

Epson Rangefinder Digital Camera R-D1

User's Guide for cameras with firmware upgraded to version 2.0

Copyright Notice

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 printer. Epson is not responsible for any use of this information as applied to other printers.

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 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.

A Note Concerning Responsible Use of Copyrighted Materials

Epson encourages each user to be responsible and respectful of the copyright laws when using any Epson product. While some countries' laws permit limited copying or reuse of copyrighted material in certain circumstances, those circumstances may not be as broad as some people assume. Contact your legal advisor for any questions regarding copyright law.

Trademarks

Epson is a registered trademark and Exceed Your Vision is a trademark of Seiko Epson Corporation.

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.

© 2006 Epson America, Inc. 12/06

Contents

Introduction

Chapter 1 Getting Started

Unpacking Your Camera 6
Camera Parts and Functions7
Attaching the Strap to the Camera 11
Using the Battery 11
Charging the Battery 11
Installing the Battery in the Camera
Using a Memory Card 13
Inserting a Memory Card 14
Removing the Memory Card
Mounting and Removing Lenses 15
Incompatible Lenses 15
Mounting an M-mount Lens 15
Removing an M-mount Lens
Mounting and Removing an L-mount Lens 16
Selecting the Focal Length 16

Chapter 2 Taking Photos

Turning the Camera On and Off	18
Taking a Picture	18
Setting White Balance	19
Setting Image Quality	20

Setting ISO Sensitivity	. 21
Setting the Exposure	. 21
Setting the Shutter Speed Automatically	. 21
Setting the Shutter Speed Manually	. 22
Setting the Aperture	
Using the Light Meter	
Focusing	. 25

Chapter 3 Viewing and Managing Photos

Opening the LCD Monitor	26
Viewing Images	27
Viewing Photo Information	28
Magnifying Images	30
Running a Slide Show	31
Managing Images	31
Deleting Images	31
Locking/Unlocking Images	32
Selecting Photos to be Printed	
(DPOF Setting)	32

Chapter 4 Customizing the Settings

Accessing the Settings Menu	34
Using the Jog Dial.	34
Setting Items	35
Settings Menu	35
Basic Šetup Menu	

Chapter 5 **Opening RAW Images on Your Computer**

Software Overview
System Requirements
Installing the Software
EPSON PhotoRAW
EPSON RAW Plug-In
Opening a RAW Image
Using EPSON PhotoRAW40
Using EPSON RAW Plug-In40
Finding More Information

Chapter 6 Maintenance and Troubleshooting

Setting the Time and Date41
Calibrating the Status Gauge42
Formatting the Memory Card42
Cleaning the Camera Body43
Cleaning the CCD Sensor
Storing the Camera
Troubleshooting
Where To Get Help45
Internet Support
Speak to a Support Representative
Purchase Supplies and Accessories

Appendix

Standards and Approvals46	5
Camera	
Lithium-ion Battery46	
Battery Charger46	5

Specifications	46
General	46
Image Format	46
Optical System	47
Display Functions	47
Viewfinder Indicators	47
Power Supply	47
Battery Charger	48
Optional Accessory	48
Important Safety Instructions	48
FCC Compliance Statement for United States Users	
WARNING	

Index

Introduction

The Epson R-D1 offers the convenience of digital imaging technology with the classic features of a traditional rangefinder camera to produce high-quality photographs and an enjoyable shooting experience.

Traditional rangefinder design

If you are already familiar with rangefinder photography, you will be up to speed in no time with the R-D1. If you are new to this type of camera, you will quickly discover the benefits of time-tested rangefinder design, such as:

- Parallax-corrected bright-line frames within the viewfinder for better composition
- □ Unobstructed and clear view of a subject during exposure
- □ Relatively silent and shock-free operations as compared to a single lens reflex (SLR) camera

Wide variety of lenses available

The R-D1 is equipped with an EM mount, which accepts a wide variety of M-type bayonet lenses originally introduced for film-based rangefinder cameras. This opens up a world of possibilities with hundreds of lenses to choose from, both vintage and contemporary. With an adapter ring, L-mount lenses can also be used with the R-D1, further enhancing its shooting potential.

Note:

The lenses you own and use on a film-based rangefinder camera may produce unexpected results when used with the R-D1.

Life-size magnification

The R-D1 comes with a viewfinder with 1.0x magnification, so what you see through the viewfinder is at the same size as seen with a naked eye. Using both eyes you can easily see what is happening outside the viewfinder. With the R-D1 you will focus more on what you are shooting, not what you are shooting with.

Print optimized images

The pictures you take using the R-D1 can be saved in unprocessed RAW format, which can be postprocessed for printing using the bundled software. We at Epson believe that photographic images, be they film-based or digital, are best expressed on printed media. The R-D1 reflects this philosophy.

Warnings, Cautions, and Notes

Observe the following while you read this manual:



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.

Chapter 1

Getting Started

Unpacking Your Camera

Make sure you have these items:

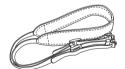




Lens hole cover

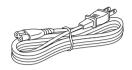


Battery



Strap





Battery charger



User's Guide

Power cord (for battery charger)



CD-ROMs:

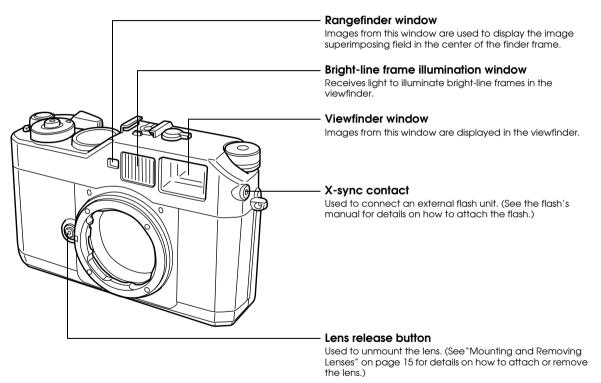
EPSON PhotoRAW/EPSON RAW Plug-in

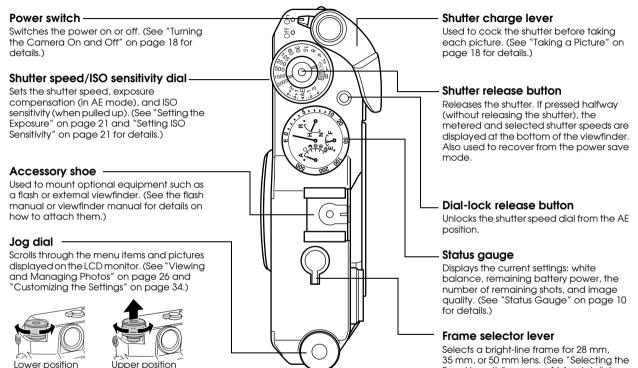
Adobe[®] Photoshop[®] 2.0 (may not be included in some regions)



Camera Parts and Functions

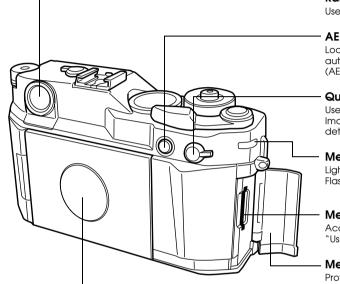
Front View





Focal Length" on page 16 for details.)

Back View



Rangefinder eyepiece

Used to compose your pictures and to focus on the subject.

AE-lock button

Locks the shutter speed at the metered value when using automatic exposure. (See "Locking the Exposure Setting (AE-lock)" on page 24 for details.)

Quality (Q) / White Balance (WB) lever

Used to set image quality or white balance. (See "Setting Image Quality" and "Setting White Balance" on page 19 for details.)

