

IMPORTANT!

You need to reinstall EPSON® Image Authentication System™ (IAS) on your camera if it was installed before your camera was repaired. Please see your *EPSON Image Authentication System User's Guide* for instructions.

IAS software lets you check the authenticity of photos taken with your EPSON Photo PC® 700, 750Z, 800, or 850Z camera. IAS detects when even a single bit of digital data in a picture has been altered. If you don't have IAS installed on your camera and would like to learn more about it, call **1-800-GO EPSON**, or visit our website at <http://www.epson.com>.



User's Guide

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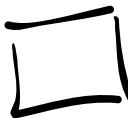
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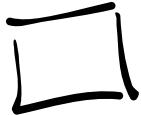
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Introduction

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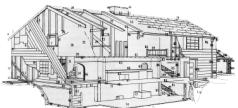
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Your new EPSON® PhotoPC® 850Z is a high resolution, two megapixel, USB and serial digital camera with 3x optical zoom. It includes three different user modes with three levels of control: a manual mode for expert photographers, a programmed mode that gives you control of your shots and saves time, and a fully automatic point-and-shoot mode for no-fuss photography.

The PhotoPC 850Z comes with a built-in microphone and speaker that let you add and play voice messages. Your camera puts you in control of all your shots with exposure, flash, white balance, metering, and focus settings.

The PhotoPC 850Z captures images at 1600×1200 pixel resolution in 24-bit color, using a 2.11 megapixel CCD sensor. With EPSON's HyPict™ image enhancement technology, the images can be interpolated to 1984×1488 pixels right inside the camera.

Your PhotoPC 850Z comes complete with cables, batteries, battery charger, neck strap, and 8MB CompactFlash™ memory card. It also comes with a CD-ROM with software and utilities for downloading, editing, organizing, and printing your pictures.

PhotoPC 850Z Features

PhotoPC 850Z is a complete system for capturing digital images, and includes the following features:

- ▶ 2.11 million pixel CCD sensor
- ▶ 3× optical zoom

- ▶ Resolutions of 1600×1200 pixels, and up to 1984×1488 pixels (interpolated) using EPSON's HyPict image enhancement technology
- ▶ 24-bit color or monochrome image capture
- ▶ High-speed image processing (one second per image in quick shot mode)
- ▶ 8MB EPSON CompactFlash card that holds approximately 24 fine-resolution or 120 standard-resolution images
- ▶ Built-in microphone and speaker that let you record and play back an audio recording of up to 10 seconds for each picture
- ▶ 2.0-inch, low-temperature, poly-silicon TFT color LCD screen that supports instant preview, playback, delete, and power save mode and has a power-saving Solar Assist™ panel
- ▶ Capability to print directly to several EPSON ink jet printers—without using a computer

- ▶ Video and audio output for playing your pictures back on a TV, VCR, or projector
- ▶ Macro, 2X digital zoom, panorama, quick shot mode, and interval and continuous shooting
- ▶ Adjustments for white balance, exposure, sensitivity, aperture, shutter, and focus
- ▶ Built-in flash with leading and trailing slow synchronized modes for night photography and action photos
- ▶ Four rechargeable NiMH AA batteries and a fast charger
- ▶ Automatic shut-off to save batteries
- ▶ Automatic date and time recording for each picture
- ▶ Serial and USB cables for transferring photos to your Windows® or Macintosh® computer
- ▶ Fully USB-compatible

Your camera comes with the PhotoPC 850Z software suite, which includes the following applications for both PC and Macintosh users:

- ▶ Sierra Imaging Image Expert™ software for transferring, organizing, editing, and printing your pictures
- ▶ The EPSON Photo!3™ application and TWAIN driver for transferring your pictures
- ▶ EPSON Photo File Uploader for converting presentation slides into image files and uploading them to your camera
- ▶ EPSON Photo Program Uploader for installing the Direct Print and Print Mark programs on your camera (Direct Print lets you print directly from the camera to a number of EPSON ink jet printers and Print Mark lets you create DPOF files to give to your local photo finishing lab.)

Optional Accessories

EPSON offers these accessories for the PhotoPC 850Z:

- ▶ Universal AC adapter (B867081) for use with any standard (100 to 240 V) electrical outlet
- ▶ Additional or replacement NiMH rechargeable batteries (B818113)
- ▶ Additional or replacement universal NiMH Power Pak, which includes batteries and charger (B818172)
- ▶ EPSON Image Authentication System™ (IAS) software (PPC8-IAS)

Your camera is also compatible with a range of options that can enhance your shots and store more images. You can attach an optional flash to the camera's hot shoe for portrait photos or photos in places that are dimly lit. You can use the camera with optional lenses for your specialized shots. You can also obtain additional Type I or Type II CompactFlash memory cards and PCMCIA adapters made by leading suppliers, such as Lexar Media,™ Delkin Devices,™ and SanDisk.®

NOTE

Please take a minute to fill out the registration card for the PhotoPC 850Z digital camera and mail it back to us. This enables you to receive special information on accessories, new products, and software upgrades. You'll get immediate attention if you have a problem with your PhotoPC 850Z.

1

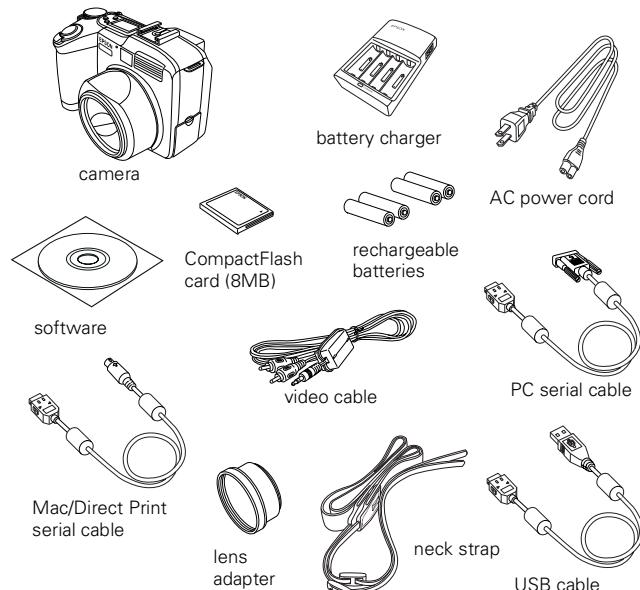
Setting Up Your Camera and Software

Before you can start using your PhotoPC 850Z, you need to charge the batteries. You must also format your CompactFlash memory card and prepare the camera. This chapter describes the following:

- ▶ Unpacking your PhotoPC 850Z
- ▶ Using rechargeable NiMH batteries
- ▶ Attaching the neck strap
- ▶ Installing the CompactFlash memory card
- ▶ Setting the date and time
- ▶ Formatting your memory card
- ▶ Removing your memory card
- ▶ Choosing your user mode
- ▶ Adjusting the viewfinder focus
- ▶ Installing your PhotoPC 850Z software

Unpacking Your PhotoPC 850Z

Make sure you have all the parts shown below.



Using Rechargeable NiMH Batteries

Your PhotoPC 850Z comes with a charger and four rechargeable NiMH batteries that can be recharged hundreds of times.

NOTE

New batteries need to be fully charged three times before you use them. This process takes approximately five or six hours—but you only need to do it once. When you need to recharge your batteries in the future, it takes approximately two and a half hours for a full charge.

Charging Batteries

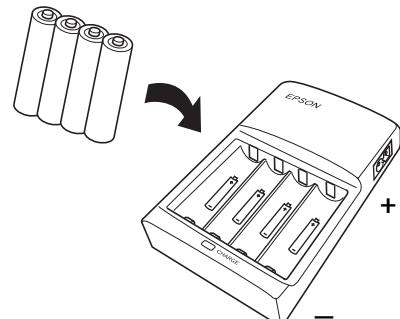
It's important to fully charge your batteries, so they will last as long as possible before they need recharging.

WARNING

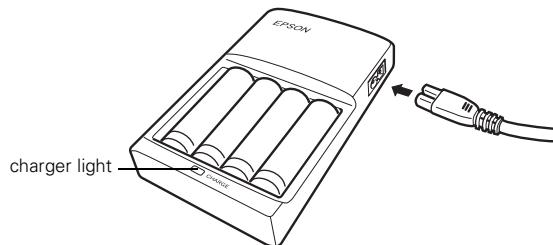
Shock hazard. Make sure you use the charger only with EPSON rechargeable NiMH batteries (model EU-24). To avoid the danger of leakage or explosion, do not place any other batteries in the charger. Read all safety and handling instructions in the Introduction of this guide before using the charger.

Follow these steps to charge your batteries for the first time:

- 1 Insert all four batteries, positioning the + and – ends as shown.



2 Connect the battery charger to its power cord, as shown below.



3 Plug the charger into an electrical outlet. The charger light turns red, indicating that the charger is working. When the batteries are charged, after about two and a half hours, the light goes off.

NOTE

The charger light flashes to indicate changes in battery temperature and voltage. If the light continues to flash for more than half an hour, the batteries may be damaged or worn out, and should be replaced. Unplug the charger if the batteries are not fully charged after four hours.

4 Now charge your batteries again by unplugging the battery power cord and then plugging it in again.

5 Charge the batteries a third time. After the charger light goes off, unplug the charger. To avoid overcharging, don't leave the charger plugged in for long periods of time after the light goes off.

6 Wait one hour until the batteries cool before removing them from the charger.

WARNING

Batteries are very hot (149 °F [65 °C]) after charging.

7 Before storing the charger, disconnect the power cord and remove the batteries.

(For subsequent charges of your NiMH rechargeable batteries, follow steps 1 through 3, then unplug the charger and follow steps 6 and 7 above.)

Be sure to charge the batteries completely to make them last as long as possible. They can be recharged hundreds of times, so do not dispose of them until they are worn out.

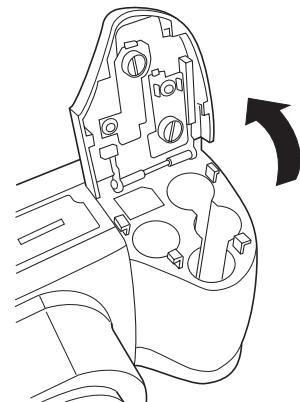
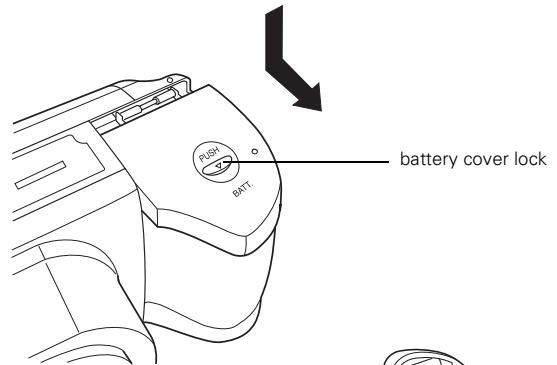
NOTE

To keep the charger terminals clean, unplug the charger and wipe the terminals with a dry cloth. Make sure you charge the batteries before you use them. If you find that your batteries run out faster after you recharge them a few times, make sure you discharge them completely before recharging. If this doesn't help, replace the batteries.

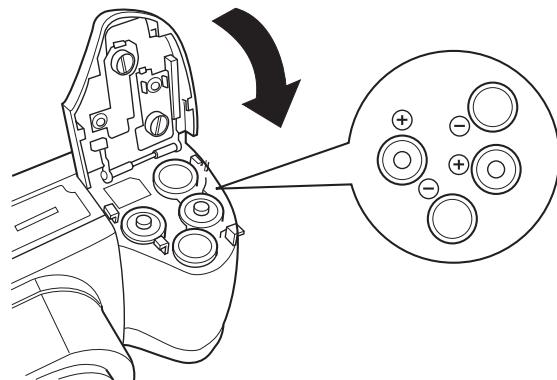
Installing Batteries

Before you install the batteries, make sure the camera dial is turned to Off.

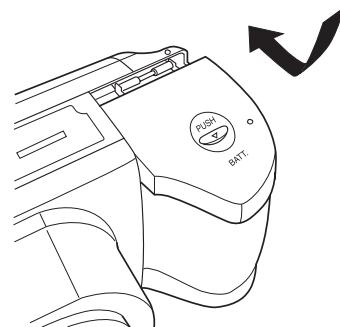
- 1 Turn the camera upside down.
- 2 Hold the battery cover lock down and slide the cover out to open it.



3 Insert four batteries into the compartment, positioning the + and – ends as shown below.



4 Lower the battery cover and slide it in, as shown below.



When the battery power is almost out, a low battery icon  appears on the camera's display panel. Be sure to replace all four batteries at the same time.

Battery Options

If you forget to charge your rechargeable NiMH batteries or if they need to be replaced, the PhotoPC 850Z camera can also accept the following:

- ▶ Rechargeable AA NiCad batteries
- ▶ Single-use AA lithium batteries (longer life, Energizer® recommended)
- ▶ Single-use AA alkaline batteries

WARNING

To avoid the danger of fire or explosion, do not mix different types of batteries. Do not allow the battery contacts to touch metal objects such as coins or keys, which could short out the battery. Read all safety and handling instructions before using batteries.

Note the following when handling batteries:

- ▶ Use only the EPSON battery charger (Model EU-38) to charge the batteries that came with your camera.
- ▶ Use the batteries that came with your camera only in EPSON digital cameras.
- ▶ Do not use manganese batteries.
- ▶ Do not mix different types of batteries; this can cause fire or explosion.
- ▶ Replace all four batteries at the same time. Do not mix old and new batteries.
- ▶ Batteries that have not been used for a long time do not charge well. However, with regular use, the batteries will return to normal.
- ▶ Batteries discharge at least 2% per day, whether they are used or not.
- ▶ If the batteries are charged in a hot environment, or if they are charged repeatedly without being discharged, they will wear out more quickly.

- ▶ Do not drop, puncture, disassemble, or mutilate batteries. Do not get them wet or expose them to fire.
- ▶ When the camera is not used for long periods of time, remove the batteries and store them at a low temperature in a dry location. Store away from the reach of children.
- ▶ To avoid fire or electric shock, do not use batteries that are leaking or damaged in any way.
- ▶ If battery acid gets in your eyes or on your skin, immediately rinse the area with water and seek medical treatment. If a battery is swallowed, seek medical treatment immediately.
- ▶ Dispose of used batteries according to the manufacturer's instructions and in compliance with all applicable laws. Contact your local government agency for information about battery recycling and disposal.
- ▶ Battery life varies depending on the battery type, the manufacturer, and other factors.

Attaching the Neck Strap

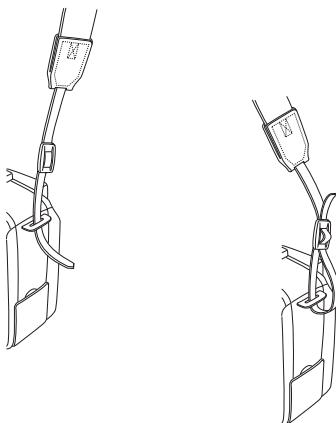
Your camera includes a neck strap that attaches to the camera to make it easier to carry.

WARNING

To avoid damaging the camera or other objects, or injuring other people, do not swing the camera about. Keep the strap away from children. Do not pull or tighten the strap too firmly while wearing it around your hand or neck; this can cause serious injury.

