro	The flash is used combined with a slow shutter speed. By using the slow synchro, you can take an action photo with a blurred background.

Flash range

ISO sensitivity	Normal (wide angle)	Normal (telephoto)
100	0.7 - 2.6 m (2.3 - 8.5 ft.)	0.5 - 1.5 m (1.6 - 4.9 ft.)
200	1.0 - 3.7 m (3.3 - 12.1 ft.)	0.6 - 2.1 m (1.9 - 6.9 ft.)
400	1.4 - 5.2 m (4.6 - 17.1 ft.)	0.8 - 3.0 m (2.6 - 9.9 ft.)

Note:

For information about ISO sensitivity, see “Setting Light Sensitivity” on page 38.

Using the Self Timer

1. Turn the Mode dial to  auto photography mode or M manual photography mode.
2. Press the  Self-timer button. The self timer  is displayed on the LCD monitor.
3. Center the image and press the shutter button fully. The count down starts and either 2 or 10 seconds later the shutter releases automatically. You can switch the time between 2 and 10 seconds by pressing the  Self-timer button in step 2.

Note:

The time can only be switched for the manual photography mode or the continuous photography mode. In auto photography mode the self-timer can only be set to 10 seconds.

Taking Photos Continuously

You can take photos continuously by holding the shutter button down. Three photos can be taken per second at maximum speed.

Note:

The rapid shooting speed may slow down when using the flash while doing continuous shooting.

1. Turn the Mode dial to  continuous photography mode.
2. Press the shutter button halfway to set the focus, then press it fully. While the shutter button remains fully pressed, photos will be taken continuously.

Note:

You can change the camera settings freely the same as in the manual photography mode.

Using Macro Mode

The macro mode allows you to focus on subjects at distances between 11 - 50 cm (4.3 - 19.6 inches) from the camera.

When shooting objects that are 50 cm or more away from the camera, reset the camera to normal mode.

1. Turn the Mode dial to  auto photography mode or M manual photography mode.
2. Press the  macro button to switch to the macro mode.

Selecting the Scene Mode

Three scene modes are pre-programmed in the camera. When using a scene mode, the camera is automatically configured to the best image capture settings for the situation.

Note:

- ❑ *When any scene mode is set, selecting macro mode shifts the camera settings to normal mode. If you cancel the macro mode, the camera settings remain in normal mode.*
 - ❑ *Using scene modes together with Exif 2.2 software and PRINT Image Matching II will provide the best possible printing results.*
 - ❑ *The Self timer, Exp Comp, Quality, Continuous Shooting, Digital Zoom, Frames, etc. are not affected by the scene mode.*
1. Turn the Mode dial to M manual photography mode.
 2. Press the MENU button. The Photography menu is displayed.
 3. Select Scene Mode by using the ▲ ▼ buttons, then press the ► button.
 4. Select the desired scene mode by using the ▲ ▼ buttons, then press the OK button.

Normal mode

This mode is best for most shooting. The flash works automatically based on the available light on the subject. The shutter speed is also selected to minimize blurring.

Landscape mode

This mode is best for broad landscapes. The flash is deactivated so the image of the landscape is captured more clearly. In low light the shutter speed is slower so you can take night scenes. Use a tripod to prevent blurring.

Portrait mode

This mode is designed for personal portraits. The depth of field is reduced (1 - 3 m) and the flash is automatically set to reduce red-eyes. When using the fill-in flash in dark settings, the slow synchro shutter feature is set allowing you to take shots with a brighter background. The use of a tripod is recommended to prevent blurring.

Setting White Balance

The white balance function adjusts the camera for different kinds of lighting. It makes white look the same color in any situation. The camera has two white balance modes; automatic and manual.

Automatic white balance

In this mode the camera automatically senses the light source and corrects the colors so you get the same white in any lighting situation. We recommend that you regularly use the camera in this mode.

1. Turn the Mode dial to  M manual photography mode.

2. Press the MENU button. The Photography Menu is displayed.
3. Select White Bal by using the ▲ ▼ buttons, then press the ► button.
4. Select Auto by using the ▲ ▼ buttons, then press the OK button.

Manual white balance

In this mode you can select specialized white balance settings to achieve truer colors in certain conditions; daylight, cloudy, incandescent, fluorescent, and mercury.

1. Turn the Mode dial to M manual photography mode.
2. Press the MENU button. The Photography Menu is displayed.
3. Select White Bal by using the ▲ ▼ buttons, then press the ► button.
4. Select the desired setting from Daylight, Cloudy, Incandescent, Fluorescent, and Mercury by using the ▲ ▼ buttons, then press the OK button.

Setting Light Sensitivity

You can change the light sensitivity for a specific purpose any time manually or let the camera select it automatically.

The camera's default setting is Auto. This is the best setting for most picture taking. Set the light sensitivity manually when you expect blurring problems from camera motion.

1. Turn the Mode dial to M manual photography mode.
2. Press the MENU button. The Photography Menu is displayed.
3. Select Sensitivity by using the ▲ ▼ buttons, then press the ► button.

4. Select the desired sensitivity from Auto, 100, 200, and 400 by using the ▲ ▼ buttons, then press the OK button.

Setting Exposure

You can adjust exposure to help control how much light falls on the CCD. It influences the brightness of the entire image. You usually don't need to make manual adjustments, but it is possible to increase or decrease the exposure to suit a particular purpose.

It is recommended that these adjustments be used when shooting against the sun or when you have any very bright background where the automatic sensors may not work well.

1. Turn the Mode dial to  M manual photography mode.
2. Press the MENU button. The Photography Menu is displayed.
3. Select Exp Comp by using the ▲ ▼ buttons, then press the ► button.
4. Select the adjustment value by using the ▲ ▼ buttons, then press the OK button.

Note:

The exposure adjustment range is from - 2.0 EV to + 2.0 EV during programmed shooting. There are 9 steps of 0.5 EV each. You can confirm the setting on the LCD monitor.

Resetting the File Numbers

Picture files are automatically numbered so that no two files can have the same number. They are numbered in the order in which they are taken. You can select whether or not to reset the sequence of the image file numbers to 0000 when replacing or formatting the memory card.