Memory card access light

Lights when a picture is being saved in the memory card. Flashes when there is an error or battery is low.

Memory card slot

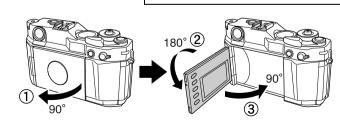
Accepts an SD memory card of up to 2 GB capacity. (See "Using a Memory Card" on page 13 for details.)

Memory card slot cover

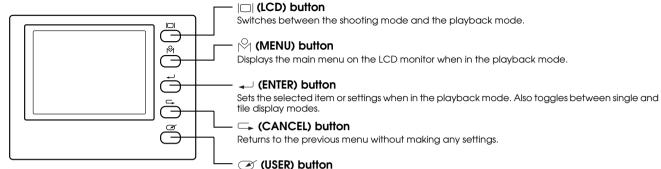
Protects the memory card and memory card slot.

Focal length conversion table

Lists equivalent 35 mm focal lengths for the attached lenses. (See "Determining the Effective Focal Length" on page 17 for details.)



LCD Monitor



Status Gauge

White balance-

Indicates the white balance setting. (See "Setting White Balance" on page 19 for details).

A	Auto
0	Sunny
	Shade
0	Cloudy
\otimes	Incandescent
Ф	Fluorescent

Remaining battery power

Indicates the remaining battery power. The current battery level is indicated on the scale from E (Empty) to F (Full).



Note: Status gauge can be calibrated if needed. See "Calibrating the Status Gauge" on page 42 for details.

The number of remaining shots

Indicates the number of remaining shots you can take (up to 999). The needle points to `E' if there is no memory card or when an error occurs.

Note: The actual number of shots you can take is not limited to 999 and varies with the size of the memory card used.

Image quality

Executes the preassigned function from the following: Delete, Lock, Magnify, Print, and Film.

Indicates the image quality setting. (See "Setting Image Quality" on page 20 for details)

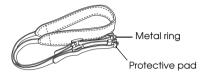
R	RAW/RAW+JPEG (High) *
Н	JPEG (High)
Ν	JPEG (Normal)

* Selected in the Settings menu (see page 35).

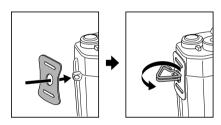
4. Lace the strap end through the two plastic fasteners.

Attaching the Strap to the Camera

1. Remove the protective pads and metal rings from the strap.



2. Attach the protective pad and the metal ring to one side of the camera.



3. Lace the end of the strap through the holes in the protective pad and the metal ring.





5. Repeat these steps to attach the other end of the strap to the other side of the camera.

Using the Battery

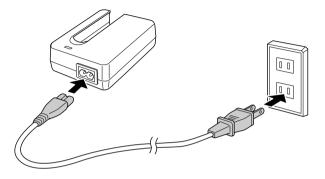
Caution:

Only use the Epson lithium-ion battery (EU-85). Do not use any other make or model of battery under any circumstances.

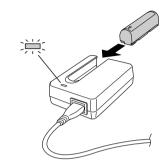
Charging the Battery

The camera comes with a lithium-ion battery (model EU 85). Be sure to charge it before using the camera for the first time, or if you have not used it for a long time. It takes approximately 3.5 hours to fully charge a new or empty battery.

1. Connect the power cord to the battery charger, then plug it into an electrical outlet.



2. Insert the battery into the battery charger with the terminal end first. The red indicator light on the charger lights up to indicate the battery is being charged.



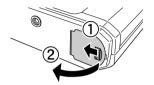
3. When the indicator light turns off, the battery is fully charged. Remove the battery from the charger.



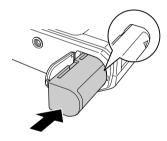
4. Disconnect the battery charger from the power outlet.

Installing the Battery in the Camera

1. Make sure the camera's power switch is in the Off position, then open the battery cover.



2. Insert the battery into the camera as far as it will go, making sure the orientation of the battery is correct.



3. Close the battery cover until it clicks.

Note:

You can check the amount of battery power remaining in the camera by checking the status gauge. (See page 10.)

Using a Memory Card

You cannot take pictures unless a memory card is installed in the camera. The camera accepts SD memory cards of up to 2 GB capacity.

Caution:

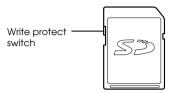
- □ Make sure there is no dirt or dust on the memory card terminal. If it is dirty, you may not be able to read from or write to the card.
- Never insert or remove a memory card while the memory card access light is on. This may cause data in the card to be lost or damaged, or render the memory card unusable.
- Keep the memory card slot cover closed except when you insert or remove the memory card. This protects the memory card and the slot from dust particles and static shock; otherwise data on the memory card may be lost or damaged.
- □ Static shock to the memory card may cause the camera to malfunction.

Note:

- Be sure to read the documentation included with the card to make sure you use it correctly.
- If the memory card has been already formatted with a computer or another digital camera, you may not be able to save images on the card. If this happens, reformat the card using this camera. For instructions, see "Formatting the Memory Card" on page 42.

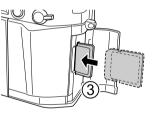
Inserting a Memory Card

1. Make sure that the memory card is not locked. Slide the write protect switch to unlock the card if needed.



2. Make sure that the memory card access light is off, then open the memory card slot cover. Insert the memory card all the way into the slot until it clicks.





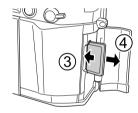
3. Close the memory card cover.

Removing the Memory Card

1. Make sure the memory card access light is off, then open the memory card slot cover.



2. Push in the memory card until it clicks, then release your finger. The memory card pops out.



Note: If the memory card is not ejected, push it again.

3. Remove the card and close the memory card cover.

Mounting and Removing Lenses

The camera accepts a wide variety of M-type bayonet mount (M-mount) lenses. You can also use L-type screw mount (L-mount) lenses by attaching a third-party adapter ring.

Incompatible Lenses

Certain lenses are not compatible with the camera due to physical constraints:

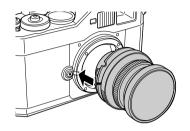
- Lenses that project more than 20.5 mm into the camera body. These lenses cannot be used because they may touch the inner parts of the camera. Some models known to be incompatible include:
 - □ Hologon 15 mm F8
 - □ Super Angulon 21 mm F3.4
 - □ Super Angulon 21 mm F4
 - □ Elmarit 28 mm F2.8 (earliest model)
 - □ Summicron 50 mm (Dual Range Summicron)
- □ Collapsible lenses.

However collapsible lenses such as the Hektor 50 mm F2.5 or the Elmar 50 mm F3.5 can be used with the camera as long as the lens barrel is not pushed into the camera body. Be very careful if using these types of lenses.

 Lenses that have an auxiliary viewfinder lens.
 These lenses cannot be used effectively because the baseline length is different from the one used for this camera.

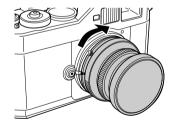
Mounting an M-mount Lens

1. Align the dot on the lens with the red dot on the lens release button.



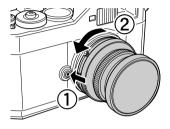
Caution:

- Do not touch the inner parts of the camera.
- Beware of dust particles entering the camera body.
- 2. Insert the lens into the camera body, then turn the lens clockwise until it clicks.