To attach the neck strap, follow these steps:

- 1 Pass one end of the strap through one of the eyelets on the sides of the camera.



- 2 Pass the strap through the clamp to secure it.
- 3 Attach the other end of the strap to the eyelet on the other side of the camera in the same way.

Installing Your Memory Card

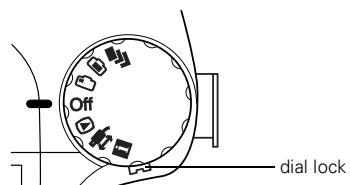
Your camera comes with an 8MB CompactFlash memory card that needs to be in the camera to take photos. This card stores your photographs until you transfer them to your computer and delete them.

You can purchase additional memory cards (4MB to 96MB) from leading suppliers like Lexar Media, Delkin Devices, and SanDisk. See page A-7 for more information.

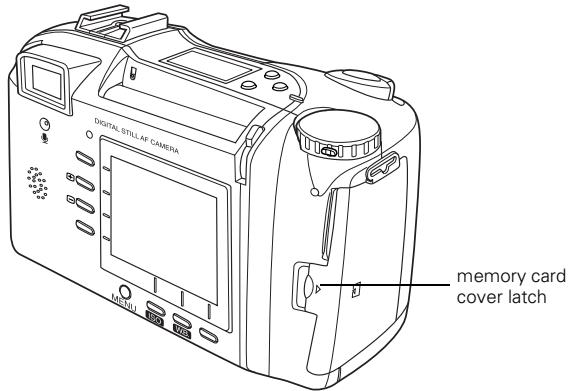
NOTE

The CompactFlash card slot is Type I and Type II compatible.

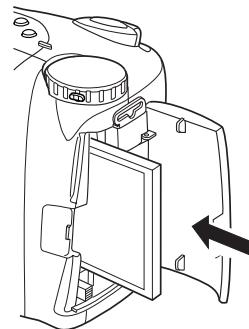
- 1 Make sure the camera dial is turned to Off. (To change the dial setting, press the white dial lock in and turn the dial.)



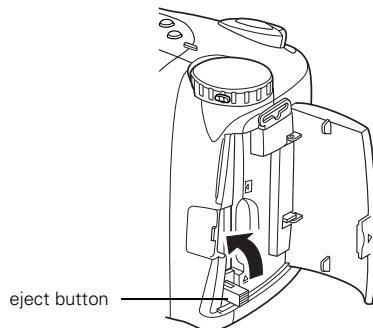
2 Place your thumb or index finger behind the memory card cover latch and pull the cover open.



3 Insert the card all the way into the memory card slot. Make sure the front of the card is facing the same direction as the front of the camera, and the arrow on the card's label is pointing in.



4 As you insert the card, the eject button pops out. Flip the eject button up and close the memory card cover.



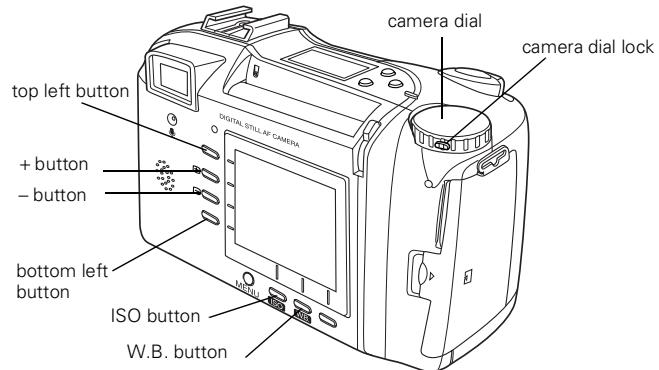
The camera's date and time need to be set before you can format the memory card.

Setting the Date and Time

Before you use the camera, you need to set its clock. Then the camera will automatically record the date and time for each picture you take. You may need to set the clock again if you don't use it for extended periods of time.

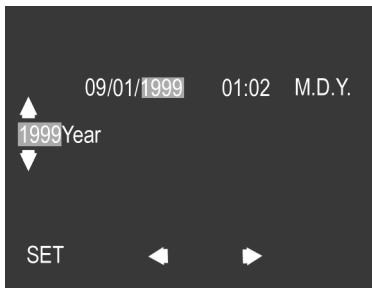
NOTE

You can also set the camera's clock through your computer. See page 8-1 for instructions on connecting the camera to your computer, and page 7-4 for instructions on setting the date and time.



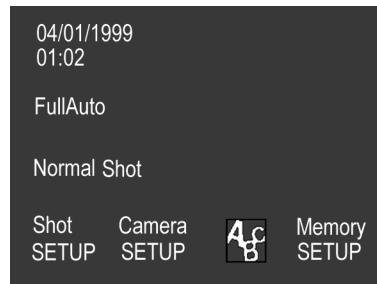
Follow these steps to set the date and time:

- 1 Push the camera dial lock in and turn the camera dial to **1**.
- 2 You see the clock setting screen with the year highlighted in red.



- 3 Press the + or – button (next to the up and down arrows) to increase or decrease the number, until the year is correct.

- 4 Press the **ISO** button (below the left arrow) to select the month and day. Press the **W.B.** button (below the right arrow) to select the time. Make adjustments as described in the previous step.
- 5 When you're finished, press the bottom left button (next to **SET**). You see the **SETUP** menu.



Now you're ready to format the memory card.

Formatting Your Memory Card

You should format your card before you use it. Follow these steps:

- 1 Turn the camera dial to **1**. You see the SETUP menu. Then press the bottom right button (below **Memory SETUP**). The Memory Card Format menu appears if a memory card is correctly installed in the camera.



- 2 Press the top left button (next to **MEMORY CARD FORMAT**) to format the card. You see a message warning you that all data on the card will be deleted.
- 3 Press the button next to **Yes** to format the card, or the button next to **No** to cancel.

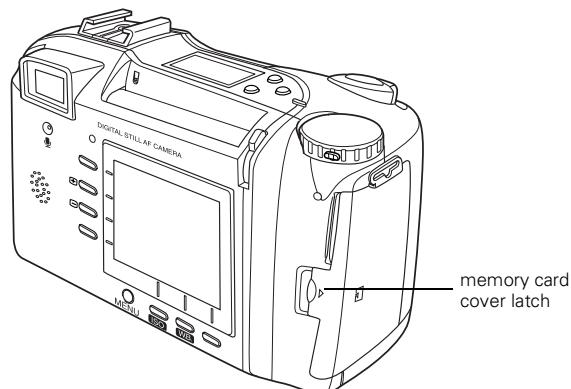
Removing Your Memory Card

Turn your camera dial to Off before you remove the card.

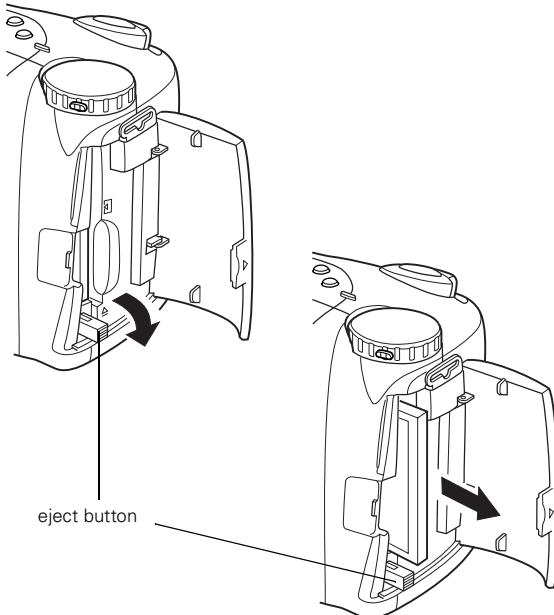
CAUTION

Never remove the card while the camera is on. Data in the card may be lost or damaged.

- 1 Place your thumb or index finger behind the memory card cover latch and pull the cover open.



- 2 Flip the eject button down and push it in to release the card. Then pull the card out and close the cover.



Choosing Your User Mode

The PhotoPC 850Z has three user modes to give you different levels of control over the camera settings. To use the more advanced features, such as white balance and exposure adjustment, you must be in Program mode or Manual mode.

Full Auto The camera chooses most settings for you. This mode is the default. You can simply point and shoot, or you can adjust some basic settings (for example: image quality, digital zoom, macro mode and panoramic mode).

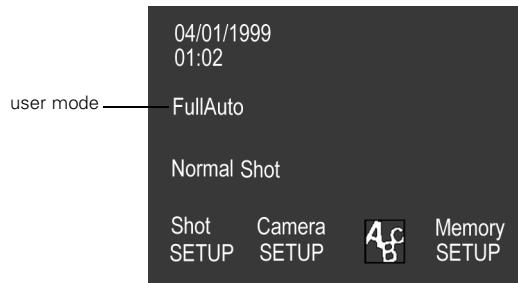
Program This setting is recommended for photographers who want a moderate amount of control over the camera's functions. Programmed subjects (Normal, Sports, Portrait, and Landscape) tailor your camera settings to the type of picture you're taking. You can also use the LCD menus to make your own adjustments to sensitivity, white balance, and exposure.

Manual This mode is for experienced photographers who want complete control over the camera's wide array of settings and features. In addition to changing sensitivity and white balance, you can adjust the shutter speed and aperture, choose a spot or matrix metering system, and focus the camera to three feet, ten feet, or infinity.

Follow these steps to choose the camera mode:

- 1 Push the camera dial lock in and turn the dial to **1**.

You see the SETUP menu:

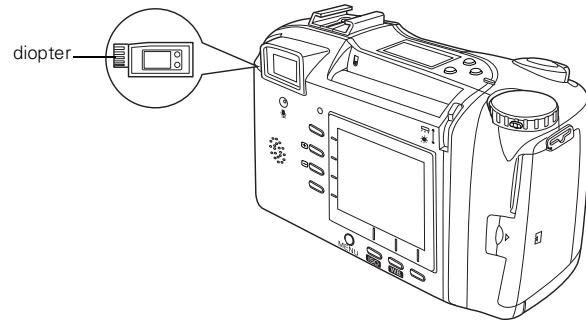


- 2 Press the + button to cycle through the three modes.

Adjusting the Viewfinder Focus

You can adjust the viewfinder's focus using the diopter. This is useful if you wear glasses and want to take pictures with the viewfinder. Follow these steps:

- 1 Turn your camera dial to **2**.
- 2 Look through the viewfinder and turn the diopter dial until you have a clear view.



NOTE

The viewfinder will not focus when the camera is turned off. Make sure the camera is turned on to adjust the diopter.

Installing Your Software

PhotoPC 850Z comes with everything you need to transfer your pictures from the camera to your computer, and then organize, enhance, and share them. You can also upload pictures and presentations to the camera. The CD-ROM has these applications for Windows and Macintosh:

- ▶ Sierra Imaging Image Expert
- ▶ EPSON Photo!3 TWAIN and standalone application and EPSON Photo!3 Program Uploader
- ▶ EPSON Photo File Uploader

Installing for Windows

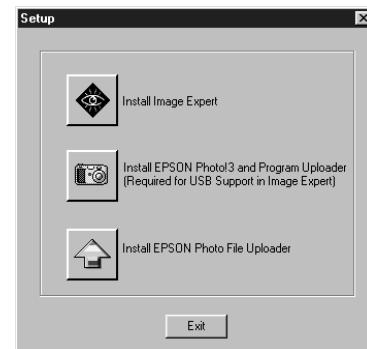
You can install the software on your Windows 98, Windows 95, or Windows NT® 4.0 system. (See page B-6 for minimum system requirements.)

NOTE

If you are asked to restart your computer after any installations, you can cancel and wait to restart until you have installed all the PhotoPC 850Z applications.

Follow these steps:

- 1 Insert the CD-ROM in your drive. The install program starts automatically.
If it doesn't start automatically, double-click **My Computer**. Then double-click your CD-ROM icon.
- 2 When you see the following screen, click the **Install Image Expert** button.



- 3 Follow the instructions on the screen to install Image Expert. When installation is complete, you return to the Setup screen.

- 4** Click the **Install EPSON Photo!3 and Program Uploader** button. Follow the instructions on the screen.
- 5** When you return to the Setup screen, click the **Install EPSON Photo File Uploader** button. Follow the instructions on the screen.
- 6** When installation is complete, click **Exit**.
- 7** Restart your computer.

Installing Your Windows 98 USB Driver

If you're installing on a Windows 98 system with a USB port, complete the steps above to install your software. The first time you connect the camera to your computer with your USB cable, you'll see the Add New Hardware Wizard. (See page 8-1 if you need help connecting the camera.)

NOTE

You may need your Windows 98 system disk for this installation.

Follow these steps to install the driver for your camera:

- 1** Insert your PhotoPC 850Z CD-ROM in your drive.
- 2** At the first screen in the Add New Hardware Wizard, click **Next**.
- 3** Select **Search for the best driver for your device**, then click **Next**.
- 4** Select **Specify a location** and browse to your CD-ROM drive.
- 5** Select the **Win98E** folder if you're installing the English driver (or the **Win98S** folder to install the Spanish driver, or the **Win98F** folder to install the French driver). Click **OK**.
- 6** On the following screen, click **Next**. The wizard locates your camera's driver.
- 7** Click **Next** on the installation screen to install the driver. When installation is complete, click **Finish**.

Installing on a Macintosh

You can install all the software on your PowerPC™, Power Macintosh® G3, or iMac™ computer. (See page B-6 for minimum system requirements.)

NOTE

- ▶ If your iMac is running OS 8.1, you'll need to update your operating system before installing your camera software. Download and install the iMac Update 1.0 or later from Apple® at <http://swupdates.info.apple.com>. Contact Apple if you have problems installing the update. If your iMac is running OS 8.5 or 8.51, Apple recommends that you download and install iMac Update 1.1. (To find out which operating system your iMac is running, select **About This Computer** in the Apple menu.)
- ▶ If you are asked to restart your computer after any installations, you can quit and wait to restart until you have installed all the PhotoPC 850Z applications.

Follow these steps:

- 1 Insert the CD-ROM in your drive.

- 2 If necessary, double-click the CD-ROM icon to open it and open the folder for the language you want to use.
- 3 Double-click the **Install Image Expert** icon. Click **Continue** and follow the instructions on the screen.
- 4 If necessary, open the folder for your language. Then open the **EPSON Photo!3 Ver. 1** folder.
- 5 Double-click the **Photo!3 Installer – Part 1** icon and follow the instructions on the screen.
- 6 If necessary, open the folder for your language. Then open the **EPSON Photo File Uploader** folder.
- 7 Double-click the **EPSON Photo File Uploader 3 Install** icon and follow the instructions on the screen.
- 8 Restart your computer.

To automatically create preferences for the EPSON Photo File Uploader, start the **EPSON Photo!3** program, then close it. You need these preferences to run Photo File Uploader.

2

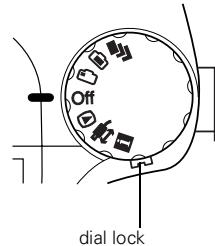
Taking Pictures

Taking pictures with the PhotoPC 850Z is similar to using a traditional camera. This chapter gives the following basic information for taking pictures:

- ▶ Using the camera dial
- ▶ Reading the status display panel
- ▶ Taking pictures with the viewfinder
- ▶ Taking pictures with the LCD screen
- ▶ Setting image quality
- ▶ Using the flash
- ▶ Taking pictures with the timer
- ▶ Taking color or black and white images
- ▶ Adding sounds to images
- ▶ Using quick playback

Using the Camera Dial

The camera dial has an Off position and six other settings: three for taking pictures, and three for performing other functions, such as setting up your photos or playing them back on the LCD screen.