1. Turn the Mode dial to setup mode.
2. Press the ► button to display the Setup Menu 2.
3. Select File No. Reset by using the ▲ ▼ buttons then press the ► button.
4. Select ON by using the ▲ ▼ buttons, then press the OK button. The file numbers are reset.

Recording Movies

You can record a movie with sound of the subject displayed on the LCD monitor.

1. Turn the Mode dial to  movie mode.
2. Press the MENU button. The Movie menu is displayed.
3. Press the ► button.
4. Select the desired quality by using the ▲ ▼ buttons, then press the OK button.
5. Press the shutter button fully to start recording.
6. Press the shutter button fully again to stop recording.

Maximum available shooting time

Quality	When using an SD memory card (Panasonic RP-SDH256)	Internal memory only (default)	Internal memory only (after the data is deleted)
640 × 480	102	2	2
320 × 240	406	3	3
160 × 120	796	8	8

Unit: seconds

* The values shown here may differ from those for SD memory cards produced by other manufacturers.

Recording sound memo

When the quick photo review setting is set to Sound Memo ON, you can record a sound memo while the photo is displayed on the LCD monitor. You can record sound memos up to 30 seconds long.

1. While the photo is displayed on the LCD monitor, press the OK button to start recording.
2. When you are finished recording, press the OK button to stop recording.

Note:

- You can play a sound memo in the playback mode. Display the photo with the sound memo in the playback mode, and press the ► button.
- The  icon is displayed when you display a photo with a sound memo in the playback mode.

Making Additional Settings

In the setup mode, you can change the camera's additional settings such as the power save setting and the sound setting.

How to change the settings

1. Turn the Mode dial to Setup mode.
2. Select the menu that has the items you want to change by using the ◀▶ buttons.
3. Select the desired setting item by using the ▲▼◀▶ buttons, then press the OK button.
4. Change the setting value by using the ▲▼ buttons, then press the OK button. The setting is changed.

Note:

Pressing the MENU button causes the setting and returns the display to the previous screen.

Available settings

Setup Menu 1

Setting items	Description	Default
Qk View/Sd Memo	Set the quick view and sound memo setting. When this setting is ON, you can record a sound memo while the image is displayed for about three seconds.	OFF
LCD Brightness	Set the brightness level of the LCD monitor.	—
Digital Zoom	Set whether or not to enable the digital zoom.	OFF
Power Save	Set the time until the camera enters the power save mode.	3 min.
Startup Screen	Set the start-up screen.	EPSON Logo

Setup Menu 2

Setting items	Description	Default
Format	Format the camera's memory or the memory card.	—
Reset All	Reset the camera's settings to defaults.	—
Date/Time	Set the date and time.	—

Setting items	Description	Default
File No. Reset	Set whether or not to reset the sequence of the image file numbers to 0000 when replacing or formatting the memory card.	OFF
Language	Set the displayed language.	—

Sound

Setting items	Description	Default
Sound	Set whether or not to enable the sound.	ON
Operation Sound*	Set the sound when operating buttons.	Sound 1 Max
Shutter Sound*	Set the shutter sound.	
Cont Shoot Sound*	Set the sound during continuous shooting.	
Focus Lock Sound*	Set the sound when the focus is locked.	
Self-Timer Sound*	Set the sound while the self-timer is set.	

* You can copy or delete sound data for these settings. When using sound data stored in the Software CD-ROM, copy the data to the memory card via EPSON Photo!4. For details, see the manual of EPSON Photo!4.

Viewing and Managing Your Photos

Viewing Photos with the LCD Monitor

You can confirm the photos that you have taken on the LCD monitor.

1. Turn the Mode dial to  playback mode. The latest photo that is taken is displayed.

Note:

- To view the next photo, press the  button. Holding the  button down fast-forwards the photos.
- To zoom the photo, press the  T button. You can shift the expanded image by pressing the     buttons.

2. To view a photo with thumbnails, press the  W button.

Note:

- To select another photo, press the     buttons.
- To view the selected photo with the full screen, press the  T or  OK button.

Viewing a slide show of your photos

You can playback your photos one at a time.

1. Put the camera in the playback mode.
2. Press the MENU button. The Playback Menu 1 is displayed.
3. Select Slide Show by using the ▲ ▼ buttons, then press the OK button. The slide show starts.

Note:

- ❑ *Pressing the OK button pauses the slide show.*
- ❑ *Pressing the ► button skips the current photo.*
- ❑ *Pressing the ◀ button stops the slide show.*
- ❑ *The power save setting is invalid during a slide show when using battery power only.*

Playing movies

1. Put the camera in the playback mode, and display the movie you want to play.
2. Press the OK button. The movie starts playing.

Note:

- ❑ *Pressing the OK button pauses the movie. Press the OK button again restarts the movie.*
- ❑ *Pressing the ▲ ▼ buttons adjusts the volume through 4 levels.*
- ❑ *Pressing the ◀ button stops the movie.*

Setting quick photo review

When the quick photo review setting is on, the photo is displayed on the LCD monitor for about 3 seconds after you take it. This function may be turned ON or OFF. The default setting is OFF.

Note:

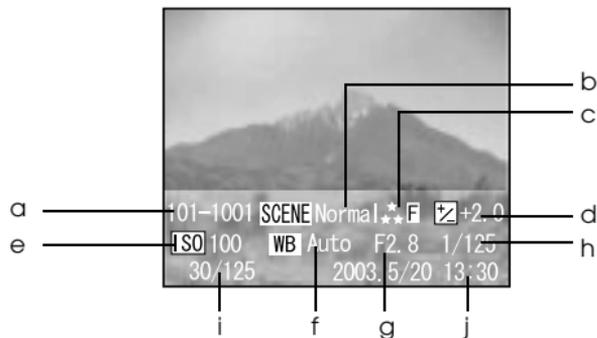
The quick photo review is not available when using the continuous photography mode.

1. Turn the Mode dial to setup mode. The Setup Menu 1 is displayed.
2. Select Qk View/Sd Memo by using the ▲ ▼ buttons, then press the ► button.
3. Select ON or OFF, then press the OK button.