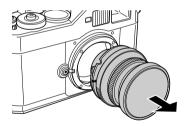


Removing an M-mount Lens

1. Press the lens release button and turn the lens body counterclockwise.



2. Pull the lens straight out.

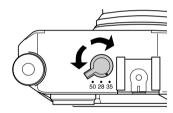


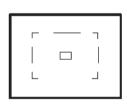
Mounting and Removing an L-mount Lens

For an L-mount lens, you need an optional M-bayonet adapter ring. Attach the adapter ring to the lens, then install the lens on the camera as you would an M-mount lens. When you want to remove the lens, the procedure is the same as for an M-mount lens.

Selecting the Focal Length

You need to select the focal length of the mounted lens in order to display the correct bright-line frame that indicates the field of view covered by the lens. The automatic parallax correction feature allows you to capture what you see in the selected bright-line frame. Turn the frame selector lever to select 28 mm, 35 mm, or 50 mm to match the focal length of the lens being used.



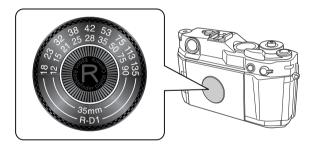


Determining the Effective Focal Length

The CCD sensor in this camera is an APS-C size, about 34% smaller than the area covered by 35 mm film. This effectively increases the working focal length of the attached lens by 1.53x to produce the equivalent 35 mm focal length.

For example, if you use a 50 mm lens with this camera, the effective focal length would be $50 \times 1.53 = 76.5$ mm. This is particularly helpful when you are using a telephoto lens, because you can use a 200 mm lens to achieve the same field of view of a 300 mm lens, which is heavier and more expensive.

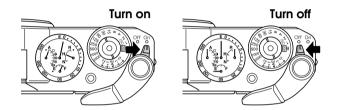
The focal length conversion table on the rear panel of the camera shows equivalent 35 mm focal lengths of the lenses attached to the camera.



Chapter 2

Taking Photos

Turning the Camera On and Off



When you turn on the camera the first time, you need to set the current date (month, day, and year) and time (hours and minutes) on the LCD monitor. Once these settings are made, the camera automatically records the date and time for each picture taken.

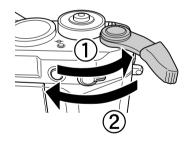
For instructions, see "Setting the Time and Date" on page 41.

Caution:

Never turn off the power while the memory card access light is on. This may cause data in the card to be lost or damaged, or render the memory card unusable. Under certain circumstances, the memory card access light may remain on for several seconds after taking a picture (for example, if you turn on noise reduction and take a long exposure).

Taking a Picture

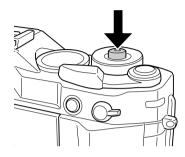
- 1. Make sure the camera is turned on and a memory card is installed.
- 2. Before taking a picture, you may need to adjust the white balance, image quality setting, ISO sensitivity, exposure, and focus, as described on the following pages.
- 3. When you are ready to shoot, push the shutter charge lever as far as it will go to the right to cock the shutter.



Note:

The shutter charge lever can be left in the "ready" position when shooting a series of pictures.

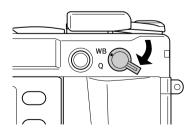
4. Gently press the shutter release button. You should hear a clacking sound that indicates the shutter release.



Setting White Balance

The white balance feature adjusts the camera for different types of ambient light. You can either set the white balance to be adjusted automatically, or select the particular setting to suit the ambient light type.

1. Pull down and hold the Q/WB lever at the WB position.



2. Rotate the jog dial to select the desired white balance setting.



The selected setting is indicated on the status gauge:

Setting	Description
A (Auto)	Automatically determined
(Sunny)	Outdoors on a sunny day
(Shade)	In the shade on a sunny day
(Cloudy)	Cloudy day without visible sun
(Incandescent)	Incandescent light
(Fluorescent)	Fluorescent light

3. Release the Q/WB lever.

Setting Image Quality

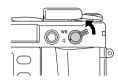
Image quality determines the format in which the image is saved, the size of the image as it will be displayed on a computer screen, and the file size of image stored in a memory card. Select the image quality according to how you plan to use the image data.

Image Format

Images can be saved in RAW format, JPEG format, or both file types at the same time if RAW+JPG is selected as the Raw Setting in the Settings menu (see page 35). To open or process RAW images, you need to install the software on the CD-ROM that came with your camera. Because they are uncompressed, RAW images take up a lot of storage space, but are also well suited for image processing and printing on paper. For more information, see "Opening RAW Images on Your Computer" on page 38.

JPEG is a universal image format that can be viewed on most computers without using proprietary software. Files saved in JPEG format are compressed and smaller than those saved in RAW format. They do lose varying degrees of picture quality when compressed, and are less suited for postprocessing because resaving a JPEG file further degrades its quality. JPEG format is fine for viewing on a regular computer screen and can also produce good quality prints if saved in a high enough resolution. Set the image quality as follows:

1. Pull up and hold the Q/WB lever at the Q position.



2. Rotate the jog dial to select the desired image quality setting on the status gauge:

Setting	Format	Image Size	File Size
R	RAW	3,008 x 2,000	10 MB*
Н	JPEG (High)	3,008 x 2,000	3 MB
N	JPEG (Normal)	2,240 x 1,488	1.5 MB

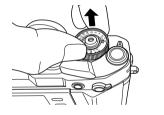
 * 13 MB if RAW+JPEG is selected as the RAW Setting in the Settings menu. See page 35 for more information.

3. Release the Q/WB lever.

Setting ISO Sensitivity

The ISO sensitivity setting determines the camera's sensitivity to available light. As ISO sensitivity is increased, less light is required to expose an image, which permits faster shutter speeds. This is helpful for shooting fast moving subjects without blurring, but it also amplifies any digital noises caught in an image, which can produce a picture with a grainy appearance.

To set ISO sensitivity, pull up and rotate the outer ring of the shutter speed dial to select 200, 400, 800, or 1600.





Setting the Exposure

You can set the exposure automatically or manually. Automatic exposure is a convenient feature that works sufficiently under most conditions. With manual exposure, you have more control over how your pictures will be exposed.

Setting the Shutter Speed Automatically

Use the aperture priority automatic exposure (AE) feature to automatically set the shutter speed for the selected aperture setting. This is useful when you want to control the depth of field or to produce special effects, or when you simply want to take point-and-shoot snapshots.

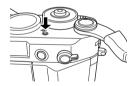
The AE feature works sufficiently most of the time, but under certain conditions you can also apply exposure compensation within the range of +2 EV to -2 EV in 1/3 EV increments. You may, for example, increase the compensation value by one notch (+1/3 EV) to overexpose a subject standing in a bright background. Likewise, if your subject is too bright for the background, you would lower the EV to underexpose the subject.

Follow these steps:

1. To use automatic exposure, rotate the shutter speed dial to the AE position.



If you need to select an exposure compensation setting, first release the dial from the AE position by pressing the dial-lock release button.



3. While holding the button down, rotate the dial to the desired position.

Setting the Shutter Speed Manually

You can specify the shutter speed from 1 to 1/2000 sec., or B (Bulb).

To set the shutter speed, rotate the shutter speed dial to the desired shutter speed value.



Note:

- □ If the dial is in the AE position, press the dial-lock release button before attempting to rotate it.
- □ To avoid blurring, set the shutter speed faster than "1/focal length (mm)." If using a slower shutter speed, the use of a tripod is recommended.
- □ For brighter subjects, fast moving subjects or with a higher ISO sensitivity, a higher shutter speed is recommended.

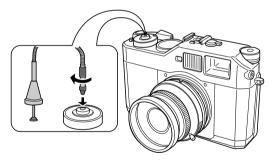
2

B (Bulb) Setting

The bulb setting is used for shooting night pictures or astronomical objects. With this setting, the shutter stays open as long as the shutter release button is depressed.