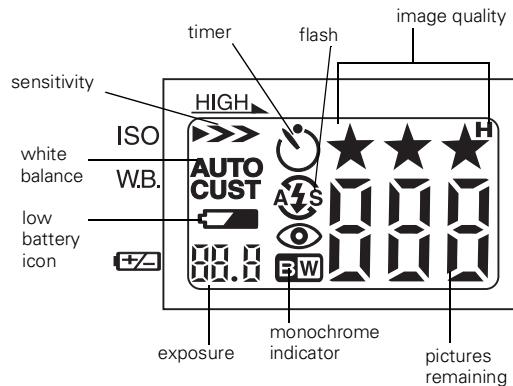
When the dial is in the Off position, press the white dial lock in to turn the dial. (You don't need to press the dial lock in when another setting is selected.)

Camera dial settings include the following:

- Use this setting for continuous and interval shooting. See pages 3-2 through 3-6 for details.
- Use this setting to take photos with the LCD screen. See page 2-6 for details.
- Use this setting to take photos with the optical viewfinder. See page 2-4 for details.
- Use this setting to play back, delete, and add audio recording to your photos. See Chapter 6 for details.
- Use this setting to print directly from your camera to an EPSON ink jet printer. See Chapter 14. Also use it to create DPOF files with the Print Mark program. See Chapter 15.
- Use this setting to set up or view information about your camera on the Setup screen. See Chapter 7 for information.

Reading the Status Display Panel

When your camera dial is turned to  ,  , or  , the status display panel (on the top of the camera) shows the camera's current settings and how many additional pictures you can take.



Checking the Battery

 When your battery power is almost out, the low battery icon appears on the display panel. The icon flashes when your battery power is completely out.

You need to recharge or replace the batteries or use the optional universal AC adapter when you see the low battery icon. Although you may be able to use the camera with low batteries, it needs full battery power to operate reliably.

Several factors can affect battery life, including the surrounding temperature and the type of batteries you use. Low temperatures—especially below 50 °F (10 °C)—drain batteries faster. See page 1-2 for battery use instructions.

Checking the Picture Counter

The large number in the lower right of the status display panel shows how many additional pictures you can take.

This number is affected by the image quality setting. Also, if you have any audio recordings stored on your memory card, the number on the display panel may be greater than the actual number of remaining pictures.

When the memory card is full, the number on the display panel reads 0, the status light on the back of the camera flashes orange, and you can no longer use the shutter button.

Before you can take any more pictures, you need to delete some of the images on the memory card. (See page 6-3 for instructions.)

If you want to save your photos before you delete them, connect the camera to your computer and transfer the pictures as described in Chapter 6.

Instead of the number of pictures remaining, you may see one of the following in the lower right corner of the status display panel:

- ▶ In quick shot mode, the number of photos taken is displayed in brackets. 
- ▶ In Program or Manual mode, the exposure value appears on the left and the shutter speed appears on the right when you hold the shutter button down halfway. See page 1-13 for more information about user modes. 

- When you turn the camera's dial to **■**, **SEt** is displayed. No other information appears in the status display panel.
- While you make an audio recording, **rEc** appears in this space.
- While you take photos using the interval shooting feature, **Int** appears on the display panel.

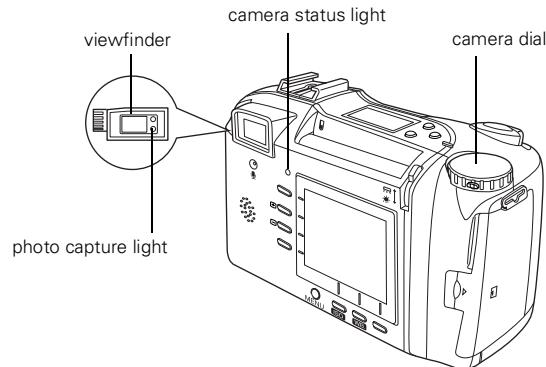
SEt

rEc

Int

Taking Pictures With the Viewfinder

 You can capture an image as you would with any point-and-shoot auto-focus camera: look through the optical viewfinder and press the two-step shutter.

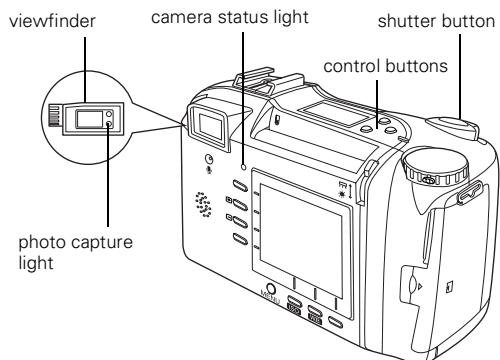


NOTE

One advantage of the optical viewfinder is that it uses less battery power than taking pictures with the LCD screen. However, you need to use the LCD screen when you make audio recordings or use the panorama, macro, and digital zoom features.

Follow these steps:

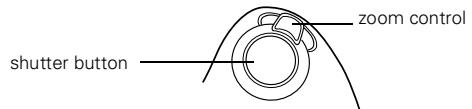
- 1 Make sure you are at least 20 inches (50 cm) away from your subject. (If you want to get closer, use macro mode as described on page 4-4.)
- 2 Turn the camera dial to  and wait until the photo capture light turns green.



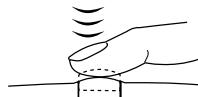
3 Use the camera's control buttons to make any changes you want to image quality, the flash, or other basic settings. (Instructions for changing basic settings start on page 2-10.)

4 Look straight through the viewfinder and center your subject within the cross-hairs.

5 Push the optical zoom control to the left (counter-clockwise) to zoom in on your subject, or to the right (clockwise) to zoom out.



6 Hold the shutter button halfway down to lock the auto focus. The photo capture light flashes until the lens locks in focus and the camera adjusts the exposure.



While holding down the shutter button, you can reframe your picture and move your subject off-center if you want.

- 7 Press the shutter button the rest of the way down to take the picture.



- 8 Hold the camera still until it clicks, then release the shutter button.

NOTE

You may notice a brief delay between the time you press the shutter button and when the camera clicks. To avoid blurring your images, make sure you hold the camera still until it clicks.

After you take a picture, the photo capture light flashes. This indicates that the image was captured and the camera is processing it. When the light stops flashing, the image is saved.

CAUTION

If you set the camera down while the light is still flashing, make sure you handle it carefully. The camera may lose your image if you set it down too hard.

Saved images remain on the memory card even when you turn the camera off or remove the memory card or the batteries.

Taking Pictures With the LCD Screen



The LCD screen lets you see a live preview of what the camera's lens sees at any moment. Although you can use this setting anytime, you always choose it when you want to use the macro, panorama, or digital zoom features; or when you want to make audio recordings to go with your photos.

NOTE

Before you begin to take pictures, you can use the SETUP menu to turn on audio recording. See page 2-16 for details.

Follow these steps:

- 1 Make sure you are at least 20 inches (50 cm) away from your subject. (If you want to get closer, use macro mode as described on page 4-4.)
- 2 Turn the camera dial to  to see the View menu. Wait until the camera status light turns green.

You see a preview of your picture on the LCD screen, with the image quality and flash settings in the upper right corner of the screen.

The following screen illustrates what you see if your camera is set to Full Auto user mode, the default setting. The settings look different if you're using Program or Manual user mode. See page 1-13 to change your setting.



NOTE

If you're using batteries, the camera shuts off automatically after a designated period of inactivity. (The default is 30 seconds. See page 7-1 for instructions on setting the power off interval.) If the image on your LCD screen disappears, press the shutter button to "wake" the camera.

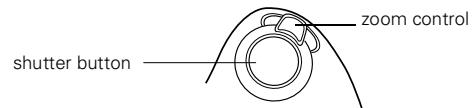
- 3** Using the preview image to guide you, make changes to the settings on the View menu, if you like.

See Chapter 3 for special shots, see Chapter 4 for framing, focusing, and zooming shots, or see Chapter 5 for color and exposure settings.

NOTE

You can also use the camera's buttons to change the image quality, flash, or timer. (See the following sections in this chapter for details on these settings.)

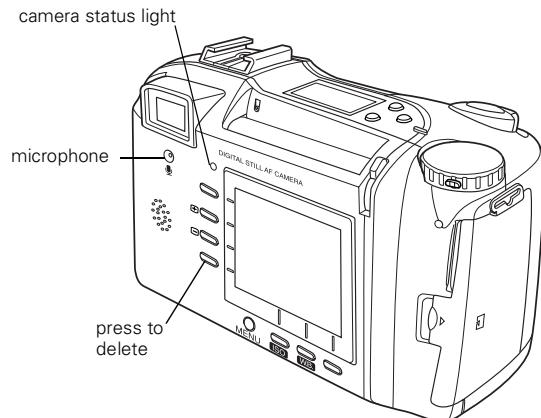
- 4** Push the optical zoom control to the left (counter-clockwise) to zoom in on your subject, or to the right (clockwise) to zoom out.



- 5** Center your subject on the screen, then press the shutter button halfway down to lock the auto focus and exposure.



The camera status light stops flashing and you see a green circle  on the screen when the lens locks in focus and the camera locks its exposure settings. While holding the shutter button down, you can reframe your picture if you want.



6 Press the shutter button the rest of the way down to take the picture.



7 Hold the camera still until it clicks. Then release the shutter button. (You may notice a brief delay between the time you press the shutter button and when the camera clicks. To avoid blurring your images, make sure you hold the camera still until it clicks.)

After a few seconds, you see a confirmation screen.



NOTE

*You can press the button next to **Delete** if you don't want the picture. You can also delete pictures in quick playback (see page 2-19) and in playback mode. (See Chapter 6.)*

When the camera status light stops flashing, you're ready to take another picture. Or, if you've turned recording on, you see a countdown of the recording time on the screen. During this time, you can record sound into the microphone on the back of the camera. (See page 2-16 for more information on recording audio.)

NOTE

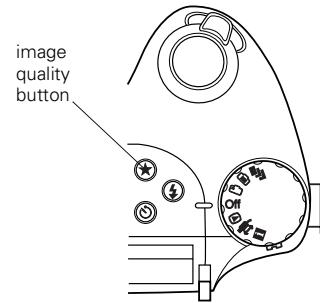
- ▶ The LCD screen uses up battery power quickly. If it's idle for more than the designated power off time, the camera turns off automatically. To turn it back on, press the shutter button, or turn the camera dial to Off and then back to . See page 7-1 to change the power off time.
- ▶ Even if you don't speak into the microphone, your camera records ambient noise when audio recording is turned on, and your images take up more space on the memory card. To fit more images on your memory card, make sure you turn recording off when you no longer want to use it.

Setting Image Quality

The PhotoPC 850Z has four image quality (resolution) settings. Press the image quality button on top of the camera to cycle from one setting to the other.

NOTE

The camera dial must be turned to , , or .



The image quality icons appear on the status display panel as described below.

Standard

★ Produces color or black and white images at 640×480 pixels. The CompactFlash card holds approximately 120 standard image quality pictures without audio recordings, but the images include less detail when enlarged. This setting is good for pictures that are viewed on screen or on the Internet.

Fine

★★ Produces color or black and white images at 1600×1200 pixels, with moderate compression. Your pictures include ample detail, and the CompactFlash card holds approximately 24 pictures without audio recordings. These images are best for 4×6 -inch prints.

Super Fine

★★★ Produces color or black and white images at 1600×1200 pixels with low compression. Your pictures include greater detail, and the CompactFlash card holds approximately 12 pictures. With less compression, super fine images are better for enlarging for up to 8×10 -inch prints.

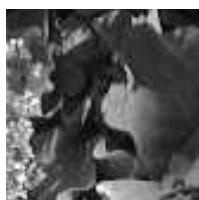
HyPict

★★★★ Produces color or black and white images at 1984×1488 pixels (interpolated) with moderate compression. Your pictures include excellent detail, and the CompactFlash card holds approximately 10 HyPict pictures. These images are best for enlarging for 11×14 -inch prints.

The illustration below is an example of how a close-up section of an image might appear at different resolutions:



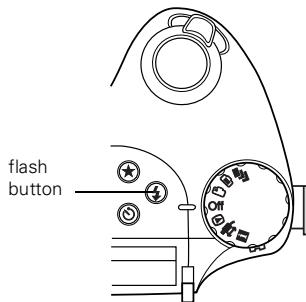
fine resolution
(1600×1200 pixels)



standard resolution
(640×480 pixels)

Using the Flash

The camera's built-in flash is effective within the range of 8 inches to 8 feet. Press the flash button to cycle through the five flash settings.



Your camera has a hot shoe to attach an optional external flash. See Appendix A for more information on where to buy and how to attach an external flash.

NOTE

The camera dial must be turned to , , or . You can't use the flash in continuous shooting mode.

An icon for each setting appears on the status display panel, as shown below:

Auto



The flash goes off automatically whenever it's needed for adequate lighting (default setting).

Forced Flash



The flash goes off with every picture you take. Use this setting to compensate for backlighting (when you are facing a light source).

Flash Off



The flash is disabled, even when lighting is inadequate. Use this setting for special effects, where flash photography is prohibited, or for macro mode close-ups.

Red-eye Reduction



Use this setting to eliminate the red-eye effect (the reddish reflection of the flash in your subjects' pupils) that flash photography often produces.

Slow Synchronized Flash

Slow Synchronized Flash To light up the background as well as your subject, use the leading slow synchronized flash mode when taking pictures at night. Or, use the trailing slow synchronized flash mode for capturing motion. Slow synchronized flash causes the aperture to stay open longer, allowing more light to enter the camera.

Changing the Slow Synchronized Flash Setting

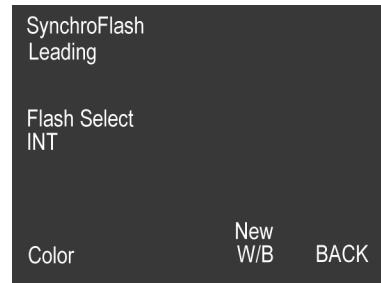
Follow these steps to change the setting:

- 1 Turn the camera dial to **1**. You see the SETUP menu.



- 2 Press the lower left (**Shot SETUP**) button.

You see the Shot SETUP menu:



- 3 Press the upper left button to change to **Leading** or **Trailing**.
- 4 Press the **BACK** button to return to the SETUP menu.

NOTE

Slow synchronized flash is available only in the Program or Manual user modes. See page 1-13 for information about changing the user mode.

After you take a picture with the flash, the flash icon blinks until it is fully recharged. Your flash setting remains in effect even after you turn off the camera.

TIPS

- When you're using the flash off setting, hold the camera steady or use a tripod to avoid capturing blurry images.
- When you're taking pictures outdoors, make sure the sun is at your back. In very bright light (at the beach or in snow, for example), your pictures may come out too light. You can adjust the exposure manually to reduce the amount of light entering the camera before you capture images. See page 5-11 for instructions.