Viewing the Properties of Photos

1. Display the photo on the LCD monitor.

2. Press the DISPLAY button twice. The following information is displayed.



- a. Folder and file number
- b. Scene mode setting
- c. Quality setting
- d. Exposure setting
- e. ISO sensitivity setting
- f. White balance setting
- g. Focus
- h. Shutter speed
- i. Playback photo number/total number of stored photos
- j. Photo date

Saving Photos in DPOF

DPOF is the abbreviation for Digital Print Order Format. This format allows you to record information on the memory card including which images and how many copies you want to have printed out.

1. Turn the Mode dial to  playback mode.
2. Press the MENU button, and then Press the  button. The Playback Menu 2 is displayed.
3. Select Make Print Order, then press the OK button.
4. Select the photo and specify the number of copies by using the     buttons.

Note:

Up to 99 copies for 999 photos can be set. However, the maximum copy quantity is 9,999 pages.

5. Press the OK button. The DPOF information is saved and the screen returns to Playback Menu 2.

Deleting Photos

You can delete photos stored in the camera from the playback mode.



Caution:

The photos that are deleted cannot be restored. Be careful when deleting photos.

Deleting a single photo

1. Turn the Mode dial to  playback mode.
2. Press the MENU button. The Playback Menu 1 is displayed.
3. Select Delete Individual Images by using the ▲ ▼ buttons, then press the ► button.
4. Select the photo to delete by using the ◀ ▶ buttons.
5. Select OK by using the ▲ ▼ buttons, then press the OK button. The photo is deleted.
6. If necessary, repeat steps 4 and 5 to delete another photo.

Deleting all photos

You can delete all photos stored in the camera.

1. Turn the Mode dial to  playback mode.
2. Press the MENU button. The Playback Menu 1 is displayed.
3. Select Delete All Images by using the ▲ ▼ buttons, then press the OK button.
4. Select OK by using the ▲ ▼ buttons, then press the OK button.

Deleting a group of images

A group of photos that are taken in continuous photography mode can be deleted all at once.

1. Turn the Mode dial to  playback mode, and display the image to delete.
2. Press the MENU button. The Playback Menu 1 is displayed.
3. Select Delete a group of image by using the ▲ ▼ buttons, then press the OK button.

Note:

You cannot select Delete a group of image if there are no photos that are taken in continuous photography mode.

4. Confirm the images one by one by using the ◀▶ buttons. Erase the 🗑 icon on the image you do not want to delete by pressing the ▲▼ buttons.
5. Press the OK button.
6. Select OK by using the ▲▼ buttons, then press the OK button.

Formatting the memory card

You can reset the card to its default status from the Setup Menu. See “Making Additional Settings” on page 42 for details.

Note:

Never format a camera memory card using a computer. Use this camera only.

Putting Photos on Your Computer

You can copy photos that are on your camera or a memory card to your computer. Then, you can work on the photos on your computer. The PC cable is needed to connect the camera and your computer.

Exporting photos to a computer



Caution:

Make sure the camera's power is turned off before you begin.

1. Open the connector cover carefully, and connect the PC cable from the camera to the computer.

Note:

Depending on the OS of your computer, you may have to install driver software. The driver software can be found on the CD-ROM that is included.

2. Turn the camera on.
3. Move the photos in the camera to your computer with a software. For details, see Chapter 6, "Operating the Software," page 65.

Note:

- ❑ *If image software is not installed on your computer, you can only copy photos in the camera to the computer.*
- ❑ *When images that were taken using the P.I.F. mode are copied to your computer, the link between the photos and the frames will be broken.*

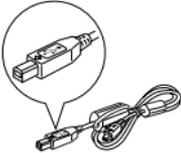
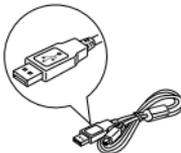
Working with photos on a computer

There is software on the CD-ROM that you can use to manipulate the photos on your computer. For details about the software, see Chapter 6, "Operating the Software," page 65.

Using Direct Print

Connecting Your Camera to the Printer

You can print a selected image easily by connecting the camera to the printer directly. This camera supports the printers listed below. Two PC cables are provided with the camera. Choose either of the cables depending on your printer.

STYLUS PHOTO R200/R210	STYLUS PHOTO 935 STYLUS PHOTO R300/R310 STYLUS PHOTO RX600
	

Note:

Printers released in the future may be added to this list.

Printing Photos

Available types of paper

This camera supports the following types and sizes of paper.

Paper	Size
Premium Glossy Photo Paper	10 × 15 cm 4 × 6 in.
Premium Semigloss Photo Paper	

Note:

- ❑ For details about paper, see your printer's manuals.
- ❑ In the print settings on the camera, you do not have to set the paper type. You can print on both paper types by setting the paper size.

Printing the photo seen on the LCD monitor

1. Connect the camera to the printer, then turn the printer and camera on.
2. Display the photo to print on the LCD monitor, then press the  PRINT button. The Print menu is displayed.
3. Select Print This Image by using the ▲ ▼ buttons, then press the  PRINT or OK button.
4. Make the print settings if necessary, then press the  PRINT button. Printing starts.

Note:

- ❑ See “Making Print Settings” on page 57 for details about the print settings.
- ❑ Press the MENU button to cancel printing.

Printing all the photos in memory

You can print all photos stored in the camera.

1. Connect the camera to the printer, then turn the printer and camera on.
2. Turn the Mode dial to  playback mode, then press the  PRINT button. The Print menu is displayed.
3. Select Print All Images by using the   buttons, then press the OK button.
4. Make the print settings if necessary, then press the  PRINT button. Printing starts.

Note:

- ❑ See “Making Print Settings” on page 57 for details about the print settings.
- ❑ Press the MENU button to cancel printing.

Printing selected photos

You can select multiple photos to print.

1. Connect the camera to the printer, then turn the printer and camera on.
2. Turn the Mode dial to  playback mode, then press the  PRINT button. The Print menu is displayed.
3. Select Select Images by using the   buttons, then press the OK button.

4. Select the photos to print by using the ◀▶ buttons, then set the copy quantity by using the ▲▼ buttons.
5. Press the  PRINT button. The preview is displayed.
6. Make the print settings if necessary, then press the  PRINT button. Printing starts.

Note:

- ❑ See “Making Print Settings” on page 57 for details about the print settings.
- ❑ Press the MENU button to cancel printing.

Album printing

You can print several photos on one sheet of paper.