Note:

- □ When you set NR (Noise Reduction) to Hi (High) in the Film Settings screen and set the exposure at more than 2 seconds, noise reduction is automatically performed after taking a photo. Do not turn the power off until the SD card access light goes out. If you turn the power off before the noise reduction procedure is complete, the image is saved without noise reduction.
- □ When taking photos in B shooting mode, use a tripod and shutter release cable to prevent the picture from blurring. Install the cable as shown in the illustration below.



Using a Flash

You can use an optional flash unit when shooting pictures under low light conditions. The syncro speed of the flash is 1/125 second. Set the shutter speed dial to 125 when using a flash.

For more information, see the documentation included with your flash.

Setting the Aperture

Rotate the lens aperture ring to the desired value.



For more information, see the documentation included with your lens.

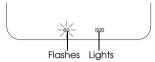
Using the Light Meter

The camera has a built-in light meter that calculates the best shutter speed for the amount of light available through the lens. Press the shutter release button halfway to view the metered shutter speed (in red) at the bottom of the viewfinder, then adjust the exposure settings as needed.

The metered value is displayed in the range of 1 (1 second) through 2000 (1/2000 second). For any value higher than one second, 1 is displayed in the viewfinder. Likewise, for values lower than 1/2000 second, 2000 is displayed in the viewfinder.

With Manual Exposure

When manual exposure is selected, the manually selected shutter speed is lit and the metered speed flashes.



You can rotate the shutter speed dial and/or the aperture ring on the lens to match the metered value, at which point only one shutter speed will be displayed in the viewfinder. Or you can disregard the meter reading and do your own exposure adjustments.

With Automatic Exposure

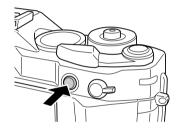
When AE is selected, the metered shutter speed is lit. If you are using exposure compensation, the shutter speed flashes to indicate that it is a compensated value.



Locking the Exposure Setting (AE-lock)

You can lock the exposure setting at the metered value using the AE-lock button. This is useful, for example, when you create a single panoramic picture from a series of images, to make sure they all have the same level of exposure.

To lock the exposure setting, point to the subject when using the AE mode and press the AE-lock button. The exposure setting remains locked until the AE-lock button is released.

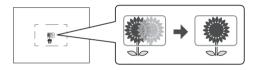


Focusing

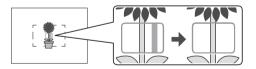
The camera's viewfinder has a magnification of 1.0x, which allows you to keep both eyes open when focusing on your subject.

When focusing, keep your eye in the center of the rangefinder eyepiece for the best result.

To focus on a subject, rotate the lens focusing ring until the double-image converges in the center of the bright-line frame.



If a subject has a distinct vertical line (e.g., a tree or a tower), rotate the focus ring until the lines merge into a single continuous line. This usually produces sharper images as straight lines are easier to focus on.



Chapter 3

Viewing and Managing Photos

Opening the LCD Monitor

1. Pull open the rear panel using the notch at the bottom.



2. Gently rotate the panel clockwise until the LCD monitor faces outward.



3. Push the panel back into place.



Caution:	
	Do no

Do not pick up or handle the camera by the rear panel.

Do not operate the camera while the rear panel is left open.

3

Viewing Images

- 1. Make sure the camera is on.
- Press the |□| (LCD) button. The camera enters playback mode and displays the newest recorded image.
- 3. Rotate the jog dial (lower position) clockwise or counterclockwise to display the image you want to view.



Note:

If you do any of the following while the camera is in playback mode, the LCD monitor is turned off and the camera returns to shooting mode:

- \Box Press the $|\Box|$ (LCD) button
- Deress the shutter release button
- □ Invert the LCD monitor

Image display



Monitor Icons

The icons displayed at the bottom of the LCD monitor indicate the following functions or operations.

lcon	Description
₽ 🗉	Indicates you can select the menu option by rotating the jog dial (upper position) clockwise or counterclockwise.
9 €	Indicates you can scroll the image horizontally by rotating the jog dial (upper position). Displayed only for the Magnify feature.
₽ ‡	Indicates you can scroll the image vertically by rotating the jog dial (upper position). Displayed only for the Magnify feature.
å 🗋	Indicates you can display the previous or next image by rotating the jog dial (lower position).

lcon	Description
å 🖬	Indicates you can magnify or shrink the image by rotating the jog dial (lower position). Displayed only for the Magnify feature.
	Appears when the \downarrow (ENTER) button is active.
	Appears when the \square (CANCEL) button is active.
	Indicates single display mode.
	Indicates tile display mode (thumbnails of four images).

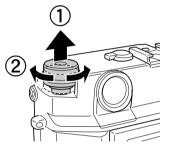
Note:

- □ When the battery is running low, the ((battery) icon appears above the jog dial icon.
- □ When the jog dial is in the upper position, the ♀ (upper) icon at the bottom left corner turns green. Likewise, when the jog dial is in the lower position, the ዿ (lower) icon turns green.
- □ Press the ← (ENTER) button to toggle between the single and tile display modes.

Viewing Photo Information

Follow these steps to see more photo information:

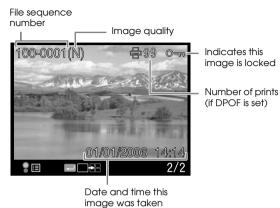
- 1. Display an image on the LCD monitor.
- 2. Pull up the jog dial to the upper position, then rotate it to display the desired set of information about the image.



The following sets of information are available:

- General information
- Exposure histogram
- Highlight
- Composition grid
- Detailed information

General Information



Highlight

Outlines and flashes highlight areas.

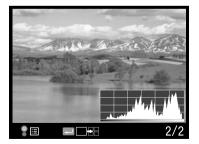


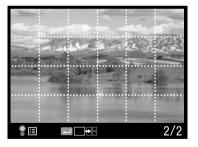
Composition Grid

Shows the grid to aid composition.

Exposure Histogram

Shows the densities of shadow and highlight areas occupied in the image.





Detailed Information

Lists detailed information about camera settings.



Listed information includes the following:

- □ File name (file number and format)
- □ Image size (image quality)
- □ Color (color / monochrome) setting. If monochrome is set, the color of the filter is also displayed.
- □ Shutter speed. If the image was taken using the AE feature, AE and the exposure compensation value (if used) are displayed.
- □ ISO sensitivity
- □ White balance
- □ Film setting

Magnifying Images

Follow these steps to zoom in on an image displayed on the LCD monitor (up to 16x).

- 1. Display an image on the LCD monitor.
- 2. Press the \bowtie (MENU) button.



- 4. Rotate the jog dial (lower position) to enlarge or reduce the image.
- To return to the main menu, press the
 (CANCEL) button once
 or twice.

Running a Slide Show

This feature allows you to view all the images in a slide show format, with a three-second interval between images.

- 1. Display an image on the LCD monitor.
- 2. Press the \bowtie (MENU) button.
- Select []] (Slide Show) using the jog dial, then press the
 (ENTER) button.



- 4. Select the order in which you want the images to be displayed:
 - □ Rotate the jog dial clockwise to start the slide show from the oldest image recorded. The forward playback (►) icon is displayed at the bottom of the screen.
 - □ Rotate the jog dial counterclockwise to start the slide show from the newest image back to the oldest one. The reverse playback (◀) icon is displayed at the bottom of the screen.

To pause the slide show, press the $\prec\!\!-\!\!-$ (ENTER) button. To restart, press the $\prec\!\!-\!\!-\!\!-$ (ENTER) button again.