Taking Pictures With the Timer

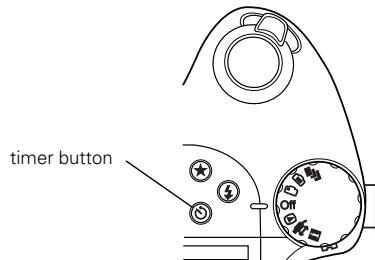
-  Setting the timer creates a 10-second delay between the time you press the shutter button and the actual image capture. This allows you to take a picture of yourself.

NOTE

You can also combine continuous or interval shooting with the timer for delayed automatic capture of images. This allows you to photograph yourself in motion. See Chapter 3 for more information.

Follow these steps to take a single picture with the timer:

- Secure the camera on a flat surface or on a tripod. (See page A-3 for information on attaching the camera to a tripod.)
- Turn the camera's dial to . Then wait until the photo capture light turns green.
- Press the timer button  on the top of the camera. The timer icon appears in the status display panel.



- Press the shutter button. The timer icon and the red timer light on the front of the camera flash slowly for eight seconds. Then they flash rapidly for two seconds before the shutter is released.

The camera clicks when the image is captured. The status light on the back of the camera flashes green as the PhotoPC 850Z processes the image(s).

NOTE

To cancel a picture after you've pressed the shutter button, press the shutter button again, or press the  button.

Taking Color or Black and White Pictures

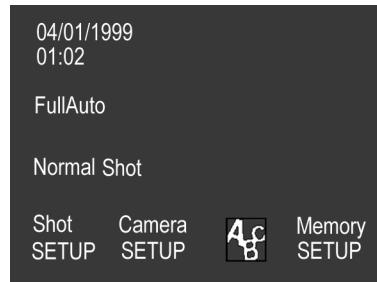
You use the Shot SETUP menu to switch between color and black and white pictures.

NOTE

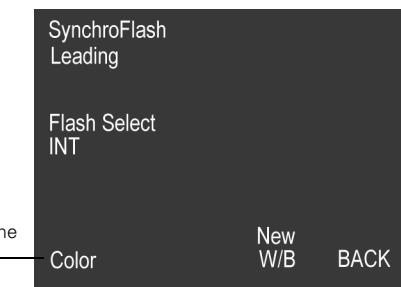
There is no difference between the file sizes of color and black and white pictures.

Follow these steps:

- 1 Turn the camera dial to . You see the SETUP menu.



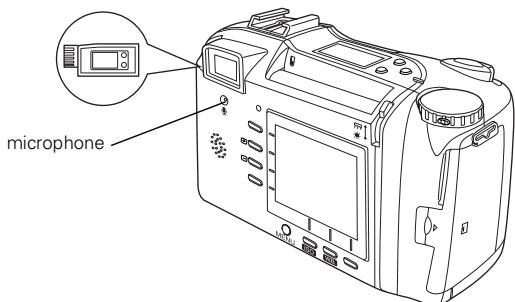
- 2 Press the lower left (Shot SETUP) button. You see the Shot SETUP menu.



- 3 Press the lower left button to change to B/W (monochrome) or Color.
- 4 Press the BACK button to return to the SETUP menu.

Adding Sound to Pictures

Your camera has a built-in microphone that lets you add an audio recording of up to 10 seconds to each photo. You can make a recording immediately after shooting a photo, or add it later. (For information about adding a recording later, see page 6-9. For instructions on playing back recordings with your camera, see page 2-19.) You can record audio in any user mode.

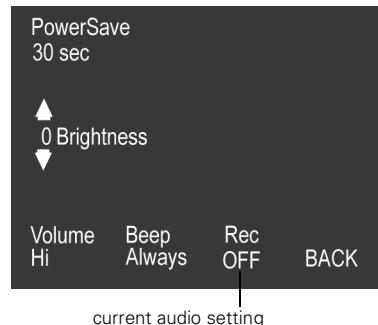


NOTE

You can only record audio when the LCD screen is turned on. You can't record audio when taking quick shots.

Follow these steps to add a recording right after taking a picture:

- 1 Turn the camera dial to **1** to display the SETUP menu.
- 2 Press the **ISO** button (under **Camera SETUP**). You see the Camera SETUP menu. The current audio setting appears at the bottom of the screen under **Rec**.



- 3 Press the **W.B.** button (under **Rec**) to choose a different setting. You can record a 3, 5, or 10-second message, or turn recording off.
- 4 Turn the camera dial to . Center the subject on the LCD screen.
- 5 Press the shutter button halfway down to lock the auto focus.
- 6 When the camera status light stops flashing and you see a green circle  on the screen, press the shutter button the rest of the way down.
- 7 Hold the camera still until it clicks. Then release the shutter button.

After a moment, you see a confirmation message. Then you see the message **Sound recording...** and a countdown of the recording time.

- 8 Speak clearly into the microphone. You see another confirmation message indicating that the recording was successful.

Now you can play back your recording. See page 2-19 for instructions.

NOTE

Even if you don't speak into the microphone, your camera records ambient noise when recording is turned on, and your images take up more space on the memory card. To fit more images on your memory card, make sure you turn recording off when you no longer want to use it. See page 6-11 for instructions on deleting sounds.

Using Quick Playback

You can play your images back quickly, without turning your camera off. The quick playback menu allows you to view your photos, play back audio, and delete individual photos.

NOTE

You can also see your pictures in the camera's playback menu, with more options such as displaying a slide show, locking and unlocking photos, recording and deleting sounds. See Chapter 6.

Follow these steps to play back your images:

- 1 Turn the camera dial to .
- 2 If you are taking pictures in Full Auto or Program mode, press the top left button (next to the  icon).

If you are taking pictures in Manual mode, press the bottom right button (under **Menu Change**). From the next menu, press the top left button (next to the  icon).

You see the quick playback screen displaying the last picture you took:



- 3 Press the + button (next to the right arrow) to display the earliest picture taken. You can continue pressing the + button to view your pictures in order. Press the - button (next to the left arrow) to move backward through your pictures.
- 4 Press the **ISO** button (under **Multi**) once if you want to display four images, or twice if you want to display nine images on the screen. Press it a third time to go back to a single image display.
- 5 Press the top left button (next to **enlargement**) to magnify your image. Press the bottom right button (under **BACK**) to return to the quick playback menu.

NOTE

The enlargement feature works the same way in quick playback as it does in the playback menu. See page 6-12 for more detailed instructions.

To return to the View menu and continue taking pictures, press the bottom right button (under **BACK**).

Deleting Pictures

If you have images stored on the camera that you want to delete, follow these steps:

- 1 Follow steps 1 through 3 in the section above to play back the image you want to delete.
- 2 When you see the image you want to delete on the screen, press the bottom left button (next to **Delete**).
- 3 You see a confirmation screen. Press the top left button (next to **Yes**) to delete the image.

You can also delete multiple photos or lock and unlock photos for deletion using the camera's playback menu; see Chapter 6 for instructions.

Playing Audio Recordings

You can use the camera's built-in speaker to play back recorded sounds with your pictures. Follow these steps:

- 1 Follow steps 1 through 3 under "Using Quick Playback" to play the image with the recording.

- 2 Press the WB button (under **Sound Play**) to hear the recording for that image.

You can change or delete your recording for any image in the camera's playback menu. See Chapter 6 for details.

Your PhotoPC 850Z lets you take special shots for varying, changing, and moving subjects. These include: programmed settings for subject-specific shots, quick shots, continuous shots, and shots taken at timed intervals.

This chapter explains how to use the special features in the following sections:

- ▶ Taking quick shots
- ▶ Continous shooting
- ▶ Interval shooting
- ▶ Using programmed settings

Taking Quick Shots

After taking a picture, the PhotoPC 850Z normally takes a few seconds to process and save the image on the memory card. In quick shot mode, the camera stores up to 10 images internally in temporary storage while you keep taking pictures. It saves the images to the CompactFlash card after you're done.

NOTE

- ▶ *You can't use quick shot mode when battery power or CompactFlash card memory is low.*
- ▶ *HyPict image quality is disabled in quick shot mode.*
- ▶ *When using quick shot mode, you can't make audio recordings for your images. (To add recordings to images later, see Chapter 6.)*

Follow these steps to use quick shot mode:

- 1 Turn the camera dial to **1**. You see the SETUP menu.
(Normal Shot appears as the default setting.)



- 2 Press the – button (next to **Normal Shot**) to select **Quick Shot**.
- 3 Turn the camera dial to **1** or **2** and wait until the camera status light turns green. The image quality icon **★** on the status display panel flashes, indicating that quick shot mode is enabled.
- 4 Press and hold the shutter button to begin taking pictures. When you're finished, release the button.

Or, you can press the shutter button repeatedly without having to wait for the camera to process each image.

1  The bracketed number on the status display panel indicates the number of pictures temporarily saved to the camera.

Continuous Shooting

 In this mode, you can capture a complex motion in a series of steps to create animation sequences. Take two standard or fine resolution pictures each second, with up to ten pictures in sequence (or one super fine resolution picture per second, with up to eight pictures in sequence). Continuous shooting is available for all user modes.

NOTE

You can't use the flash for continuous shooting, so make sure you have adequate lighting for your pictures. In addition, you can't select the HyPict image quality setting.

- 1 Make sure you are at least 20 inches (50 cm) away from your subject.

2 Turn the camera dial to . Wait until the camera status light turns green.

You see a preview of your picture on the LCD screen, with a red frame around it. **CONTINUOUS** appears on the screen.



3 Center your subject in the red frame.

4 Press and hold the shutter button all the way down. The camera clicks as it captures each picture.

5 When the camera has captured a sequence of pictures, the sound stops and the camera status light flashes. Release the shutter button.

NOTE

If you continue to hold down the shutter button after the first sequence of pictures, the camera will pause to process the images and then take a second sequence. The camera will continue to take pictures until the memory card is full.

Continuous Shooting Using the Timer

You can also combine continuous shooting with the timer to delay automatic capture of a series of images. This allows you to photograph yourself in motion.

NOTE

You can capture 10 standard (2 per second) or fine (1 per second) images or up to 6 super fine (1 per second) resolution images.

- 1 Secure the camera on a flat surface or on a tripod. (See page A-3 for information on attaching the camera to a tripod.)
- 2 Turn the camera dial to . Wait until the camera status light turns green.

You see a preview of your picture on the LCD screen, with a red frame around it. **CONTINUOUS** appears on the screen.



- 3 Center your subject in the red frame.
- 4 Press the timer button.

The timer icon  appears on the status display panel to indicate that the timer is enabled.

- 5 Press the shutter button.

You have 10 seconds to get ready for “action” in front of the camera.

The timer icon and the red timer light on the front of the camera flash slowly for eight seconds. Then they flash rapidly for two seconds before the shutter is released.

The camera clicks each time it captures an image, and the timer light on the front of the camera flashes as the images are processed.

Interval Shooting

You can use this time lapse feature to capture scenes that change over time, such as a sunset or a busy street corner. Your camera lets you set a time interval from 10 seconds to 24 hours. Interval shooting is available for all user modes.



NOTE

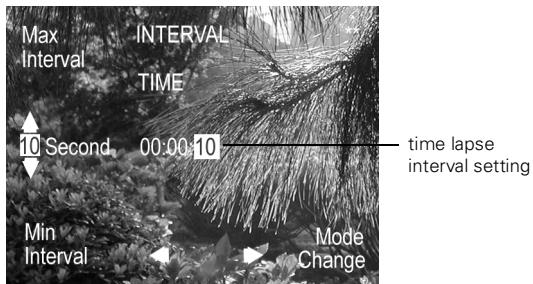
When you're adding audio recordings or taking pictures with HyPict image quality, the shortest time interval available is 20 seconds.

Follow these steps to use the time lapse feature:

- 1 Secure the camera on a flat surface or on a tripod. (See page A-3 for information on attaching the camera to a tripod.)
- 2 Turn the camera dial to . Wait until the camera status light turns green.

You see a preview of your picture on the LCD screen, with a red frame around it. **CONTINUOUS** appears on the screen.

3 Press the bottom right button (under Mode Change). You see the following screen:



The current setting for the time lapse interval (hours, minutes, and seconds) appears in the center of the screen, with seconds highlighted.

4 Press the + or - button (next to the up and down arrows) to change the highlighted setting, then press the ISO button (under the left arrow) to move to the next setting and repeat the process. Continue until you've set the correct interval.

NOTE

You can also choose the maximum interval (24 hours) by pressing the top button (next to **Max Interval**), or the minimum interval (10 seconds) by pressing the bottom button (next to **Min Interval**).

5 Press the shutter button to take the first picture.

The camera turns off automatically after you take the first picture, then turns on again after the selected interval to take the next photo.



While the camera is on in this mode, **Int** appears in the display panel.

6 To stop taking pictures, turn the camera's dial to **Off**.

NOTE

The number of photos you can take is limited by the space on the CompactFlash card. With a higher capacity card, you can store more pictures. (See Appendix A for more information.)

Using Programmed Subject Settings

The Program user mode provides four programmed settings that let you choose the type of shot you're taking. The camera automatically assigns the optimum exposure, metering method, and sensitivity for your subject.

Normal



Appropriate for most photographs. Uses the following settings: auto exposure, matrix metering.

Sports



Recommended for action photographs. Uses the following settings: high shutter speed, automatic sensitivity, matrix metering.

Portrait



Recommended for portraits. Uses the following settings: spot metering, aperture fixed at f/2.4.

Landscape



Recommended for landscapes or scenery. Uses the following settings: matrix metering, aperture set to f/8.0. (The aperture automatically changes to f/2.4 when the subject is dim.)

Follow these steps to use programmed subject settings:

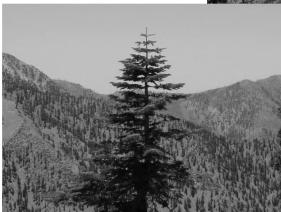
- 1 Set the camera to Program user mode. (See page 1-13 for instructions.)
- 2 Turn the camera dial to . You see the View menu.



- 3 Press the bottom right button (under the Program setting) to cycle through the four subject settings.
- 4 Take your picture (See page 2-6 for instructions.)

4

Framing, Focusing, and Zooming



Your camera has great shot-capturing capabilities that allow you to get the exact image you want. You can use the 2x digital zoom, frame your images as panoramas, or focus in on close objects with macro mode. You can also manually focus the camera.

- Taking digital zoom pictures
- Taking digital panoramic pictures
- Taking close-ups with macro mode
- Adjusting the focus manually

Taking Digital Zoom Pictures

Digital zoom pictures are magnified two times (2x). The automatic cropping effect makes file sizes smaller.

Follow these steps to take digital zoom pictures:

- 1 Turn the camera dial to . You see the View menu:



NOTE

This example shows the View menu when the user mode is set to Full Auto. Depending on the user mode setting, your View menu may look different.

- 2 Press the bottom left button (next to **Normal Frame**) three times.

The words **DIGITAL ZOOM** appear on your LCD briefly. A yellow frame appears around the previewed image, and the mode setting changes to **x2**.



- 3 Press the shutter button halfway to lock the auto focus and exposure. When the camera locks its settings, the camera status light stops flashing and you see a green circle  on the screen. If you want, you can reframe your picture while holding the button down.
- 4 Press the button all the way down to capture the image.

The digital zoom format remains active until you change it or turn off the camera.

NOTE

Since the digital zoom mode crops the image and magnifies it, it's best to print the image in a smaller format such as 2 X 2 inches, a good size for photo identification cards.