1. Connect the camera to the printer, then turn the printer and camera on.
2. Turn the Mode dial to  playback mode, then select the first photo to print.
3. Press the  PRINT button. The Print menu is displayed.
4. Select Print an Album by using the ▲▼ buttons.
5. Select the number of photos per page by using the ◀▶ buttons, then press the OK button.
6. Make print settings if necessary, then press the  PRINT button. Printing starts.

Note:

- ❑ See “Making Print Settings” on page 57 for details about the print settings.
- ❑ Press the MENU button to cancel printing.
- ❑ You cannot print P.I.F. images when you select Album Printing.
- ❑ If you save the DPOF information before starting printing, the DPOF information will be enabled.

Printing photos taken in P.I.F. mode

Images that have been taken in P.I.F. mode must be printed using direct printing in order for the frame to show up on the print. Any other printing method will break the link between the frame and the image and only the image will be printed with no frame.

For details about the P.I.F. mode, see Chapter 5, “Using PRINT Image Framer (P.I.F.).”

Making Print Settings

When printing images directly to the printer, you can set the various print settings on the camera.

Changing print settings

1. Select Print Settings by using the ▲ ▼ buttons on the preview screen, and then press the OK button. The Print Settings screen is displayed.
2. Select the item to set by using the ▲ ▼ buttons, then press the OK button. The current setting is displayed.
3. Select the item by using the ▲ ▼ buttons, then press the OK button.

Note:

Pressing the MENU button cancels the settings.

Selecting paper size

Specify the size of the paper for your photo. You can select from 10x15cm Prem.Glossy or 4x6in.Prem.Glossy.

Selecting print borders

Specify whether to print pictures with or without borders. The default setting is BorderFree (printing without borders).

Printing the date

All pictures taken have a record of the date (Y.M.D., M.D.Y. or D.M.Y which is selected in the date and time setting). You can choose to print the date record on your pictures. The default setting is ON.

Printing at high speed

You may print your pictures faster, but the quality will be affected. The default setting is ON.

Using Printer Utilities

You can confirm the printer's status from the camera. You can also execute head cleaning on your printer by using the camera.

Note:

These utilities can be used with STYLUS Photo R200/R210 only.

1. Display the preview screen.
2. Select Maintenance by using the ▲ ▼ buttons, then press the OK button.
3. Select the desired item by using the ▲ ▼ buttons, then press the OK button.

See the following sections for details on how to check each setting.

Checking the amount of ink left

Confirm the amount of ink remaining in the ink cartridges in the printer that is currently connected. After checking the amount of ink left, press the OK button.

Checking the print head nozzles

Print the nozzle check pattern. You can check the condition of the print head. If the nozzle check pattern is not printed clearly, execute head cleaning.

1. On the Maintenance screen, select Nozzle Check.
2. Load some A4 size paper into the printer, select OK by using the ▲ ▼ buttons, then press the OK button.
3. Check the nozzle check pattern.

Cleaning the print head nozzles

Execute the head cleaning on the printer that is currently connected. After head cleaning, you can check the condition of the print head by printing the nozzle check pattern.

1. On the Maintenance screen, select Head Cleaning.
2. Select OK by using the ▲ ▼ buttons, then press the OK button. Head cleaning is executed.

Aligning the print head

Adjust the printing accuracy when doing bi-directional printing.

1. On the Maintenance screen, select Print Head Alignment.
2. Load some A4 size paper into the printer, select OK by using the ▲ ▼ buttons, then press the OK button. The Print Head Alignment Check pattern is printed.
3. Select the number lined up closest to the printed pattern by using the ◀ ▶ buttons, then press the OK button.

Note:

When the multiple pattern numbers are lined up equally close, select one and press the OK button. After that, repeat the print head alignment until a single pattern number lines up closest with the printed pattern.

Chapter 5

Using PRINT Image Framer (P.I.F.)

Taking Photos in P.I.F. Mode

PRINT Image Framer (P.I.F.) will link a frame to your picture as it is recorded. The various frames can be selected from stored frames in the camera or memory card. You can then use the direct printing process to print the composite frame.

Note:

- ❑ *In P.I.F. mode, you will use frames that you have previously loaded into the camera. Select one and take a photo. The photo will be printed in this frame during direct printing. You can change the frame before you print.*
 - ❑ *When copying an image that has been taken in P.I.F. mode to a computer, the link connecting the image and the P.I.F. frame will be lost.*
 - ❑ *Images taken in P.I.F. mode and set in DPOF format and saved on a memory card when printed with the Stylus Photo 935 will print with the first frame that is stored in the printer.*
1. Turn the Mode dial to  auto photography mode or  M manual photography mode.
 2. Press the  P.I.F. button. The frame stored in the camera is displayed.

Note:

When you want to select a frame stored in the memory card, press the ► button after pressing the  P.I.F. button.

3. Select the desired frame by using the ▲ ▼ buttons, then press the OK button.
4. The selected frame is displayed on the LCD monitor. You can now take the photograph.

Changing the Frames

You can change the frames after you take a photo in the P.I.F. mode. You can also add a frame to a photo that was taken without a frame.

1. Turn the camera on, then turn the Mode dial to  playback mode.
2. Display the desired photo to change or add a frame, then press the  P.I.F. button. The Camera in Frame screen is displayed.
3. Select a frame by using the ▲ ▼ buttons, then press the OK button.

Note:

To save the photo with no frame, select No Frame.

Replacing Frames Stored in the Camera or Memory Card

In order to add or change the frames loaded in the camera's memory you must use a memory card that already has replacement frames in memory. Frames can be found in the CD-ROM provided with your camera or on the Epson web site.

Note:

It is recommended to replace frames via memory card.

Using the CD-ROM

Note:

- You need a computer with a CD-ROM drive.*
- You need to install the PRINT Image Framer Tool beforehand.*

For detailed information, refer to the online help for the EPSON PRINT Image Framer Tool.

Downloading from the web

Note:

- You need a computer that is connected to the internet.*
- You need to install the PRINT Image Framer Tool.*

Detailed information can be found online at Epson's web site.

Deleting Frames

You can delete frames stored in the camera's memory or the memory card.

1. Press the  P.I.F. button, then select a location that stores frames to delete by using the ◀▶ buttons.
2. Select a frame to delete by using the ▲▼ buttons, then press the MENU button.