To return to the main menu, press the \square (CANCEL) button.

Managing Images

Deleting Images

In playback mode, you can delete the currently displayed image or all the images saved on the memory card.

- 1. Display an image on the LCD monitor.
- 2. Press the \bowtie (MENU) button.
- 3. Select (Delete) using the jog dial, then press the ← (ENTER) button.



 Select Delete 1 image or Delete all images using the jog dial (upper position), then press the → (ENTER) button. You see the confirmation screen.

Note:

- □ If you select Delete 1 image, you can select an image you want to delete by rotating the jog dial (lower position).
- □ You cannot delete images that have a lock (····) icon. See the next section, "Locking/Unlocking Images" on page 32 for details.
- □ If the memory card is locked, the message "Cannot delete. The SD card is write-protected" is displayed. Remove the card from the camera, then unlock the card and try again.

- 5. In the confirmation screen, select OK using the jog dial, then press the ---- (ENTER) button.
- Caution:

This operation cannot be undone.

Note:

This procedure does not securely delete the data from the memory card. To securely "flush" the memory card so that no data can be recovered from the card using third-party data recovery software, use Full Format to format the card. For instructions, see "Formatting the Memory Card" on page 42.

Locking/Unlocking Images

Use this feature to protect images from accidental deletion.

Note:

Locked images are read-only and cannot be modified.

- 1. Display an image on the LCD monitor.
- 2. Press the \bowtie (MENU) button.
- 3. Select ∽ (LOCk) using the jog dial, then press the → (ENTER) button. You see the Lock menu.



When the image is locked, the lock (\sim) icon is displayed at the top right of the image.

If you select LOCK/UNIOCK 1 image, you can select an image you want to lock by rotating the jog dial (lower position).

If you select LOCK/UNIOCK 1 image for a locked image, the image will be unlocked.



Caution:

If you format a memory card that contains images, all the data on the card will be lost, including locked images.

Selecting Photos to be Printed (DPOF Setting)

This feature allows you to specify the number of prints for the images you want to print from a printer, application, or photo lab that supports Digital Print Order Format (DPOF).

Note:

This feature is not available for images saved in RAW format.

- 1. Display an image on the LCD monitor.
- 2. Press the $\stackrel{O}{\mapsto}$ (MENU) button.



Note:

- **D** To select another image, rotate the jog dial in the lower position.
- □ To view the current DPOF setting, select View current DPOF.
- 5. Specify the number of prints using the jog dial, then press the (ENTER) button.

Chapter 4

Customizing the Settings

You can use the LCD screen to adjust camera settings.

Accessing the Settings Menu

1. Press $|\Box|$ (LCD) then |O| (MENU) to display the main menu on the LCD monitor.



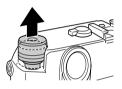
- 2. Select ♀ (Settings) using the jog dial, then press the → (ENTER) button to display the Settings menu.
- Select the desired setting using the jog dial, then press the

 (ENTER) button. The selected setting is displayed.

 If you select () (Basic Setup), select the desired setting and press the
 (ENTER) button again.
- Change the value or select the item using the jog dial, then press the ← (ENTER) button.

Using the Jog Dial

Rotate the jog dial clockwise or counterclockwise to display the previous or next menu or photo. The jog dial is used in either the raised or lowered position, depending on the menu or function. To use the jog dial in the raised position, pull it up as shown below.



Setting Items

🖭 Settings Menu

Setting	Description
Color Setting)	Selects whether to save images in Color or Monochrome. For Monochrome, you can select the Monochrome Filter by pressing the $ ^{O}_{1} $ (MENU) button.
(Basic Setup)	Displays the Basic Setup menu. See "Basic Setup Menu" on page 36.

Setting	Description	
(Format SD Card)	Formats the memory card. You can select Quick Format or Full Format . See "Formatting the Memory Card" on page 42 for details.	
🔩 (Initialize Settings)	Resets the current settings (except date and time) to their default settings as shown below.	
	Setting	Default Value
	Color	Color
	Film	Standard
	Date	YYYY/MM/DD
	Power Save Timer	5min
	Sequential Numbering	On
	LCD Brightness	5/8
	Language	English
	USER Button	Delete
(Long Exp Noise Reduction)	Reduces noise that appears in an image taken with a long exposure. The shooting time may become longer depending on shooting conditions.	
Color Space)	Selects the color space from sRGB or Adobe RGB . Adobe RGB is a wider color space than sRGB and encompasses the colors that can be printed with CMYK inks. Select Adobe RGB if you have a printer that supports it.	
RAW Setting)	Sets the image format recorded when shooting in RAW mode. You can select RAW format only, or both RAW and JPEG (high resolution) format in a single file. RAW+JPEG provides the convenience of viewing the JPEG image on most computers while retaining the RAW data for postprocessing, at an increase in image size and memory card access time.	

Setting	Description
(Film Setting)	Allows you to quickly switch film profiles to best suit the shooting subject or environment. For each film profile (Film 1, Film2, or Film3), you can assign Edge Enhance, Saturction, Tint, Contrast, and NR (Noise Reduction). By default, Film1 is preset for portrait, Film2 for landscape, and Film3 for night pictures. Use Standard if no particular profile is required.

🕒 Basic Setup Menu

Setting	Description
Time and Date	Sets the current date and time (year, month, day, hours and minutes).
	See "Setting the Time and Date" on page 41.
Date Format	Selects date display format from the following: YYYY/MM/DD (default setting), MM/DD/YYYY, DD/MM/YYYY
Power Save Timer	Selects the length of time before the camera enters the power save mode, in which the LCD monitor is turned off automatically to reduce power consumption. The available settings are 3min , 5min (default setting), 10min , or 20min . Press any button to exit the power save mode.
Sequential Numbering	Specifies whether to save images with a sequential number (as part of the file name). On (default): sequential numbers continue even if the memory card is replaced. Off: sequential numbers end and a new sequence of numbers starts when the memory card is replaced.
LCD Brightness	Changes brightness of the LCD monitor. Also shows the firmware version.
Language	Selects the language for messages and menus displayed on the LCD monitor from the following: Japanese, English, French, German, Italian, Spanish, Dutch, T (Traditional)-Chinese

Setting	Description	
Calibrate Needles	Displays the Needle Calibration menu to adjust the status gauge needles: E (number of remaining shots), R (image quality), E (remaining battery power), and A (white balance).	
Dead Pixel Correction	Corrects non-functional pixels so they are less conspicuous in photographed images. Repeat this procedure every few months, or if you notice missing (black) pixels or hot (white) pixels. For the pixels that cannot be corrected with this setting, try Long Exp Noise Reduction (see page 35).	
	Note:	
	Be sure to attach the lens cap before executing this feature. Otherwise, correct pixels may be incorrectly calibrated. Also make sure the battery has enough power left when using this feature. You cannot execute this function with a near-empty battery.	
Quick View	Displays the image on the LCD monitor (i.e., enters the playback mode) automatically when you release the shutter. You can select the time period during which each image is displayed on the LCD monitor: 3 sec or 10 sec .	
	Quick View is canceled and the LCD monitor is turned off if you do any of the following:	
	\square Press the $ \Box $ (LCD) button	
	\square Press the $ ^{O}_{1}$ (MENU) button	
	\square Press the $$ (USER) button	
	Press the shutter release button	
	Turn off the camera	

Setting	Description
Assign USER Button	You can assign one of the following functions to the (USER) button: Delete, Lock , Magnify, Print , and Film . By default, Delete is assigned to this button.
	Note: The 🏽 (USER) button does not function in the tile display mode.