Taking Digital Panoramas

Images in the panorama format are long and narrow, although they are not captured at a wider angle than normal images. Strips at the top and bottom of the image area are cropped out. Smaller file sizes mean you can store more pictures in the panorama format.

NOTE

You can't select standard ★ image quality when taking panoramic pictures. For more information about image quality, see page 2-10.

You can take panoramic pictures using any user mode (Full Auto, Program, or Manual). Follow these steps:

- 1 Turn the camera dial to .

You see the View menu. The current frame setting appears in the lower left corner.



NOTE

This View menu illustrates what you see if your user mode is set to **Full Auto**. Your View menu will look different if the user mode is set to **Program** or **Manual**.

2 Press the bottom left button (next to the current setting) to cycle through the frame settings (Normal Frame, Macro, and Panorama).

For a few seconds, the word PANORAMA appears on the LCD screen, and a black frame appears around the previewed image. Also, the panorama mode icon  appears in the lower left corner of the screen.



3 Press the shutter button halfway to lock the auto focus and exposure. When the camera locks its settings, the camera status light stops flashing and you see a green circle  on the screen. If you want, you can reframe your picture while holding the button down.

4 Press the button all the way down to capture the image.

The Panorama format remains active until you change it or turn off the camera.

Taking Close-Ups With Macro Mode

You can use the camera's macro mode to take pictures as close as 8 inches (20 cm). Follow these steps:

1 Turn the camera dial to . You see the View menu.



NOTE

This View menu illustrates what you see if your user mode is set to Full Auto. Your View menu will look different if the user mode is set to Program or Manual.

- 2** Press the bottom left button (next to the current frame setting).

For a few seconds, the word **MACRO** appears on the LCD screen, and a green frame appears around the previewed image. Also, the macro mode icon  appears in the lower left corner of the screen.



- 3** Press the shutter button halfway to lock the auto focus and exposure. When the camera locks its settings, the camera status light stops flashing and you see a green circle  on the screen. If you want, you can reframe your picture while holding the button down.

- 4** Press the button all the way down to capture the image.

Macro mode remains active until you change it or turn off the camera.

NOTE

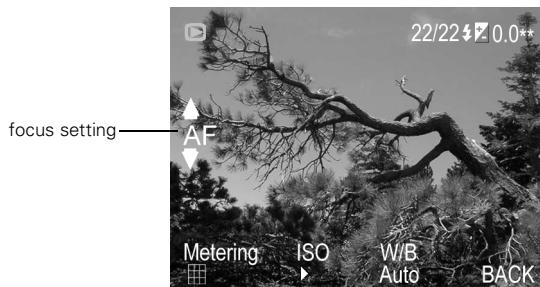
When you take macro close-ups, you should use a tripod (as described in Appendix A) and disable the flash. Otherwise, your pictures may appear blurry and washed out.

Adjusting the Focus

The PhotoPC 850Z lets you adjust the distance of the focal point. Follow these steps:

- 1** Make sure that the camera is set to Manual user mode. (See page 1-13 for details.)

- 2 Turn the camera dial to .
- 3 If you want to use the macro feature or take panoramas, press the button next to **Normal Frame** until **Macro** or **Panorama** appears in the center of the screen.
- 4 Press the bottom right button (under **Menu Change**) until the following screen appears:



- 5 Press the + or - button (next to the up and down arrows) to select a manual focus setting.

If the camera is set to **Normal Frame** or **Panorama**, you can choose from the following settings:

AF The camera determines the focus automatically.

 Focal point is about three feet.

 Focal point is about 10 feet.

 Focal point is infinity (∞).

If you're using the macro feature, you can choose either **MACRO1** (focal point is about 8 inches) or **MACRO2** (focal point is about 20 inches).

- 6 Press the shutter button halfway to lock the camera's exposure settings. When the camera locks its settings, the camera status light stops flashing and you see a green circle  on the screen. You also see the shutter speed and F stop (aperture) at the top of the screen in yellow.
- 7 Press the button all the way down to capture the image.

Your manual focus setting remains active until you change it or change your user mode.

5

Adjusting Exposure and Color Settings

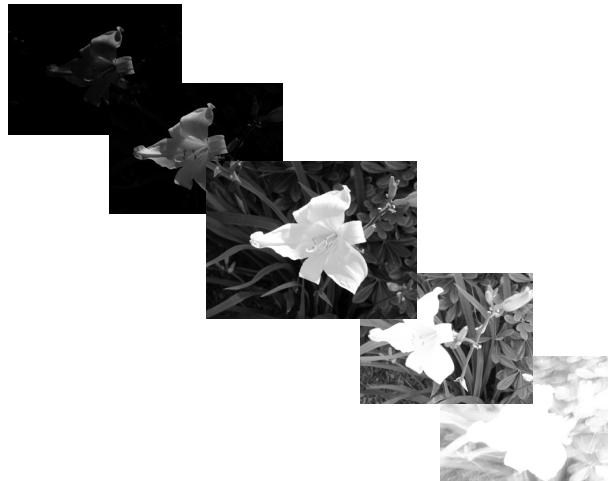
Light is one of the most important considerations for taking great photographs. Good color composition is also invaluable. Your PhotoPC 850Z gives you complete control over exposure, color, and other lighting condition settings. See the following sections to change your settings:

- ▶ Adjusting exposure
- ▶ Adjusting the sensitivity setting
- ▶ Adjusting the white balance setting
- ▶ Changing the metering method
- ▶ Exposure and color tips

NOTE

The settings in this chapter require that you set your user mode to Manual or Program. See page 1-13 to change the user mode for your camera.

Adjusting Exposure



Your camera normally adjusts exposure automatically. However, you may want to increase the exposure setting if you want to lighten your picture or if you're taking pictures

of an object against a bright background, such as sand or snow on a sunny day. Similarly, you may want to decrease it if you want to darken the picture, or if you're taking pictures against a dark background.

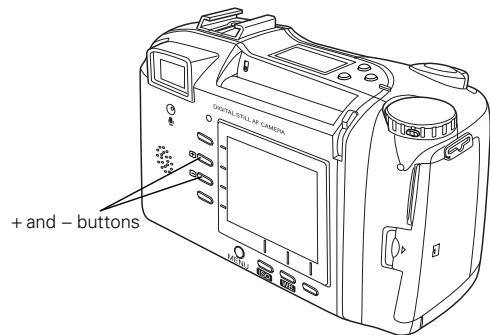
With the PhotoPC 850Z, you can select automatic exposure settings, or you can fine-tune the exposure manually by setting the shutter speed and aperture setting.

Changing the Automatic Exposure Value

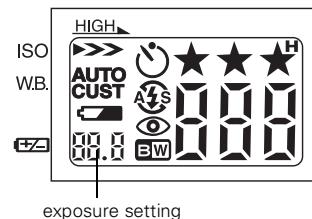
Follow these steps to select predefined exposure settings:

- 1 Make sure that the camera is set to Program or Manual user mode. (See page 1-13 for details.)
- 2 Turn the camera dial to  or .

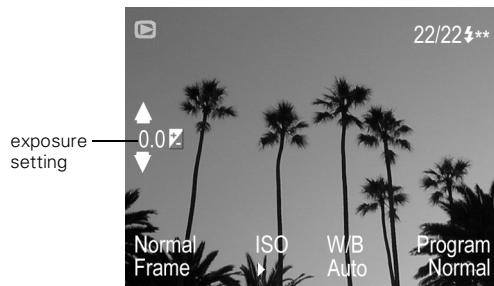
- 3 Press the + button (next to the up arrow) to increase the exposure setting, or the – button (next to the down arrow) to decrease it.



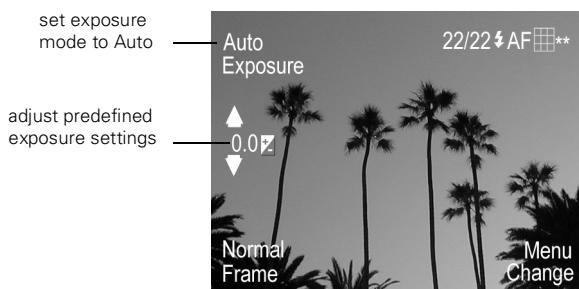
The setting appears in the status display panel next to the +/- mark and remains in effect while you take pictures.



In Program mode, you can select from nine settings in increments of 0.5, from -2.0 to $+2.0$ EV (Exposure Value).



In Manual mode, you can choose from 21 settings in increments of 0.2, from -2.0 to $+2.0$ EV.



NOTE

Exposure Value is a combination of shutter speed and aperture setting.

Setting Shutter Speed and Aperture

Experienced photographers can set the exposure manually by adjusting the shutter speed and aperture.

5

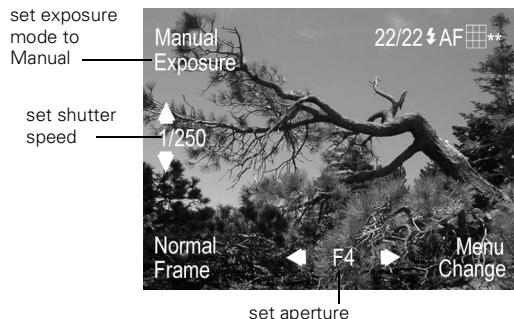
NOTE

To set either the shutter speed or the aperture setting and let your camera automatically determine the other exposure setting, you can use the Aperture Priority and Shutter Priority settings; see page 5-4.

Follow these steps to set the shutter speed and aperture:

- 1 Make sure that the camera is set to Manual user mode. (See page 1-13 for details.)
- 2 Turn the camera dial to .

- 3 Press the top left button (next to Auto Exposure) to change the exposure mode to Manual.



- 4 Press the + button (next to the up arrow) to increase shutter speed, or the - button (next to the down arrow) to decrease it.
- 5 Press the W.B. and ISO buttons to change the aperture setting. (You can choose F2, F2.8, F4, F5.6, F8 or F11.)

NOTE

The camera detects the lighting conditions and warns you when exposure settings are outside the ideal range. If you see EV! on the LCD screen, your image may be under- or over-exposed.

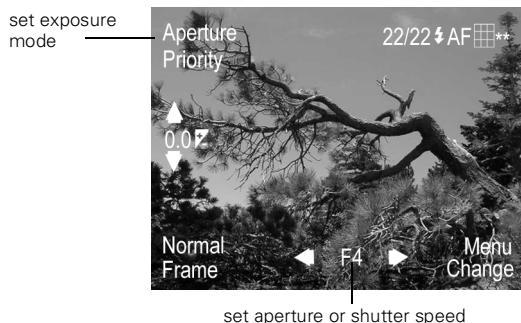
Using Aperture Priority and Shutter Priority Settings

You may want to select a specific aperture or shutter speed setting for a desired effect, such as a fast shutter speed to capture an action photo. The camera will automatically select the other setting, based on the lighting conditions.

Follow these steps to set the shutter speed or aperture and let the camera automatically determine the other setting:

- 1 Make sure that the camera is set to Manual user mode. (See page 1-13 for details.)
- 2 Turn the camera dial to .

3 Press the top left button (next to Auto Exposure) to change the exposure mode to **Shutter Priority** or **Aperture Priority**.



4 If you are using Shutter Priority, press the **W.B.** button (under the right arrow) to increase shutter speed, or the **ISO** button (under the left arrow) to decrease it. (You can select a shutter speed from 4 to 1/800.)

If you are using Aperture Priority, press the **W.B.** or **ISO** button to change the aperture setting. (You can choose **F2, F2.8, F4, F5.6, F8 or F11**.)

When you press the shutter button part way down to focus the camera, the camera shows the other exposure setting at the top of the LCD screen.

NOTE

You can change the automatic exposure value to have the camera select a lighter or darker range for the other exposure setting. (See page 5-2.)

Adjusting the Sensitivity Setting

With the PhotoPC 850Z's high sensitivity settings, you can take pictures of fast-moving subjects, or indoor or low light pictures without a flash. You can set the sensitivity from the camera's standard ISO equivalent of 100 to an ISO equivalent of 200 or 400.



NOTE

Since image quality is lower when you use high sensitivity settings, the standard setting is recommended for most pictures.

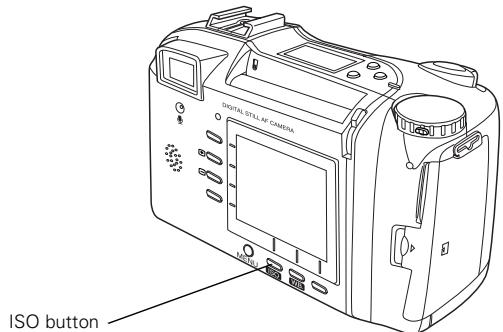
The arrow icons above the ISO button indicate the sensitivity setting:

- ▷ The standard setting is equivalent to ISO 100. This is the recommended setting for most pictures.
- ▷▷ The high sensitivity setting is equivalent to ISO 200.
- ▷▷▷ The super high sensitivity setting is equivalent to ISO 400.

Follow these steps to adjust sensitivity:

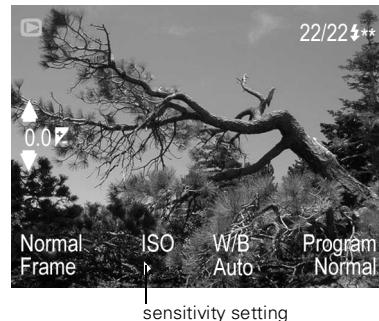
- 1 Make sure the camera is set to Program or Manual user mode. (See page 1-13 for instructions.)
- 2 Turn the camera dial to  or .

3 If you are taking pictures using the viewfinder (with the camera dial set to ) , press the **ISO** button on the back of the camera to cycle through the three sensitivity settings.



The arrow icons in the upper left corner of the status display panel indicate the sensitivity setting.

If you are taking pictures with the LCD screen, you see the View menu.



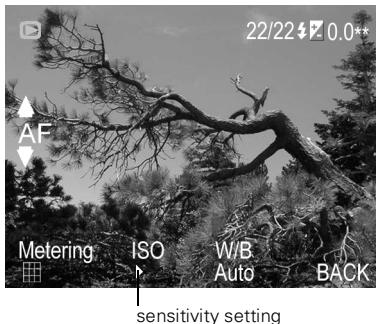
NOTE

This View menu illustrates what you see if your user mode is set to Program. Your View menu will look slightly different if the user mode is set to Manual.

4 Do one of the following:

- ▶ If user mode is set to Program, the current sensitivity setting appears above the **ISO** button. (See the example above.) Press the **ISO** button to change the sensitivity setting.

- If user mode is set to Manual, press the bottom right button (under **Menu Change**). You see the following screen. Press the ISO button to change the sensitivity setting.



Adjusting the White Balance Setting

Although the PhotoPC 850Z adjusts white balance for you automatically to ensure color accuracy, you may sometimes want to change this setting for special effects or lighting conditions.

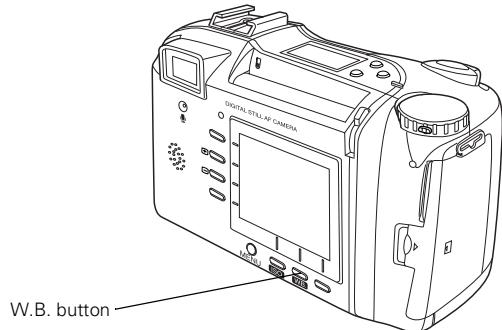
The PhotoPC 850Z has the following white balance settings:

AUTO	Adjusts the white balance of your pictures automatically. This is the recommended setting for most pictures.
FIX	Locks the white balance setting at 5200 °K. This setting gives your pictures a warmer appearance under fluorescent lighting. It's also a good choice for retaining the reds in a sunset.
CUST	Lets you customize the white balance setting. See page 5-10 to set the custom white balance.