Note:

To cancel the operations, press the  P.I.F. button.

3. Select Delete by using the ▲▼ buttons, then press the OK button.
4. Select OK by using the ▲▼ buttons, then press the OK button. The selected frame is deleted.

Chapter 6

Operating the Software

Introduction

You can manipulate photos on your computer. This camera comes with a Software CD-ROM that includes software that lets you work with your photos on a computer.

The Software CD-ROM includes the following software and files.

EPSON Photo!4

This software allows you to easily store, review and arrange your digital camera images. Please read the instructions that come with the disk.

QuickTime (for Windows only)

This software is used to playback movies.

EPSON PRINT Image Framer Tool

This software enables you to transfer frames (layout files) to your SD memory card in your camera.

PIF DESIGNER

This software enables you to create original frames for your photos or edit existing frames to suit the way you want them to appear.

USB storage driver (for Windows only)

The USB driver for connecting the camera to Windows 98, Me, 2000, and XP operating systems.

P.I.F. files

Frame images that are used when doing P.I.F. printing.

Sound files

Sound data that are used to change the operating sound settings.

System Requirements

The system requirements for using the L-410 with a computer are as follows:

Windows	OS:	Microsoft® Windows® 98, Me, 2000 Professional, XP Home Edition, XP Professional
	Memory:	64 MB or more
	Hard disk:	50 MB or more free memory is required for installation 170 MB or more free memory is required for operation

	Display:	SVGA (800 × 600) or higher, 16 bit color or higher
	Port:	USB port (type A connector)
Macintosh	OS:	Mac OS® 9.1 or later, Mac OS 10.2 or later
	Hard ware:	PowerPC G3 233MHz or higher
	Memory:	42 MB or more application memory
	Hard disk:	50 MB or more free memory is required for installation 170 MB or more free memory is required for operation
	display:	800 × 600 or higher, 32000 colors or more

Installing the Software

1. Insert the software CD-ROM into the CD-ROM drive.

For Windows users:

The EPSON Installer Program dialog box appears automatically.

Note:

If the EPSON Installation Program dialog box does not appear, click the CD-ROM icon, and then select Open from the File menu. Then double-click EPSETUP. EXE.

For Mac OS 9 users:

Double-click the Mac OS 9 icon inside the EPSON folder.

For Mac OS 10.x users:

Double-click the Mac OS X icon inside the EPSON folder.

Note:

When the authentication dialog box for assigning administrator privileges appears, enter the user name and password, and then click OK.

2. Select the software to install, then click Install.

Note:

The first time you install the software, you should install all of it. Or to select which software to install, click Custom.

3. Follow the on-screen instructions until all of the software is installed. When a message appears to inform you that the installation is complete, click Exit or Restart Now/Exit.

Starting EPSON Photo!4

For Windows

Click Start, point to All Programs (or Programs), and then select EPSON Camera. Select EPSON Photo!4, and then click EPSON Photo!4.

For Macintosh

Double-click the EPSON Photo!4 icon in the EPSON Photo!4 program folder.

Finding More Information

To learn more about the software included on the software CD-ROM, see the each online User's Guides. Start the software and access the online User's Guide, and then follow the steps below.

Software	To start online User's Guide
EPSON PhotoQuicker	Click the Help button in the dialog box.
EPSON PRINT Image Framer Tool	Start EPSON PRINT Image Framer Tool and then select EPSON PRINT Image Framer Tool Help from the Help menu.
PIF Designer	Start PIF Designer and then select User Guide from the Help menu.

Note:

You can access the online guides using the Start menu in Windows, or double-click the MANUAL folder in each of the software's program folders, and then double-click INDEX.HTM for Macintosh.

Maintenance and Troubleshooting

Maintenance

To keep your camera operating at its best, you should clean it thoroughly several times a year. Before you perform any maintenance on the camera, be sure to read the “Safety Instructions” on page 7. Then follow these guidelines.

Resetting your camera's defaults

You can reset all the settings to their defaults from the Setup Menu 2. See “Making Additional Settings” on page 42 for details.

Note:

The Date/Time setting and Language setting are not reset even if the following procedure is executed.

Cleaning your camera



Caution:

Do not use volatile chemicals such as alcohol, paint thinner or benzine. They will damage the camera exterior. The same is true for the battery compartment.

Camera exterior

Wipe the outside of the camera with a soft dry cloth. If it is very dirty use a cloth dampened with a natural detergent. Wipe again with soft dry cloth.

Lens and the LCD monitor

To clean the lens, make sure that the camera is turned off, then blow off any loose dust or dirt or use a lens and camera cleaning brush. Next, blow on the lens and wipe off all moisture with a soft dry cloth.

Clean the LCD monitor with a soft dry cloth also.

Battery terminals

Do not use volatile chemicals such as alcohol, paint thinner or benzine. They will damage the camera's exterior. The same is true for the battery compartment.

Storing your camera

Store the camera in a cool and dry location and remove the batteries to prevent corrosion or leaks if you will not be using the camera for a long period of time.

Problems and Solutions

Camera problems

The camera has no power

Cause	What to do
Are the batteries installed correctly?	Check if the battery is installed correctly. See “Installing the battery” on page 20 for details.
Is the Mode dial turned fully?	Turn the Mode dial fully to the mode you want and press the POWER button fully.

The camera does not take a photo after you press the shutter button

Cause	What to do
Is the power switched on?	See “The camera has no power” on page 72 and check the camera.
Is the photo image number on the LCD monitor 0?	This means the memory card is full. Transfer the data on the card to a computer then delete them from the card to free up space. See “Deleting Photos” on page 49 for details.

The camera does not react when you press any buttons

Cause	What to do
Are the illumination lamp and both of the indicator lamps (red and green) flashing?	Turn the power off, and then turn it on again. If the power does not turn off, remove the battery, reinstall it and turn the power on. If the lamps are still flashing, contact our Customer Support.

The power turns off automatically.

Cause	What to do
Is the power saving function turned on?	Press any button or turn the Mode dial to come out of the power save mode.

The camera takes too long to take a photo

Cause	What to do
Did you press the shutter button completely with one push?	Usually you should press the shutter button halfway and hold it to set the focus, then press the rest of the way to take a photo. When pressing the shutter button fully all at once, it takes time to focus and set the exposure before the shutter releases. It may take longer than when pressing the shutter button in two steps.