Chapter 5

Opening RAW Images on Your Computer

Software Overview

To open RAW format images, you need to install the Epson PhotoRAW software included on the CD-ROM that came with your camera:

- EPSON PhotoRAW is a standalone application that can process multiple RAW images at one time using the batch feature.
- EPSON RAW Plug-In lets you process your images using Adobe Photoshop (versions 7, CS, CS2, and Elements 2 and 3).

System Requirements

Windows:	OS:	Microsoft [®] Windows [®] 98 Second Edition, Me, 2000 Professional, XP Home Edition, XP Professional
	Hardware:	Pentium [®] III 1 GHz or faster (Pentium 4 2 GHz or faster is recommended)
	Memory:	256 MB or more (1 GB or more is recommended)
	Hard Disk:	10 MB or more is required for installation 500 MB or more is required for operation
	Display:	XGA (1024 \times 768) or higher, 24-bit color or higher
Macintosh):OS:	Mac [®] OS 10.2 or later
	Hardware:	PowerPC [®] G4 or higher (PowerPC G5 is recommended)
	Memory:	256 MB or more (1GB or more is recommended)
	Hard disk:	10 MB or more is required for installation 500 MB or more is required for operation
	Display:	1024 × 768 or higher, 16-bit color or higher (24-bit color is recommended)

5

Installing the Software

To install the software, you need administrator privileges.

EPSON PhotoRAW

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

The EPSON Installer Program dialog box appears automatically. *Note:*

If it does not appear, click the CD-ROM *icon, and then select* Open *from the File menu. Then double-click* EPSETUP. EXE.

2. Follow the on-screen instructions until all the software is installed. When you see a message that the installation is complete, click Finish.

Uninstalling PhotoRAW

If you need to uninstall PhotoRAW, do one of the following:

- Click Start, point to Settings, and select Control Panel, Add/Remove Programs, and then click EPSON PhotoRAW.
- Click Start, point to Programs, and select EPSON PhotoRAW, and then click Uninstall.

EPSON RAW Plug-In

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

Windows:

The EPSON Installer Program dialog box appears automatically. *Note:*

If it does not appear, click the CD-ROM icon, and then select Open from the File menu. Then double-click EPSETUP. EXE.

Macintosh:

Double-click Install EPSON RAW Plug-In icon inside the EPSON folder.

2. Follow the on-screen instructions until the software is installed. When you see a message that the installation is complete, click Finish or Quit.

Note:

EPSON RAW Plug-In program is automatically installed in the plug-in folder for Adobe Photoshop. If the plug-in folder for Adobe Photoshop is not detected automatically, specify the folder manually.

Uninstalling RAW Plug-In

If you need to uninstall the RAW Plug-in, follow the instructions below.

Windows:

Click Start, point to Settings, and select Control Panel, Add/Remove Programs, and then click EPSON RAW Plug-In.

Macintosh:

Delete the EPSON folder in the plug-in folder of Adobe Photoshop.

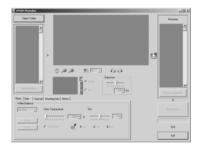
Opening a RAW Image

Be sure to copy your RAW image files to your hard disk before trying to open and process them. Working with them while they are still on the memory card will take a very long time.

Using EPSON PhotoRAW

Click Start, point to All programs (or Programs), and select EPSON PhotoRAW, and then click EPSON PhotoRAW.

EPSON PhotoRAW starts and the main window is displayed.



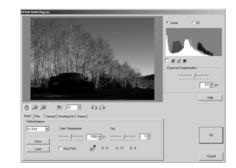
Using EPSON RAW Plug-In

For Windows

- 1. Start Adobe Photoshop.
- 2. Click File and point to Open. The Open dialog box is displayed.
- 3. Select the desired RAW file, then click the Open button.

For Macintosh

Start Adobe Photoshop and open the RAW file you want to process. The main window for EPSON RAW Plug-In is displayed.



Note:

- □ If the EPSON RAW Plug-In does not start automatically even if you select a RAW file, select Open from the File menu, and select EPSON RAW Plug-In from the Format drop-down list. Then select the RAW file.
- You cannot select a RAW file from a sub folder.

Finding More Information

For more information about the bundled software, see the online help.

Chapter 6

Maintenance and Troubleshooting

Setting the Time and Date

1. Press |□| (LCD), then |♀ (MENU) to display the main menu on the LCD monitor.



2. Select ⓐ (Settings), ⓑ (Basic Setup), then Time and Date using the jog dial, then press the ← (ENTER) button.

Time and Date ◀2006 ► 01 / 01 15 : 09
Set Back

3. Use the following to set the time and/or date:

Jog dial	Changes the value.
← (ENTER) button	Moves the cursor forward. Pressing this button on the minutes slot applies the change and returns to the previous menu.
⊂ → (CANCEL) button	Moves the cursor backward. Pressing this button on the year slot returns to the previous menu without setting time or date.

Note:

If you remove the battery from the camera, the date and time settings will be lost after approximately two days.

Calibrating the Status Gauge

The gauge readings may deviate slightly from the set positions over time. If this happens, follow the steps below to calibrate the gauge needles.

1. Press |□| (LCD) then |^O| (MENU) to display the main menu on the LCD monitor.



- Select (Gettings), (Basic Setup), then Calibrate Needles using the jog dial, then press ← (ENTER).
- 3. Select the needle you want to calibrate using the jog dial, then press → (ENTER).



 Select ◄ or ► using the jog dial, then press → (ENTER) repeatedly to adjust the needle position on the status gauge.

- 5. Select Finish using the jog dial, then press \leftarrow (ENTER).
- 6. Repeat steps 2 through 4 if you want to calibrate the other needles.
- 7. Select Finish using the jog dial, then press \leftarrow (ENTER).

Formatting the Memory Card

Format the memory card when you want to erase all the data on the card, or if the memory card has been formatted with a computer or another digital camera and you cannot save any images on the card. Follow these steps:

- 1. Press |□| (LCD) then | → (MENU) to display the main menu on the LCD monitor.
- 2. Select ♀ (Settings) then ➡ (Format SD Card) using the jog dial, then press ← (ENTER).
- 3. Select Quick Format or Full Format using the jog dial, then press (ENTER). The confirmation screen is displayed.
- 4. Select OK using the jog dial, then press \checkmark (ENTER).

The formatting starts and the message "Formatting..." is displayed.

After the memory card is formatted, the screen returns to the Settings menu.

Note:

- When you format the memory card, all the data on the card will be lost, including the locked images.
- □ If the memory card is locked, the message "Cannot format. The SD card is write-protected" is displayed. Remove the card from the camera, then unlock the card and try again.

Caution:

Do not remove the memory card from the camera while the card is being formatted.

Note:

Quick Format does not securely delete the data from the memory card. To securely "flush" the memory card so that no data can be recovered from the card, use Full Format to format the card.

Cleaning the Camera Body

Clean your camera thoroughly several times a year to keep it in good working condition. Before you perform any maintenance procedure on the camera, be sure to read the safety instructions on page 48. Then follow these guidelines to clean the camera:

- □ Be sure to turn off the camera before cleaning.
- Use a clean, dry cloth to keep the camera free of dust.
- Do not use abrasive cleaners.
- □ If necessary, clean the battery contacts with a dry cloth.

Cleaning the CCD Sensor

If dark spots appear on the same place on all the pictures you take, there may be dust particles on the CCD image sensor inside the camera. To clean the CCD sensor, you need a hand blower and a cable shutter release with a shutter lock feature.

Caut

Caution:

Do not use blower cans that use compressed air.