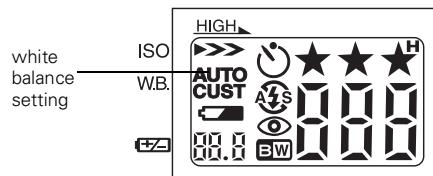
Follow these steps to change the white balance setting:

- 1 Make sure the camera is set to Program or Manual user mode. (See page 1-13 for instructions.)
- 2 Turn the camera dial to or .

3 If you are taking pictures using the viewfinder (with the camera dial set to ), press the **W.B.** button on the back of the camera to cycle through the three settings.



The setting, which appears in the status display panel next to the **W.B.** mark, remains in effect while you take pictures.



NOTE

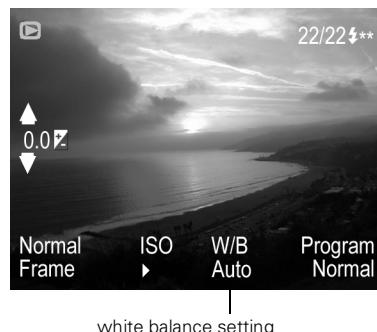
*When nothing appears next to **W.B.** on the display panel, the camera is in the fixed white balance mode.*

5

If you are taking pictures with the LCD screen, you see the View menu.

4 Do one of the following:

- If user mode is set to Program, the current white balance setting appears above the **W.B.** button. Press the **W.B.** button to select **FIX** or **CUSTOM**.



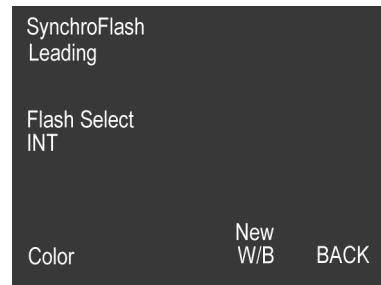
- If user mode is set to Manual, press the bottom right button (under **Menu Change**). You see the following screen. Press the **W.B.** button to select **FIX** or **CUSTOM**, then press the bottom right button (under **BACK**) to save your setting.



Setting the Custom White Balance

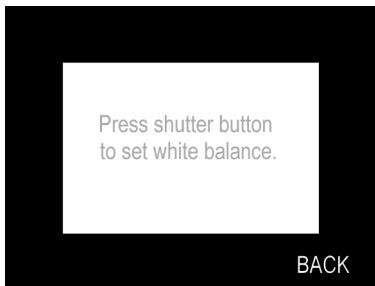
Follow these steps to customize the white balance setting:

- Turn the camera dial to **1** to display the **SETUP** menu. If necessary, change to Program or Manual user mode.
- Press the bottom left button (next to **Shot SETUP**) to go to the **Shot SETUP** menu.



- Press the **W.B.** button (below **New W/B**).
- You see a screen asking you if you want to save a new setting for the custom white balance mode. Press the bottom left button (next to **Yes**) to save a new white balance setting.

The camera's lens moves out. You see a message with a framed area that the camera's lens uses to set the white balance.



5 Focus the camera on a piece of white paper, or some other object to set the white balance by, and press the shutter button to save the setting.

Changing the Metering Method

If you're using Manual mode, your camera lets you choose between matrix metering and spot metering.

With matrix metering, the camera automatically measures the available light and determines the correct exposure. If you're an advanced photographer, you can use spot metering to choose a point that the camera samples to determine exposure.

Follow these steps to change the metering system:

- 1 Make sure that the camera is set to Manual user mode. (See page 1-13 for details.)
- 2 Turn the camera dial to .

3 Hold down the bottom right button (under **Menu Change**). You see the following screen. The current metering setting is in the lower left corner.



4 Press the bottom left button (next to **Metering**) to change the setting to spot  or matrix  metering.

When you take a picture, make sure the center of the camera's lens is focused on the area by which you want it to read the light. If you can't get the exact center by looking at the LCD screen, use the viewfinder to pinpoint the area. Once you press and hold the two-step shutter part way down to lock the exposure, you can look at the LCD screen again to frame your image. See Chapter 2 for details.

Exposure and Color Tips

Getting the right lighting in your shots can be complicated. These tips provide suggestions for various conditions.

If you are taking pictures in bright sunlight:

- ▶ Reduce the exposure setting.
- ▶ Use a fast shutter speed or smaller aperture setting.
- ▶ Avoid taking pictures while facing the sun.
- ▶ Use an optional filter with the camera's included lens adapter to cut down on excessive light.
- ▶ Use the Solar Assist panel to save battery power.



If the sky is cloudy:

- ▶ Increase the exposure setting.
- ▶ Try using fixed white balance.
- ▶ Increase the sensitivity.



- ▶ If there is complete cloud cover, avoid taking landscape photos. Portraits and closer shots are better choices under cloudy conditions.

If you are capturing a sunset or sunrise:

- ▶ Use the fixed white balance setting.
- ▶ Adjust exposure settings for different effects.
- ▶ Take several shots at different times to capture the changing colors. (To do this automatically, set up interval shooting as described in Chapter 3.)



If you are taking pictures in low light or at night:

- ▶ Increase the sensitivity setting.
- ▶ Increase the exposure setting.
- ▶ Use a wide aperture or slow shutter speed setting to let in more light.
- ▶ If your subject is in the shade with a sunny background, try using spot metering and focusing the camera on your subject.



- ▶ For photographs taken at night, use the slow synchronized flash mode. The leading setting sets off the flash first, then exposes the subject and takes the picture. In this mode, hold the camera still or use a tripod (see Appendix A). The trailing setting flashes at the end of the exposure, allowing you to capture background motion while freezing your subject. (See Chapter 2 to change the setting to leading or trailing.)

If you are taking photographs under fluorescent lighting:

- ▶ Use custom or fixed white balance.
- ▶ Avoid taking portraits under fluorescent lights.



If you are taking portrait photos:

- ▶ Try using spot metering. Make sure you center your subject when you lock the exposure with the two-step shutter. Then you can move the subject off-center while you are holding the shutter button down. (See Chapter 2 for details on using the two-step shutter.)
- ▶ Try using the **Portrait** setting in Program mode (see Chapter 3).
- ▶ Be aware of lighting conditions and how they affect the appearance of your subject. Early morning, late afternoon, and cloudy skies provide more flattering light than direct sunlight.
- ▶ If you need to take a portrait under fluorescent or other unflattering indoor light, use the fixed or user-defined white balance.



- ▶ Use the red-eye reduction flash mode for portraits. If you are taking portraits in bright light, you still may want to use the flash to correct for the camera's exposure adjustments.

6

Playing Back Photos



NOTE

You can also use some of the playback functions while taking pictures with the LCD screen (see page 2-17).

The LCD screen lets you play back your pictures one-by-one or in groups of four or nine. You can magnify or delete selected pictures and customize playback features. You can also view your pictures on a television as easily as on the camera's screen. This chapter explains the following:

- ▶ Playing back pictures one-by-one or several pictures at a time
- ▶ Deleting pictures
- ▶ Locking pictures
- ▶ Adding, playing back, and deleting audio recordings
- ▶ Magnifying pictures
- ▶ Viewing detailed information about a picture
- ▶ Playing pictures as a slide show
- ▶ Playing back pictures on TV

Playing Back Pictures One by One

When you set the camera dial to **□**, you see the last picture you took on the LCD screen:



Press the + button (next to the right arrow) to display the earliest picture taken. Continue pressing the + button to view your pictures in order. Press the – button (next to the left arrow) to move backward through your pictures.

NOTE

After a designated period of inactivity, the camera automatically shuts off to conserve battery power. If this happens, press any button on the back of the camera to “wake” the camera. If you are using the AC adapter, the camera doesn’t shut off.

Playing Back Multiple Pictures

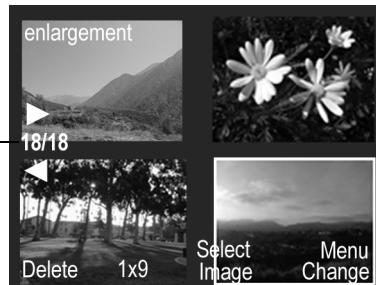
You can play back your pictures in Multi mode to view small “thumbnail” versions of either four or nine pictures at once.

Follow these steps to play back multiple pictures:

- 1 Turn the camera dial to **□**. You see the last picture you took on the LCD screen.
- 2 Press the **ISO** button (below **Multi**).

Small thumbnail images of the last four pictures you took appear on the screen, with the currently selected image framed in white.

press the + or – button to move through images



- 3 If you want to display nine pictures as once, press the ISO button (under 1x9) again.
- 4 Press the + and – buttons to move the white selection frame through the images on screen, or hold one of these buttons down to move through the images quickly.

When the frame passes the first or last image of the current group, the previous or next three images are displayed in the group.

- 5 To switch back to displaying one picture at a time, press the ISO button again.

Deleting Pictures

The LCD screen provides two different methods for deleting images after you play them back:

- ▶ You can delete the currently displayed picture
- ▶ You can select multiple pictures for deletion, or “lock” pictures to protect them from deletion

You can also delete images from the quick playback screen in View mode (see page 2-17), or through your software when the camera is connected to your computer (see Chapter 8).

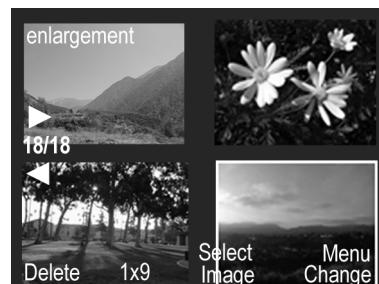
Deleting the Currently Displayed Picture

Make sure the camera dial is set to , then follow these steps:

- 1 Press the + or – button (next to the right and left arrows) to display the image you want to delete.

NOTE

To make choosing images easier, you can display four or nine images at a time by pressing the ISO button (under Multi) once or twice.



- 2 Press the bottom left button (next to **Delete**). A confirmation message appears.
- 3 Press the top left button (next to **Yes**) to delete the image, or the bottom right button (next to **No**) to cancel.

NOTE

*If you try to delete a locked image , you see a warning message. Press the bottom right button (under **BACK**) to save the image. To remove the lock and delete the image, press the bottom left button (next to **Cancel Delete**).*

Deleting All Pictures

To delete all the images from your memory card, make sure the camera dial is set to , then follow these steps:

- 1 Press the **W.B.** button (under **Select Image**).
- 2 Press the top left button (next to **Select All**) to select all the images in your card.

- 3 Press the **ISO** button (under **Delete**) to delete the images. A confirmation message appears.
- 4 Press the top left button (next to **Yes**) to delete the images, or the bottom right button (next to **No**) to cancel.
- 5 Press the bottom right button (under **BACK**) twice to return to the main playback menu.

NOTE

*If any images are locked, you see a message asking if you want to delete them (instead of the message from step 3). Press the button next to **No** to delete only the unlocked images, or next to **Yes** to delete the locked images too. See page 6-8 for instructions on unlocking images.*

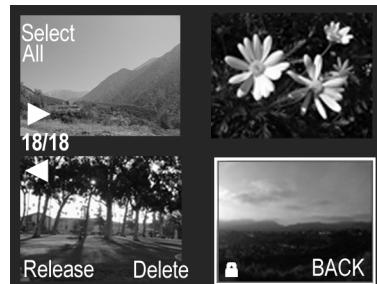
Deleting Selected Pictures

You can select two or more images and then delete them all at once. Make sure the camera dial is set to **□**, then follow these steps:

- 1 Press the **ISO** button (under **Multi**) once to display four pictures on the screen, or twice to display nine. A white frame appears around one of the pictures.
- 2 Press the **W.B.** button (under **Select Image**) to see the image selection screen:



- 3 Press the + or – button (next to the right and left arrows) to move the frame to an image you want to delete. Then press the bottom left button (next to **Select**). A red frame appears around the image and the word **Select** changes to **Release**.



NOTE

*If you change your mind, press the button next to **Release** to deselect the image. The red frame disappears.*

- 4 Repeat step 3 to select any additional images.

5 After you've finished selecting images, press the ISO button (under **Delete**) to delete them.

A confirmation message appears. Press the top left button (next to **Yes**) to delete the selected images, or the bottom right button (under **No**) to cancel.

NOTE

If any images are locked, you see a message asking if you want to delete them (instead of the message from step 3).

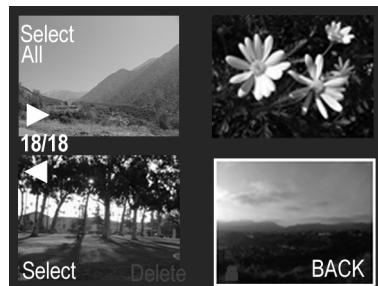
*Press the button next to **No** to delete only the unlocked images, or next to **Yes** to delete the locked images too. See page 6-8 for instructions on unlocking images.*

6 Press the bottom right button (under **BACK**) twice to return to the main playback menu.

Locking Pictures

The lock feature allows you to keep your images from being accidentally deleted. You can lock selected images or all the images in the camera. Make sure the camera dial is set to **Q**, then follow these steps to lock pictures:

- 1 Press the ISO button (under **Multi**) once to display four pictures on the screen, or twice to display nine. A white frame appears around one of the pictures.
- 2 Press the W.B. button (under **Select Image**) to see the image selection screen:



3 Do one of the following:

- ▶ If you want to lock all images, press the top left button (next to **Select All**). (If you change your mind, press the same button [**Release All**] to deselect all images.)
- ▶ If you want to lock just one or some of the images, press the + or – button (next to the right and left arrows) to move the frame to an image you want to lock. Then press the bottom left button (next to **Select**). A red frame appears around the image and the word **Select** changes to **Release**. Repeat this step to select any additional images.

4 Press the W.B. button (under the padlock  icon). You see the following on your screen:



5 Press the top left button (next to **Lock**) to lock the images you have selected.

A padlock icon appears in the upper right corner of each locked image.



- 6 Press the bottom right button (under **BACK**) to save your settings.

Unlocking Pictures

After you have locked some of your pictures, you can unlock selected pictures or all the pictures in the camera.

Make sure the camera dial is set to , then follow these steps:

- 1 Repeat steps 1 through 3 of “Locking Pictures” to select the images you want to unlock.

- 2 Press the **W.B.** button (under the padlock  icon). You see the following:



- 3 Press the bottom left button (next to **Release**).

The selected images are unlocked. If an image is successfully unlocked, the padlock  icon disappears from the upper right corner of its frame.

- 4 Press the bottom right button (under **BACK**) to save your settings.

Adding Audio Recordings

You can add audio recordings to images stored on your memory card.

Follow these steps to add a recording to an existing image:

- 1 Turn the camera dial to  to select playback mode.



- 2 Press the + or – button (next to the right and left arrows) to move to the photo to which you want to add a recording. (If you're displaying multiple images, you'll see a white frame around the currently selected photo.)

- 3 Press the bottom right button (under **Menu Change**) until the screen changes, then press the top left button (next to **Sound**).

You see the following:



- 4 Press the button next to your desired recording time. A countdown of the recording time appears on the screen.