The flash does not work

Cause

What to do

Is the flash setting correct?

When  flash off is set as the flash setting, the flash will not go off. See “Controlling the Flash” on page 33 for details.

The LCD monitor is hard to see

Cause

What to do

Is the LCD monitor brightness level set to too bright?

Adjust the LCD Brightness setting in the Setup Menu. See “Making Additional Settings” on page 42 for details.

The LCD monitor displays vertical lines

Cause

What to do

Did you point the camera toward a strong bright light?

When you use the LCD monitor to take photos, any very bright light may affect the sensor and cause the lines to appear on the monitor. They will not appear in the recorded image itself.

Nothing appears on the LCD monitor

Cause	What to do
Is the Mode dial turned fully?	Turn the Mode dial fully to the mode you want and press the POWER button fully.
Is the power saving function turned on?	Press any button or turn the Mode dial to come out of the power save mode.
Is the camera connected to a computer?	When the camera is connected to a computer, the LCD monitor is disabled.
Is the LCD monitor setting set to off?	Press the DISPLAY button to switch the LCD monitor setting. See “Taking Photos Using the Viewfinder Only” on page 31 for details.

Image problems

Images are out of focus

Cause	What to do
Did you operate the auto-focus correctly?	Place the subject in the center of the focus area and press the shutter button halfway. See “Releasing the Shutter” on page 24 for details.
Is the camera in the right distance mode setting?	See “Camera range” on page 25 for details.
Is the lens dirty?	See “Cleaning your camera” on page 70 and clean the lens.
Is the captured image blurred?	Hold the camera in the proper position when shooting, with your lower, support arm close to your body. Use a tripod for night scenes and other low light situations.

The image is too dark or too bright (underexposed/overexposed)

Cause	What to do
Is the flash setting correct?	Use the flash. See “Controlling the Flash” on page 33.

Is the exposure set to too dark or bright?	Adjust the exposure setting properly. See “Setting Exposure” on page 39 for details.
--	--

Is the light sensitivity set to too low or high?	Adjust the light sensitivity setting properly. See “Setting Light Sensitivity” on page 38 for details.
--	--

Part of the image is missing

Cause**What to do**

Was your finger covering the lens?	When taking photos using the viewfinder, fingers, straps or pieces of clothing may partially cover the lens.
------------------------------------	--

Are you looking straight through the viewfinder?	You can misjudge the composition of the picture if you are looking through the viewfinder at an angle or holding the camera away from your face.
--	--

Is the subject of the picture very close to the camera?	When the object is less than 1 meter from the lens, you may be experiencing parallax problems. Taking photos using the LCD monitor.
---	---

Printing problems

**A horizontal or vertical red line appears on the image
The color in the image does not look right
The images do not look as good as they used to**

Cause**What to do**

Is the print head clogging? See “Cleaning the print head nozzles” on page 60 and clean the print head.

Is the proper paper loaded in the printer? Make sure that the proper paper is loaded in your printer.

The wrong date and/or time is displayed on your camera

Cause**What to do**

Is the date and time setting set correctly? See “Setting the date and time” on page 23 and set the date and time correctly.

The area captured in the photo is different from what you saw in the viewfinder

Cause

What to do

The camera has malfunctioned.

Contact our Customer Support.

List of Error Messages

Error message	Description
This memory card is write-protected.	The memory card is locked. Release the write-protect.
Memory card error. Check the memory card.	Unspecified memory card problem. See "Installing/removing the memory card" on page 21 to remove the memory card and replace it. Contact the card maker.
No memory card inserted.	The camera has no memory card inserted. Insert a memory card.
Not enough free space in the camera's memory. Not enough free space in the memory card.	No more room for data on the camera's memory or memory card. Make room by deleting data (See "Deleting Photos" on page 49) or export the data to your computer and then reformat the card. (See "Putting Photos on Your Computer" on page 51)

Error message	Description
This frame cannot be used with this camera.	The file size of the frame exceeds the limit. Register a frame that is within the limit size. See "Replacing Frames Stored in the Camera or Memory Card" on page 63 for details.
The maximum number of Frames that can be registered to the memory card has been reached.	See "Deleting Frames" on page 64 to delete an unnecessary frame or take photo with the existing frames in the memory card.
P.I.F. Frame does not exist or is unusable.	The picture can't be viewed because there is no file or the link has been broken. The link has been broken or the frame itself has been deleted. See "Replacing Frames Stored in the Camera or Memory Card" on page 63 and replace or add a frame linked to this file.
No images.	There are no images recorded in the memory. Insert a memory card with images.
This image cannot be displayed.	The image file exists but can't be displayed. The images that are taken with another camera or stored on the computer may not display on your camera.
<p>This file cannot be deleted because this file is locked or cannot be deleted.</p> <p>Some files are locked or could not be deleted.</p>	The image(s) has been locked to prevent deletion. Delete the image(s) with the device that took the image or locked it.

Error message	Description
The necessary Frame file does not exist or is unusable.	The picture cannot be viewed because there is no file or the link has been broken. The link has been broken or the frame itself has been deleted. Replace or add a frame linked to this file.
Ink is too low to perform this operation.	The ink remains too low to execute head cleaning. Replace the cartridge(s) following the printer instruction booklet.
Printer error.	There may be a problem with the printer. Turn the printer off for a few seconds then turn the power back on. If the error message still appears, turn the power off and check to see if there is anything (packing materials, paper) stuck inside the printer. Then turn the power back on.
This image cannot be printed.	The selected image cannot be printed. Select another image.
Could not print. Retry?	If the printer is in the middle of printing something, it may not be able to accept the next request. Restart the printer or wait until the current print run is finished and then try again.
The printer is currently configured to print on a CD or DVD. Change the printer's configuration to that for printing on paper.	The CD-R/DVD-R tray on the printer is not closed. Close the tray.