- □ Do not touch the sensor with your finger or a cloth. Doing so may damage the sensor and may affect image quality.
- Do not let the blower tip enter the camera body or touch the sensor surface. The shutter or sensor may be damaged if the shutter is accidentally released.
- 1. Remove the memory card from the camera.
- 2. Turn the shutter speed dial to B and attach the cable release.
- 3. Insert a fully charged battery and turn on the camera.

Caution:

- Do not use a low battery. If the battery dies and the shutter closes during cleaning, the camera may be damaged.
- 4. Cock the shutter, then remove the lens or lens hole cover.
- 5. Lock the shutter open using the cable release.
- 6. Blow off the dust carefully using the hand blower.
- 7. After cleaning, unlock the cable release and close the shutter.
- 8. Attach the lens or lens hole cover and remove the cable release.

Storing the Camera

If you are not planning to use the camera for a long period of time, remove the battery and store it at room temperature in a dry location. Store the camera in its case. Do not store the camera in following conditions:

- Direct sunlight or bright light
- □ High humidity
- High heat
- □ Excessive dirt or dust
- □ Excessive vibrations
- □ Strong magnetic fields

Troubleshooting

Error Messages

Message	Remedy
Cannot delete. The image is locked.	Unlock the image using the lock function in the main menu, then try again.
Cannot delete. The SD card is write-protected.	Remove the card from the camera, release the write-protect switch from the lock position, and try again.
Cannot lock. The SD card is write-protected.	The memory card is write-protected. Remove it from the camera, release the write-protect switch from the lock position, and try again.
Cannot unlock. The SD card is write-protected.	Remove the card from the camera, release the write-protect switch from the lock position, and try again.

Other Problems

Problem	Remedy
Permanent black or white spots (dead pixels) appear in pictures taken with the camera.	Use the Dead Pixel Correction feature to correct the dead pixels. See "Basic Setup Menu" on page 36 for details. Due to the nature of the CCD sensor, dead pixels cannot be completely eliminated.
The shutter cannot be released and the memory card access light flashes.	The battery power is too low. Charge the battery and try again.

Where To Get Help

Epson provides these technical support services:

Internet Support

Visit Epson's <u>support website</u> for solutions to common problems. You can download documentation, get FAQs and troubleshooting advice, or e-mail Epson with your questions.

Speak to a Support Representative

Before you call Epson for support, please have the following information ready:

- Derived Product name (Epson Rangefinder Digital Camera R-D1)
- □ Product serial number (located on the camera body)
- □ Proof of purchase (such as a store receipt) and date of purchase
- Description of the problem

Then call:

U.S.: (562) 276-4315, 6 AM to 6 PM, Pacific Time, Monday through Friday.

Canada: (905) 709-3839, 6 AM to 6 PM, Pacific Time, Monday through Friday.

Toll or long distance charges may apply.

Purchase Supplies and Accessories

You can purchase camera accessories from an Epson authorized reseller. To find the nearest reseller, call 800-GO-EPSON (800-463-7766). Or you can purchase online at **www.epsonstore.com** (U.S. sales) or **www.epson.ca** (Canadian sales).

Appendix

Standards and Approvals

Camera

EMC Directive 89/336/EEC	EN55022 Class B
	EN55024

Lithium-ion Battery

EMC Directive 89/336/EEC

Battery Charger

Low Voltage Directive 73/23/EEC EMC Directive 89/336/EEC EN60950 EN55022 Class B EN55024

EN55022 Class B EN55024

Specifications

General

Model type:	Lens-intercl camera	nangeable rangefinder digital
Dimensions:	Height:	88.5 mm (3.54 in.)
	Width:	142 mm (5.68 in.)
	Depth:	39.5 mm (1.58 in.)
Weight:	Approx. 560) g (1.2 lb)
Temperature:	Operating:	5 to 35°C
	Storage:	-20 to 60°C
Humidity:	Operating:	30 to 80%
(without condensation)	Storage:	10 to 80%
External interfaces:	Memory can to 2 GB)	d slot (for SD memory card up
	X-sync cont	act (for external flash unit)

Image Format

Recording format: File type: Image size/ typical file size: RAW, JPEG Exif 2.21, DCF 2.0, DPOF 1.1 compliant JPEG: 2240 × 1488 pixels/1.5 MB JPEG: 3008 × 2000 pixels/3 MB RAW (12-bit)/10 MB JPEG compression ratio:Locked at 1/4PRINT image matching:Supports PRINT Image Matching III

Optical System

Image sensor:	Primary-color filter CCD (APS size: 23.7×15.6 mm)
Pixels:	6.1 M
Lens mount:	EM mount (M-type bayonet mount; L-type screw mount with an optional adapter ring)
Viewfinder:	Real image range finder type see-through viewfinder
Viewfinder magnification:	1.0x
Rangefinder:	Combined coincidence-type (interlocking range: 0.7 m to infinity)
Rangefinder baseline	
length:	38.2 mm
Visual field frame:	28/35/50 mm bright frame switching, auto parallax compensation
Frame coverage:	85% (at 3 m)
Shutter:	Electronically controlled vertically traveling focal plane shutter Shutter speed: 1/2000–1 sec, bulb
Flash:	Synchronous: 1/125 sec or slower
	Supported only in synchronized shooting
Metering:	TTL screen surface direct actual-aperture center-weighted averaged metering

Automatic exposure (AE) with aperture priority and AE-lock/manual
+/-2.0EV in 1/3EV steps (AE mode only)
200/400/800/1600
1.53x

Display Functions

LCD monitor:	Type 2 low-temperature polysilicon color LCD 235 K pixels
Status gauge:	Analog needle indicators

Viewfinder Indicators

Shutter speed:	1/2000–1 sec. (flashing metered/lit: set on dial)
Bright-line frames:	for 50/28/35 mm lenses

Power Supply

Battery type:	Lithium-ion
Model:	EU-85
Output voltage:	3.7 V
Capacity:	1500 mAh

Battery charge life-cycle: Number of shots possible

Under shooting conditions 1*: Up to about 1000 shots

Under shooting conditions 2**: Up to about 360 shots (compliant with the CIPA standard)

- Shooting conditions 1: Shooting six pictures per minute at a regular interval then turning the camera off for one minute before turning it on again and repeating this procedure, while the flash is off, a shutter speed of 1/250, ISO of 200, image quality of **N** (JPEG: 2240 × 1488 pixels) and WB on Sunny.
- ** Shooting conditions 2:

Turning on the camera and waiting 30 seconds before taking the first picture, then taking nine more pictures at 30 second intervals before turning off the camera and removing the battery for 10 minutes and repeating this procedure, while using the flash - which is attached to the accessory shoe - on full for every second shot, with a shutter speed of 1/125, ISO of 200, image quality of **H** (JPEG: 3008 × 2000 pixels) and WB on Auto.

Battery Charger

Model:	A281H
Input voltage:	100–240 VAC, 50/60Hz
Charging method:	Constant voltage, constant current

Optional Accessory

The following option is available for the camera.

Lithium-ion battery (Model: EU-85)

Important Safety Instructions

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

When using the camera

- □ Follow all warnings and instructions marked on this product.
- □ Do not insert objects into any openings.
- 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.
- □ Protect the camera from rapid temperature change.
- □ 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 battery from the product. 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 from a cold to warm environment, or vice-versa. Condensation may form on electronic parts.
- □ To prevent possible injury, do not take flash pictures in close proximity to anyone's eyes.
- Do not insert your finger into the camera or EM mount.
- □ If the liquid crystal solution contained in the LCD monitor leaks out and gets on your hands, wash them thoroughly with soap and water. If it gets into your eyes, flush them immediately with water.
- □ When connecting this product to a computer or other device with a cable, ensure the correct orientation of the connectors. Each connector has only one correct orientation. Inserting a connector in the wrong orientation may damage both devices connected by the cable.