NOTE

*If an image is locked, you see a warning message. Press the bottom left button (next to **Release**) to unlock the image. Then press the top left button (next to **Yes**) when you are ready to record a message. Or, press the bottom right button (under **BACK**) to return to playback mode.*

*If there's already a message on the selected photo, a confirmation message appears after you choose the recording time. To erase the old recording and make a new one, press the top left button (next to **Yes**). Or press the bottom right button (under **No**) to cancel.*

- 5 Speak clearly into the microphone on the back of the camera. (Press the button next to **Cancel** to stop recording and delete the message at any time.)

A microphone icon appears in the upper right corner of the image to indicate that a recording has been added.

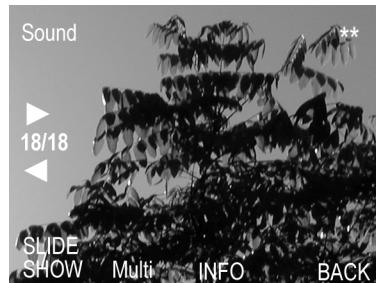
- 6 Press the bottom right button (under **BACK**) twice to return to the main playback menu.

Playing Back Recordings

Your camera has a speaker that allows you to play back your recordings. You can also play audio recordings in your camera's slide shows (see page 6-14) and when you play back images from View mode (see page 2-17).

Make sure your camera dial is set to **□**, then follow these steps:

- 1 Press the + or – button (next to the right and left arrows) to move to the photo for which you want to hear a recording.
- 2 Press the bottom right button (under **Menu Change**). You see the following:



- 3 Press the top left button (next to **Sound**).
- 4 Press the **W.B.** button (under **Sound Play**). If you want to stop the playback, press the **W.B.** button again.

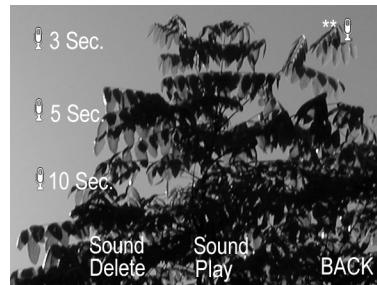
Deleting Audio Recordings

You can also delete audio recordings that you've added to the pictures on your memory card.

Make sure your camera dial is set to **□**, then follow these steps:

- 1 Use the + or – button (next to the right and left arrows) to move to an image whose attached recording you want to erase. (If you're displaying multiple images, you'll see a white frame around the currently selected photo. You'll see a microphone icon in the upper right corner if the image has a recording attached.)
- 2 Press the bottom right button (under **Menu Change**).
- 3 Press the top left button (next to **Sound**).

You see the following:



- 4 Press the **ISO** button (under **Sound Delete**) to delete the recording for the picture. A message appears asking you to confirm the deletion.

NOTE

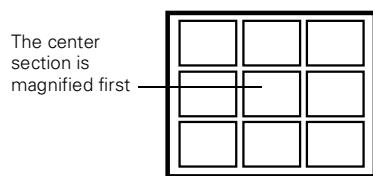
*If you see a message that the selected image is locked, press the button next to **Release** to unlock it.*

- 5 Press the button next to **Yes** to confirm, or under **No** to cancel.
- 6 Press the bottom right button (under **BACK**) twice to return to the main playback menu.

Magnifying a Picture

You can zoom in to enlarge a portion of your image on the LCD screen and view it in greater detail. Then you can use the camera's buttons to scroll the image and display another section (up to nine sections for regular images and three sections for panoramic images).

The sections of your image that can be viewed are demonstrated in the figure below:



Make sure the camera dial is set to , and follow these steps:

- 1 To enlarge the currently displayed image, press the top left button (next to **enlargement**).



A magnified view of the center section of the picture appears. An icon in the top right corner of the screen indicates which section of the image is currently displayed.



- 2 To view different sections of the magnified image, press the + and – buttons (next to the up and down arrows) to move up or down, or the ISO and W.B. buttons (under the left and right arrows) to move left or right.

NOTE

When you magnify a panoramic picture, it's divided into three parts. You can only scroll left and right.

- 3 To exit the enlargement screen, press the bottom right button (under BACK).

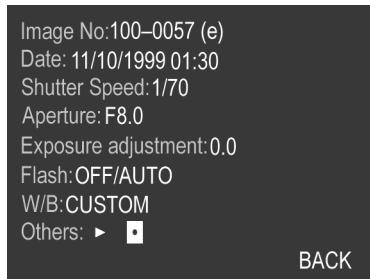
Viewing Picture Information

You can use the LCD screen to view detailed information about individual images, including date and time taken, shutter speed, exposure settings, aperture and white balance settings, and metering method. To display image information, follow these steps:

- 1 Turn the camera dial to , then press the bottom right button (under **Menu Change**). You see the following:



2 Press the **W.B.** button (under **INFO**) to display information for the currently selected image.



3 Press the bottom right button (under **BACK**) twice to return to the main playback screen.

Playing Your Pictures as a Slide Show

You can use the LCD screen to play back your pictures in a continuous “slide show.” You can even control the slide show’s speed and pauses. Follow these steps:

1 Turn the camera dial to **□**. Then press the bottom right button (under **Menu Change**).

2 Press the bottom left button (next to **SLIDE SHOW**). You see the following:



3 Press the + button to select the slide show speed. You can have the image change automatically every 3, 5, or 10 seconds, or you can choose to change the images manually. (For images with audio, the camera stays on the image until the entire recording has played.)

NOTE

You can also turn sound on or off, rotate the images, or exclude certain images from your slide show. See the following sections for instructions.

4 Press the bottom left button (next to Start) to begin the slide show.

To pause the slide show, press the bottom right button; then press the bottom right button again to restart it.

While the slide show is paused, you can view the last image by pressing the ISO button (under BACK). You can also exclude the currently displayed image by pressing the top left button (next to Exclude).

To stop the slide show, press the bottom left button (next to Quit).

NOTE

At the end of the slide show, a black screen with the message "fin!" appears. Then the camera shuts off. Press any button on the back of the camera to turn it back on in playback mode.

Playing Sounds With Your Slide Show

You can turn the audio recordings for your images on or off when you display your slide show. Follow these steps:

- 1 Turn the camera dial to . Then press the bottom right button (under Menu Change).
- 2 Press the bottom left button (next to SLIDE SHOW).

You see the following:



- 3 Press the top left button (next to Sound Play OFF) to turn the sound on. (If the setting is Sound Play ON, you can press the same button to turn it to Sound Play OFF.)

Excluding Pictures From a Slide Show

All pictures saved in your camera's memory card are automatically included in the slide show. To exclude any pictures from the slide show, follow these steps:

- 1 Turn the camera dial to . Then press the bottom right button (under **Menu Change**).
- 2 Press the bottom left button (next to **SLIDE SHOW**).

You see the following:



- 3 Press the – button (next to **SlideSelect**). The slide selection screen appears:



- 4 Press the + or – button (next to the right and left arrows) to select the picture you want to exclude from the slide show. (If you want, press the **ISO** button to display multiple pictures.)
- 5 Do one of the following:
 - ▶ Press the bottom left button (next to **Exclude**) to exclude the selected picture.
 - ▶ Press the top left button (next to **Excl All**) to exclude all pictures.

The number that normally appears in the top right corner of each slide show image disappears for excluded photos.

NOTE

*If you change your mind, move the white frame to the picture you want to include again and press the bottom left button (next to **Select**). Or press the top left button (next to **Select All**) to include all pictures.*

6 When you're finished, press the bottom right button to return to the slide show menu.

NOTE

*Once you exclude images, the camera only plays the ones that were not excluded. If you take new photos and want to play them in your slide show, select them or press the button next to **Select All** to include all the pictures in the camera.*

Rotating Pictures in a Slide Show

You can display pictures in your slide show rotated 90 degrees to the right or left. Follow these steps:

- 1 Turn the camera dial to **□** to display the playback menu, then press the bottom right button (under **Menu Change**).
- 2 Press the bottom left button (next to **SLIDE SHOW**). You see the slide show menu:



3 Press the – button (next to **Slide Select**) to display the slide selection screen:



4 Press the + or – button (next to the right and left arrows) to frame the image you want to rotate.

NOTE

*To make it easier to view your picture, press the **ISO** button to display multiple images, then use the + or – button to select an image.*

5 To rotate the image 90 degrees to the left, press the **W.B.** button (under **Rotate**) once. (Press it two more times to rotate the image back.)

To rotate the image 90 degrees to the right, press the **W.B.** button twice. (Press it once more to rotate the image back.)

NOTE

*You can't rotate images that have been excluded from the slide show. If you want to include an excluded image, press the button next to **Select** and then rotate it.*

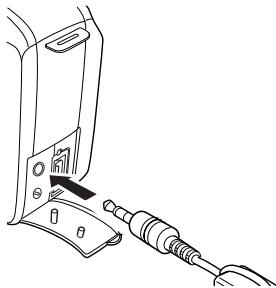
6 Repeat steps 3 through 5 to select and rotate more pictures. When you're finished, press the bottom right button (under **BACK**) to save your changes and return to the slide show menu.

Playing Back Pictures on TV

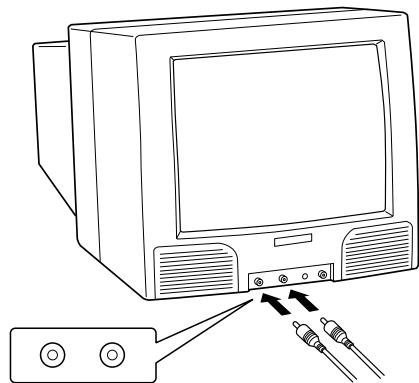
You can display your pictures and play back audio recordings on a regular television or VCR by using the video cable that came with your PhotoPC 850Z. You may want to use the optional AC adapter when you play back your pictures on a TV. See page A-2 for instructions.

Follow these steps to play back your pictures on TV:

- 1 Make sure the camera and TV (and VCR) are turned off.
- 2 Open the camera's connector cover and connect the black end of the video cable to the **AV OUT** port, as shown.



- 3 Connect the yellow end of the cable to the **VIDEO IN** port and the white end of the cable to the **AUDIO IN** port on the television or VCR.



- 4 Turn on the TV (and VCR) and switch to the correct video mode.
- 5 Turn the camera dial to **►**. The last picture you took appears on the TV screen. You can use all of the camera's playback features when your pictures are displayed on TV.

NOTE

The LCD screen is blank when the camera is connected to a TV.

- 6** When you're done playing back pictures, switch back the video mode, if necessary. Turn your camera dial to **Off** and turn off the TV (and VCR). Then disconnect the cables.

TIP

You can videotape your pictures and sounds to share them without using a computer. After you connect the camera to your VCR, press the Record button on the VCR and use the camera's slide show feature, as described on page 6-14.

7

Adjusting Camera Settings

Your camera has many options that you can change to configure the camera to work exactly the way you want. This chapter describes the following:

- ▶ Setting the auto power off time
- ▶ Adjusting the LCD brightness
- ▶ Turning the camera alert sounds on or off
- ▶ Setting the camera volume
- ▶ Setting the time and date
- ▶ Setting the language
- ▶ Setting the broadcast signal system

Setting the Auto Power Off Time

The automatic power off feature saves battery power by automatically turning your camera off when it's idle for a designated period of time. You can set the camera to turn off after 10 seconds, 30 seconds, one minute, three minutes, or five minutes.

NOTE

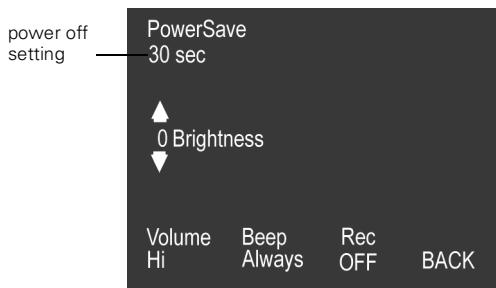
You can also set the camera's clock and automatic power off feature from your computer. See Chapter 12 for details.

Follow these steps to change the power off interval:

- 1 Push the camera dial lock in and turn the dial to **1**. You see the SETUP menu:



- 2 Press the **ISO** button (below Camera SETUP) to go to the Camera SETUP menu. The current power off setting appears in the upper left corner of the screen.



- 3 Press the top left button (next to the current setting) to select a new setting.

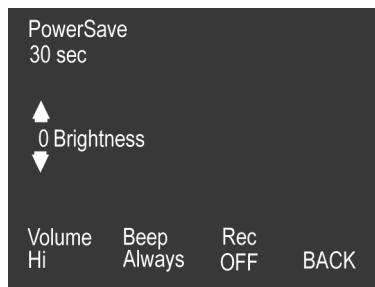
NOTE

Automatic power off is in effect only when you're using batteries to power the camera.

Adjusting the LCD Brightness

To adjust the brightness of the LCD screen, follow these steps:

- 1 Turn the camera dial to **i** to display the SETUP menu. Then press the **ISO** button (under **Camera SETUP**). You see the Camera SETUP menu:



- 2 Press the + or – button (next to the up and down arrows) to adjust the screen brightness.

Turning the Camera Alert Sounds On or Off

Normally, the camera clicks to let you know when an image has been captured and makes sounds whenever you press any of its buttons. However, you can turn the alert sounds off, or set the camera to click only when it captures an image. To set the alert sounds, follow these steps:

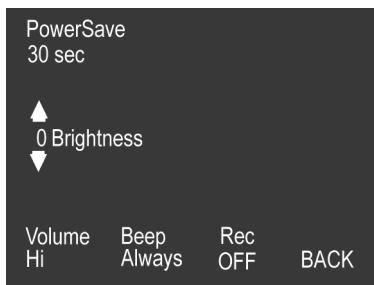
- 1 Turn the camera dial to **i** to display the SETUP menu. Then press the **ISO** button (under **Camera SETUP**). You see the Camera SETUP menu (shown to the left).
- 2 Press the **ISO** button (under **Beep**) to cycle through these choices:
 - ▶ **Shutter** The camera clicks when an image is captured.
 - ▶ **Never** Turns all sounds off.
 - ▶ **Always** The camera makes sounds whenever you press a button and clicks when the camera captures images.

- 3 Press the bottom right button (under BACK) to return to the SETUP menu.

Setting the Camera Volume

You can change the camera's volume for playing back audio recordings and alert sounds. Follow these steps:

- 1 Turn the camera dial to **■** to display the SETUP menu. Then press the ISO button (under Camera SETUP). You see the Camera SETUP menu:



- 2 Press the lower left button (next to Volume) to change the setting to **Hi** or **Low**.

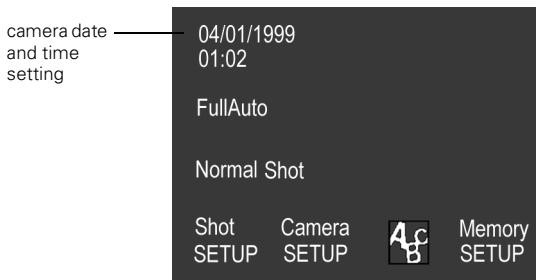
- 3 Press the bottom right button (under BACK) to return to the SETUP menu.