Error message	Description
A communication error has occurred.	Either the cable has been disconnected or the power has been turned off. Recheck that the cable is connected, turn the power back on and try again.
XX images could not be printed.	If some of the images were taken with another camera or have been changed by software, they may not print, only the images taken with this camera will be printed. Use the actual camera or computer that was used to create the images in order to print them.
Cannot print because the necessary Frame file does not exist or is corrupted.	The picture cannot be printed because there is no frame file or the link has been broken. Replace or add a frame linked to this file.
This function is not available.	The printer does not support this function. You can try to clean it in some other way, but the printer does not support the camera's function.
Parts inside your printer require maintenance.	The printer cannot print because components within the printer need adjusting. Turn the printer off for a few seconds then turn the power back on. If the error message still appears, consult the shop you bought your printer from or Customer Support.

Contacting Customer Support

If your Epson product is not operating properly and you cannot solve the problem using the troubleshooting information in your product documentation, contact customer support services for assistance. If customer support for your area is not listed below, contact the dealer where you purchased your product.

Customer support will be able to help you much more quickly if you give them the following information:

- Product serial number
(The serial number label is usually on the back of the product.)
- Product model
- Product software version
(Click About, Version Info, or similar button in the product software.)
- Brand and model of your computer
- Your computer operating system name and version
- Names and versions of the software applications you normally use with your product

For users in the United Kingdom and the Republic of Ireland

URL	http://www.epson.co.uk
Telephone (UK)	08701 637 766
(The Republic of Ireland)	01 679 9016

For users in the Middle East

URL	http://www.epson.com
E-mail	epson_support@compubase.co.ae
Telephone	+971 4 352 4488
Fax	+971 4 351 6617

For users in Scandinavia

URL	http://www.epson.com
Telephone	Denmark 80 88 11 27 Finland 0800 523 010 Norway 800 11 828 Sweden 08 445 12 58

For users in South Africa

URL	www.epson.co.za
Telephone	(011) 444-5223 or 0800 600 578

For user in France

Support Technique EPSON France,

0 892 899 999 (0,34 E/minute)

Ouvert du lundi au samedi de 9h00 à 20h00 sans interruption

<http://www.epson.fr/support/selfhelp/french.htm> pour accéder à l'**AIDE EN LIGNE**.

<http://www.epson.fr/support/services/index.shtml> pour accéder aux **SERVICES** du support technique.

For user in Germany

EPSON Service Center c/o Exel Hünxe GmbH

Werner-Heisenberg-Strasse 2

46569 Hünxe

For user in Italy

EPSON Italia S.p.a.

Via M. Viganò de Vizzi, 93/95

20092 Cinisello Balsamo (MI)

Tel. 02.660.321

Fax. 02.612.36.22

Assistenza e Servizio Clienti

TECHNICAL HELPDESK

02.268.300.58

<http://www.epson.it>

For users in Spain

URL	http://www.epson.es
E-mail	soporte@epson.es
Telephone	902 40 41 42
Fax	93 582 15 16

For users in Portugal

URL	http://www.epson.pt
E-mail	apoio_clientes@epson.pt
Telephone	707 222 000
Fax	21 303 54 90

Appendix

Standards and Approvals

European model: EMC Directive 89/336/EEC	EN 55022 Class B EN 61000-3-2 EN 61000-3-3 EN 55024
---	--

Specifications

Effective pixels:	4.07 mega pixels
Image recording capacity:	Still picture: 2304 × 1728 pixels Movie: 640 × 480 pixels
Image file type:	Jpeg (Exif 2.2)/Print Image Matching 2, AVI
Camera file system:	DCF file format, DPOF 1.1
Internal memory	16 MB

Available memory card:	SD memory card (Up to 512 MB), Multimedia card (Up to 512 MB, MMC ver 2.1 or later, made by Hitachi or SunDisk).
Lens:	<p>Focal length: f=5.6 to 16.8 mm (equivalent to a 34 to 102 mm lens on a 35 mm camera)</p> <p>F value: F2.8 (WIDE) to 4.9 (TELE)</p> <p>Aperture: Wide angle; F2.8/F4.8, Telephoto; F4.9/F8.4</p> <p>Zoom: Collapsible mount 3× zoom</p>
Digital zoom:	2× or 3× zoom (Maximum 9× zoom with simultaneous use of the optical zoom)
Focus mode:	Auto focus
Object distance:	0.5 m to infinity 0.11 to 0.5 m (macro mode, wide)
Shutter speed:	<p>Still picture: 1 - 1/2000 seconds</p> <p>Movie: 1/32 - 1/2000 seconds</p>
TTL exposure control:	
White balance:	TTL auto white balance (Auto/daylight/cloudy/incandescent/fluorescent/Mercury)
Sensitivity:	Auto/fixed (equivalent to ISO 100/200/400)

Viewfinder:	Real-image optical view
Flash:	Internal form (Auto/flash off/red-eye reduction/forced flash/slow synchro)
Self-timer:	2 seconds/10 seconds
Photography mode:	Normal/portrait/landscape/macro
LCD monitor:	1.5-inch low temperature polysilicon TFT color LCD monitor
Interface:	USB/serial dual interface (Ver. 1.1/Mass Storage Class)
Power sources:	Two AA type Ni-MH batteries/alkali batteries/nickel Mn batteries/nickel batteries One CR-V3 battery
External power source:	Optional AC adapter (EU-37)
Dimensions (Height × Width × Depth):	62 × 92.5 × 31.5 mm (2.4 × 3.6 × 1.2 inches)
Weight:	Approx. 156 g (0.3 lb)
Temperature:	Operating: 5 to 35°C Storage: -20 to 60°C
Electrical:	Input voltage: DC 3.4 V
Interface:	One USB (ver 1.1) interface for Host and Slave connection

About Optional Accessories

AC adapter (EU-37)

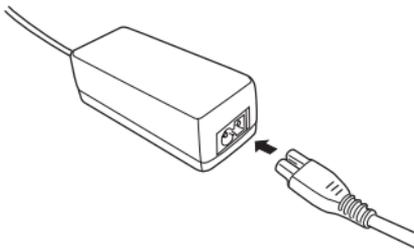
Model:	EU-37
Input:	AC 100 - 240 V
Output:	DC 3.4 V, 2.5 A
Power consumption:	14 W

Using the AC adapter

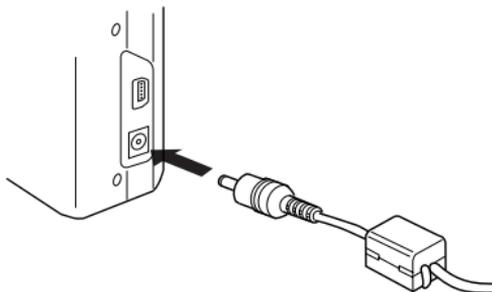
Note:

Read the documentation that is provided with the AC adapter before using it.