When using the strap

- □ Do not swing the camera about. This can damage the camera or other objects, or cause injury.
- Do not pull or tighten the strap too much when wearing it; this can cause serious injury.
- □ Keep the strap away from children.

When using the battery

Follow the precautions below when using the battery as mishandling it may cause injury.

- □ 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 an Epson Li-ion battery for this camera, as specified in this manual.

- Do not use the battery that comes with this product for other devices.
- □ To protect against short-circuiting, do not remove the outside sleeves 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 expose the battery to heat, fire, or water.
- Do not use batteries that are leaking or damaged in any way.
- □ Do not charge the battery on battery chargers other than the one provided with this product.
- Do not charge the battery near open flame or in very hot locations.
- □ Keep the battery away from heat sources.
- □ Prevent the battery from coming into contact with metal objects that could short-circuit it, such as coins or keys.
- Do not solder wires or terminals directly to the battery.
- Do not touch battery terminals.
- □ Keep the battery away from open flame.
- □ If overheating, discoloration, distortion, a strange smell or any other abnormal situations occur, remove the battery from this product and do not use it.
- □ Keep batteries out of the reach of children.
- □ If charging has not finished after the regular charging time, stop charging.
- □ Do not place the battery into a high-pressured container or a microwave oven.
- □ Do not insert the battery into power outlets or other power sources, such as cigarette lighters.
- □ Charge the battery before using it. The battery is not fully charged when you purchase it.

When storing the battery

- □ When not using this device for a long period, remove the battery from this product and store it separately.
- Do not store the battery where temperature or humidity is very high.
- □ Store the battery out of children's reach.
- Discharge the battery completely before storing it for a long time.
- When not using the battery for a long time, charge the battery and then discharge it completely about once a year during storage.

When disposing of the battery

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

- Warning:
 - □ Be sure to completely cover both 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.



This mark indicates that the battery will be recycled by RBRC. When you dispose of the battery, contact RBRC.

When using the battery charger

Warning:

Read all relevant safety and operating instructions before using this product, as misuse could result in personal injury from fire, explosion, leakage, overheating, or electric shock.

These safety and operating instructions should be kept for future reference.

- □ Use only the Epson battery charger provided to charge the Epson Li-ion battery Model EU-85. Never attempt to charge other types of batteries in this charger as they may explode, leak, overheat, or cause personal injury.
- Do not charge primary (non-rechargeable) batteries.
- □ Do not handle the battery charger with wet hands or use it near water.
- Do not expose the battery charger to water or high humidity.
- Use only the type of power source indicated on the battery charger's label, and always supply power directly from a standard, domestic power outlet with a power cord that meets the relevant local safety standards.
- □ Place the battery charger near an electrical outlet where the power cord can be easily unplugged.
- The battery charger is designed for use and provided with this product. Do not attempt to use it with other electronic devices unless specified.
- The battery charger included is designed for use with this product. Use of any other battery charger could result in fire, electric shock, or injury.
- □ Use only a power source that meets the power requirements indicated on the label attached to the product. If you are not sure of the power supply specifications in your area, contact your local power company or contact our Customer Support.
- □ Make sure the total amperage of all devices plugged into the power outlet does not exceed the power outlet's ampere rating.
- If you plan to use this product in Germany, the building installation must be protected by a 16 amp circuit breaker to provide adequate short-circuit protection and over-current protection for this product.
- Do not use a damaged or frayed battery charger.

- □ If you use an extension cord with this product, make sure the total amperage of all devices plugged into the extension cord does not exceed the cord's ampere rating.
- □ Never disassemble, modify, or attempt to repair the battery charger by yourself except as specifically explained in this guide.
- □ Do not use power outlets controlled by wall switches or automatic timers.
- Do not use power outlets on the same circuit as large motors or other appliances that may cause voltage fluctuations.
- □ Avoid using outlets on the same circuit as photocopiers or air conditioning systems that regularly switch on and off.
- □ Position this product's power cord so that it will not be stepped on or run over.
- Do not place any objects on the power cord or the battery charger.
- □ Keep the power cord straight at the ends and at the points where it enters the transformer.
- Do not let the power cord become damaged or frayed. Place the battery charger in a location where people are unlikely to walk on the power code, and the cord is not pinched by items placed upon or against it.
- □ If you cannot insert the plug into the power outlet, contact an electrician.
- □ Use the power cord provided or a 6 to 10 foot UL-approved type SPT-2 or heavier type, 2 X 18 AWG cord with a 125 V 10 A plug and 125 V 7 A connector.

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.

Do not remove the memory card while the power switch is on.

When using the LCD

- 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 camera

- 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.

FCC Compliance Statement for United States Users

This equipment complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are 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 or television reception. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio and 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 to an outlet on a circuit different from that to which the receiver is connected
- Consult your dealer or an experienced radio/TV technician for help

WARNING

The connection of a non-shielded equipment interface cable to this equipment will invalidate the FCC Certification of this device and may cause interference levels which exceed the limits established by the FCC for this equipment. It is the responsibility of the user to obtain and use a shielded equipment interface cable with this device. If this equipment has more than one interface connector, do not leave cables connected to unused interfaces.

Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

DECLARATION of CONFORMITY

According to 47CFR, Part 2 and 15 for Class B Personal Computers and Peripherals; and/or CPU Boards and Power Supplies used with Class **B** Personal Computers:

We:	EPSON AMERICA, INC.
Located at:	MS 3-13
	3840 Kilroy Airport Way
	Long Beach, CA 90806
	Telephone: (562) 290-5254

Declare under sole responsibility that the product identified herein, complies with 47CFR Part 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 a 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.

Trade Name:	EPSON
Type of Product:	Digital Still Camera
Model:	G911A

Index

A

accessory shoe, 8 adapter ring, 15 AE-lock, 24 AE-lock button, 9 aperture setting, 23

В

battery charging, 11 installing, 13 lithium-ion battery, 11 bright-line frame illumination window, 7 selecting, 16 bulb setting, 23 button CANCEL button, 10 ENTER button, 10 LCD button, 10 MENU button, 10 USER button, 10

С

Cable release, 23 calibrating status gauge, 42 cleaning camera, 43 CCD sensor, 43 contacting Epson, 45 customer support, 45

D

dial-lock release button, 8 display icons, 27

Ε

EPSON PhotoRAW, 39

F

flash, 23 focal length conversion scale, 9 focusing, 25 format memory card, 42 frame selector lever, 8

I

icons, 27 image quality, 10 installing software, 39 ISO sensitivity dial, 8

J

Jog dial, 8

L LCD monitor, 10, 26 lens

incompatible lens, 15 mounting L-mount lens, 16 mounting M-mount lens, 15 release button, 7 removing M-mount lens, 16

М

memory card access light, 9 formatting, 42 inserting, 14 removing, 14 slot, 9 slot cover, 9 write protecting, 14, 42

0

option, flash, 23 optional accessory, 48

Ρ

power on/off, 18 power switch, 8 PRINT image matching, 47

R

rangefinder eyepiece, 9 rangefinder window, 7

S

SD memory card, formatting, 42 setting aperture, 23 white balance, 19 shutter charge lever, 8, 18 shutter release button, 8 shutter speed, 8, 23 software, installing, 39 status gauge, 8, 10 storing camera, 44

Τ

technical support, 45

V

viewfinder window, 7

W

white balance, 10

Χ

X-sync contact, 7