1. If your AC adapter has a separate AC power cable, connect the cable connector firmly into the AC inlet.



2. Open the connector cover on the side of the camera and plug the adapter cable into the DC port on the camera.



3. Plug the AC adapter into an electrical outlet.

Glossary

The following definitions apply specifically to the L-410.

application

A software program that helps you carry out a particular task, such as word processing, image editing, or financial planning.

brightness

The lightness or darkness of an image.

default

A value or setting that takes effect when the equipment is turned on, reset, or initialized. Also known as a factory setting.

drive

A memory device, such as a CD-ROM, hard disk, or floppy disk drive.

driver

Software that sends instructions to a computer peripheral to tell it what to do. For example, your printer driver accepts print data from your L-410 and sends instructions to the printer on how to print this data.

Together, the printer driver and printer utilities are referred to as “printer software.”

exposure

The amount of light that passes through the lens to form an image.

image

Data representing a two-dimensional scene. A digital image composed of pixels arranged in a rectangular array with a certain height and width. Each pixel may consist of one or more bits of information, representing the brightness of the image at that point.

ink cartridge

Contains the ink that your printer uses to print.

interface

A piece of hardware, a method, or a standard used to connect the computer and the camera.

interface cable

The cable that connects the L-410 to the printer or other devices.

JPEG

A file format for strong color and grayscale images in compressed files. Data saved using the JPEG format generally receives greater compression than data saved using TIFF and other formats.

light sensitivity

The measurement of the light sensitivity of films. In the digital camera, it depends on the capability of the sensor.

nozzles

Fine tubes in the print head through which ink is sprayed onto the page. Print quality may decline if the print head nozzles are clogged.

pixel

Short for picture element. Each image is composed of a number of pixels. Pixels are also counted in units of dots.

port

An interface channel through which data is transmitted between devices.

printer driver

See *driver*.

printer utilities

See *utilities*.

reset

To return the L-410 to its defaults.

thumbnails

Small representations of images.

USB interface

Universal Serial Bus interface. Enables the user to connect up to 127 peripheral devices (such as keyboards, mice, and printers) to the computer through a single, general-purpose port.

utilities

Software that allows you to monitor and maintain your printer. Together, utilities and the printer driver are referred to as “printer software.”

zoom

To show a smaller area of an image at a higher magnification (zoom in) or a larger area at a lower magnification (zoom out). Digital zoom is the electronic enlargement of the center part of the captured image. Optical zoom uses the lens system to enlarge the image.

Index

- A**
- Additional settings, 43
 - Album printing, 56
 - Auto photography mode, 25
 - Available memory card, 21
 - Available types of paper, 54
- B**
- Battery life, 20
 - Buttons, 17
- C**
- Camera parts, 15
 - Camera range, 25
 - Changing print settings, 57
 - Cleaning the camera, 70
 - Closing the battery/memory card cover, 19
 - Contacting EPSON, 83
 - Customer support, 83
- D**
- Deleting photos, 49
 - Digital print order format, 49
 - Digital zoom, 32
 - Direct printing, 53
 - printing all photos in memory, 55
 - printing a photo on the LCD monitor, 54
 - printing selected photos, 55
 - DPOF, 49
- E**
- EPSON Photo!4, 65
 - Error messages, 79
 - Exposure, 39
- F**
- Flash, 33
 - Flash range, 34
 - Formatting the memory card, 51
 - Frames
 - changing, 62
 - deleting, 64
 - replacing, 63
 - Functions of buttons, 17
- I**
- Information on LCD monitor, 29
 - Initial settings, 23
 - Installing

battery, 19, 20
memory card, 19, 21
software, 67

L

Landscape mode, 37
Light sensitivity, 38

M

Macro mode, 35
Main features, 7
Managing photos
 deleting, 49
 exporting to a computer, 52
 viewing, 45
Manual photography
mode, 25
Memory card
 available types, 21
 formatting, 51
 installing, 21

N

Normal mode, 36
Number of photos that can be
taken, 27

O

Opening the battery/memory
card cover, 19
Operating the software, 65
Optical zoom, 32
Optional accessories, 90

P

P.I.F., 61
P.I.F. files, 66
Photography mode, 25
Portrait mode, 37
Printer utilities, 59
 aligning the print head, 60
 checking the amount of ink
left, 59

 checking the print head
nozzles, 59
 cleaning the print head
nozzles, 60
Print Image Framer, 61
 changing the frames, 62
 deleting frames, 64
 replacing frames, 63
 taking photos, 61
Printing photos, 53
Print settings
 changing, 57
 high speed printing, 58
 paper size, 58
 printing date, 58
Problems and solutions, 72
Properties of photos, 47

Q

Quick photo review, 47
QuickTime, 65

- R**
- Releasing the shutter, 24
 - Removing the memory card, 22
 - Resetting
 - file numbers, 40
 - your camera's defaults, 70
 - Resolution and compression, 26
- S**
- Scene mode, 36
 - Selecting language, 23
 - Self timer, 34
 - Setting the date and time, 23
 - Setup Menu, 43
 - Shutter, 24
 - full position, 24
 - half position, 24
 - Slide show, 46
 - Software
 - system requirements, 66
 - Sound setting, 43
 - Specifications, 87
 - Standards and approvals, 87
 - Status and error messages, 79
 - Storing the camera, 71
- T**
- Taking photos
 - continuously, 35
 - in macro mode, 35
 - in P.I.F. mode, 61
 - using the LCD monitor, 28
 - using the viewfinder, 31
 - Technical support, 83
 - Troubleshooting, 72
 - camera problems, 72
 - image problems, 76
 - printing problems, 78
 - Turning on/off the camera, 23
- U**
- Unpacking the camera, 14
 - USB driver, 66
- V**
- Viewing
 - photos with the LCD monitor, 45
 - properties of photos, 47
- W**
- White balance, 37
- Z**
- Zoom, 32