Setting the Time and Date

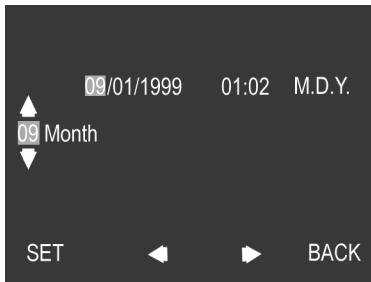
The camera remembers the time and date settings you made when you formatted your memory card, unless it goes without battery power for more than a couple of hours.

If you need to reset the time and date for any reason, follow these steps:

- 1 Turn the camera dial to **■** to display the SETUP menu. You see the camera date and time settings in the upper left corner of the screen.



2 Press the top left button (next to the setting) to display the following screen. The month is highlighted in red.



3 Press the + or – button (next to the up and down arrows) to adjust the setting, then press the **W.B.** button (under the right arrow) to highlight the day.

4 Repeat step 3 for each item you want to change. (To return to a previous setting, press the **ISO** [left arrow] button.)

5 When you're done, press the bottom left button (next to **SET**) to save the setting and return to the SETUP menu.

To return to the SETUP menu without changing the setting, press the bottom right button (under **BACK**).

Setting the Language

You can choose from eight languages for information displayed on the LCD screen.

Follow these steps to change the language setting:

1 Turn the camera dial to **1** to display the SETUP menu.

2 Press the **W.B.** button (under the **4G** icon) to go to the language setting screen.



- 3 If necessary, press the W.B., ISO, + or – buttons (under and next to the arrows) to highlight English.
- 4 Press the bottom left button (next to SET) to save the setting and return to the SETUP menu.

To return to the SETUP menu without changing the setting, press the bottom right button (under BACK).

Setting the Broadcast Signal System

If you will be using your camera with a television, you can make sure the camera has the correct broadcast signal setting. Follow these steps:

- 1 Turn the camera dial to **1** to display the SETUP menu.

- 2 Press the W.B. button (under the  icon) to go to the language setting screen.



- 3 If necessary, press the top left button (next to **Signal System**) to change the setting to NTSC (the U.S. broadcasting standard).
- 4 Press the bottom left button (next to SET) to save the setting and return to the SETUP menu.

To return to the SETUP menu without changing the setting, press the bottom right button (under BACK).

When you're finished taking pictures, you can connect the camera to your computer and transfer the images. Then you can use the pictures on your Web site, in presentations, or in just about anything you create on your computer. This chapter describes the following:

- ▶ Connecting the camera
- ▶ Transferring photos and audio files with Image Expert
- ▶ Getting images into TWAIN-compliant applications
- ▶ Getting images that you can import

NOTE

If your computer has a Type II PCMCIA card slot, you can transfer your pictures by copying them directly from your memory card with an optional adapter. See page A-7 for instructions.

Connecting the Camera

This section describes how to connect the camera to a Windows PC (using the serial cable), a Macintosh (using the Macintosh serial cable), and to a USB-compatible PC or Macintosh (using the USB cable). Note the following before you start:

- ▶ You can conserve battery life by using the optional AC adapter when you connect the camera to your computer. See page A-2 for instructions.
- ▶ When you connect the camera, make sure your system is not exposed to sources of electromagnetic interference, such as stereo speakers or the base units of cordless telephones.

Connecting to a Windows PC

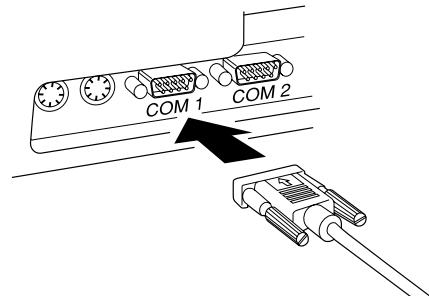
Follow these steps to connect the camera to your Windows 95, 98, or NT system with the included serial cable:

- 1 Locate the Windows serial cable that came with the camera, then turn off the camera and your computer.
- 2 Locate a serial port on the back of your computer. You may have two serial ports labeled COM1 and COM2, or the ports may be labeled with icons. If you have two serial ports available, use COM1 (port 1) to connect your camera.

NOTE

If you have a 25-pin serial port, you can use a 9- to 25-pin adapter.

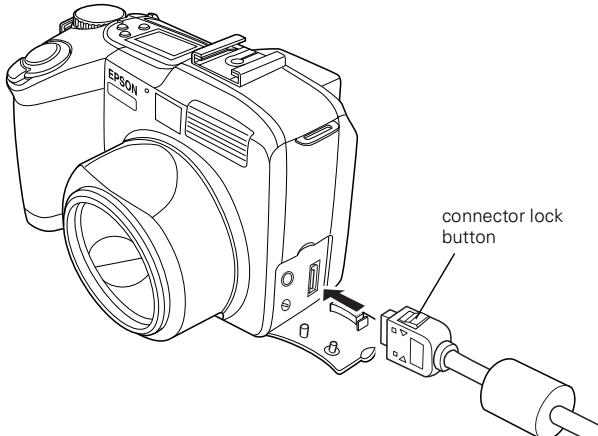
- 3 Line up the serial connector on the cable with one of the serial ports on your computer, and insert the connector. Then tighten the screws.



- 4 Open the connector cover on the side of the camera. Carefully insert the connector on the other end of the cable into the camera's interface port.

NOTE

To disconnect the cable from the camera, squeeze and hold the two connector lock buttons on the sides of the connector while you pull the cable out.



5 Turn on the camera by turning the camera dial to , then turn on your computer system.

NOTE

If you have problems connecting to the COM port you have selected, check your computer's COM port configuration and try again. If your computer has a high-speed serial board, you may be able to transfer your pictures at the rate of 230.4KB per second. If your camera software doesn't set this speed automatically, you can set it manually. See page 12-5.

Connecting to a Macintosh

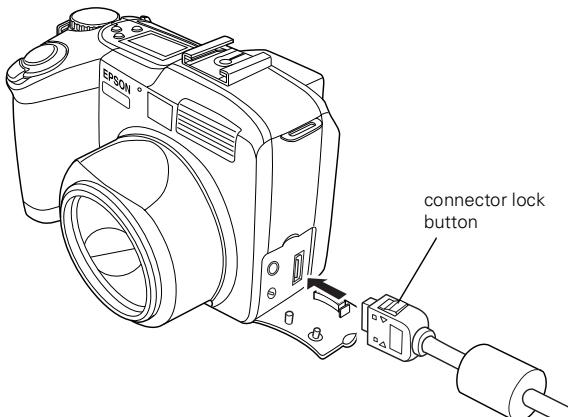
Follow these steps to connect the camera to your PowerPC with the Macintosh serial cable that came with your camera:

- 1 Locate the Macintosh serial cable that came with the camera, then turn off the camera and your computer.
- 2 Locate the modem port  or printer port  on the back of your Macintosh. You can use either port to connect the camera.

NOTE

If you're sharing a serial port that you use for another device, make sure AppleTalk™ is turned off. Your Macintosh may not recognize the camera if AppleTalk is on. Also, if you have problems connecting to the printer port, use the modem port instead.

3 Open the connector cover on the side of the camera. Carefully insert the connector on the other end of the cable into the camera's interface port.



NOTE

To disconnect the cable from the camera, squeeze and hold the two connector lock buttons on the sides of the connector while you pull the cable out.

4 Turn on the camera by turning the camera dial to , then turn on your Macintosh system.

On a PowerPC or PowerMac G3, you may be able to transfer your pictures at the rate of 230.4KB per second. If your camera software doesn't set this speed automatically, you can set it manually. See page 12-5.

Connecting the Camera with the USB Cable

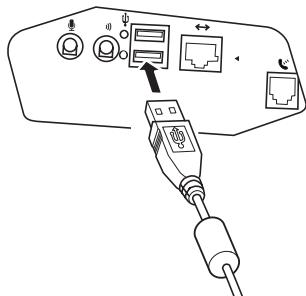
You can connect the camera to your USB-enabled Windows 98 system, iMac, or PowerMac G3 system using the USB cable that came with your camera.

NOTE

- If you're using Windows 98 and you see the *New Hardware Found* screen, follow the instructions on page 1-16.
- If your iMac is running OS 8.1, you'll need to update your operating system before connecting to your camera using the USB cable. Download and install the iMac Update 1.0 or later from Apple at <http://swupdates.info.apple.com>. Contact Apple if you have problems installing the update. If your iMac is running OS 8.5 or 8.5.1, Apple recommends that you download and install iMac Update 1.1. To find out which operating system your iMac is running, select **About This Computer** in the Apple menu.

Follow these steps to connect the camera to your system using the USB cable:

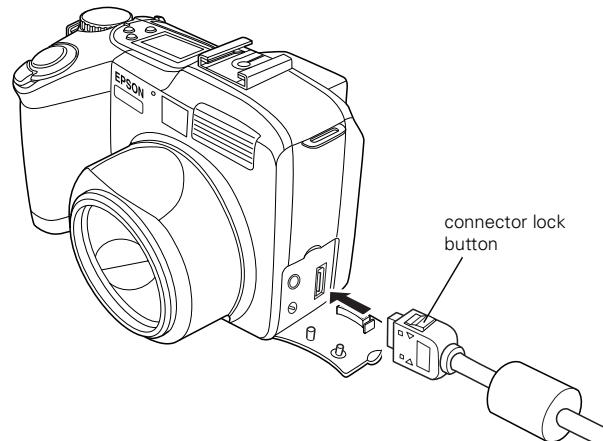
- 1 Locate the USB cable that came with the camera, then turn off the camera and your computer.
- 2 Plug the connector on the USB cable into the USB port on your computer, or into a port on a USB hub.



NOTE

Although you can use a USB hub, it's recommended that you connect the camera directly to the computer's USB port.

- 3 Open the connector cover on the side of the camera. Then insert the connector on the other end of the USB cable into the camera's interface port.



NOTE

To disconnect the cable from the camera, squeeze and hold the two connector lock buttons on the sides of the connector while you pull the cable out.

- 4 Turn on the camera by turning the camera dial to .

Transferring Photos and Audio Files

The PhotoPC 850Z provides several different ways to transfer your pictures from the camera's memory card to your computer. The simplest method is to use the Image Expert software that came with your camera. This lets you view small thumbnail images of your pictures, and then quickly transfer them to an album (folder) on your hard disk drive.

If you haven't installed your software, do it now. (See Chapter 1.) Make sure the camera is connected to your computer and the camera dial is turned to .

NOTE

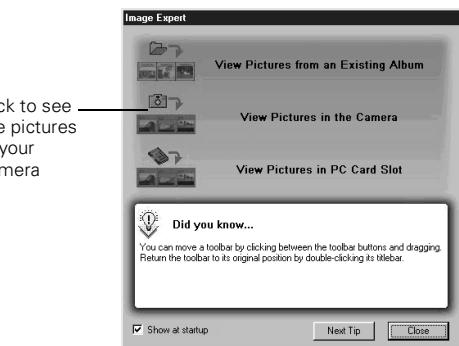
Although these instructions apply to Windows 95 and 98, the same basic steps can be used with a Macintosh or Windows NT 4.0 system.

- 1 In Windows, Start Image Expert: Click **Start**, point to **Programs**, point to **Image Expert**, and click **Image Expert**.

On a Macintosh, open the Image Expert folder and double-click the **Image Expert** icon.

If you see the Image Expert Quick Tour screen, click **Close**. (This screen does not appear on the Macintosh.)

You see a window like the following:



- 2 Click **View Pictures in the Camera**. You see a window displaying "filmstrips" of your images. (If you see an error message instead, see page 8-9.)

click to start transferring your photos

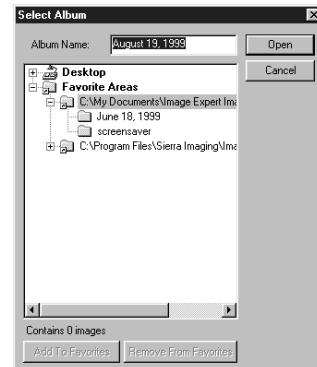


3 Click the  button to transfer all the images to your hard drive. To transfer a single image, select it, then click the button.

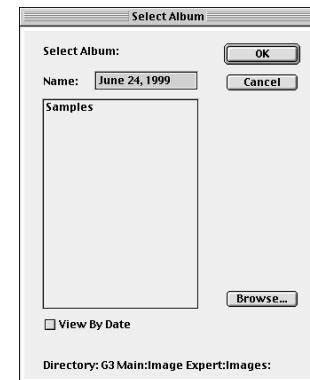
NOTE

- ▶ To select more than one image, hold down the **Ctrl** key while you click. To deselect, click another image.
- ▶ You must click the  button to transfer images. When you view images on your computer, they are not yet transferred.

You see a Select Album window like the following:



Windows



Macintosh

Image Expert will automatically create an album (folder) for your pictures with the current date as its name. You can type your own name for the album if you want, or choose an existing album.

- 4 Click **Open** (or **OK** on a Macintosh) to begin transferring your pictures. You see a confirmation message asking if you want to download selected images only.
- 5 Click **Selected** to download the selected images, or **All** to download all images. A window like the following shows you the progress of each image:

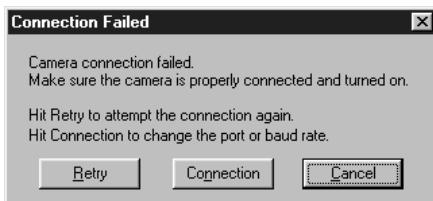


- 6 When you're finished, close the filmstrip window.
- 7 To erase all images from the camera's memory card, select **Erase All Images** from the Camera menu. To erase a particular image, click the image to select it and choose **Delete** from the Edit menu. You see a confirmation message.
- 8 Click **Yes** to erase the image(s), or **No** to cancel.

You can double-click an image to open it in Image Expert. You can display your images one by one, edit, print, and copy them to diskettes, or place them in your documents and presentations. See Chapters 9, 10, and 11 for more information about working with images in Image Expert.

What To Do if You See an Error Message

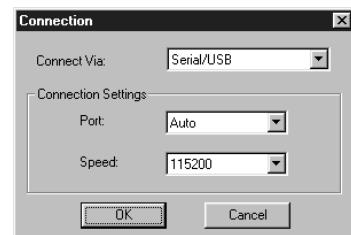
When you click the button to view images in the camera's memory card, you may see a message like the following:



Follow these tips to get your camera connected correctly:

- 1 Make sure the camera is turned on and has not shut off automatically. If it has, turn the camera dial to **Off**, then to .
- 2 Check the cable and make sure the connections are secure. Make sure the pins inside the connector are not bent.
- 3 Make sure your batteries have enough power, or your AC adapter is connected.

- 4 Click **Retry**. If you see the **Connection Failed** message again, click **Connection**. You see the following dialog box:



- 5 Select another image source from the **Connection Via** list, if necessary. If you're using a PCMCIA adapter to access images from a PC card slot, select **PC Card**.
- 6 Select another port if necessary. In most cases, it's best to leave the **Port** setting at **Auto** because Image Expert can detect the camera connection automatically.

If you have a serial device connected to one port and an internal modem on the other, you can try setting the **Port** to **COM3** or **COM4**.

If you have a USB port, select **Serial/USB**, then remove the USB cable from your computer and reconnect it.

7 Select a slower speed. Image Expert automatically chooses the fastest speed that works with your system, but this may actually be too fast for the configuration of your port. Try setting the speed to **57600**. You may need to experiment to choose the best speed.

8 When you are finished, click **OK**.

Getting Images Into TWAIN-Compliant Applications

If you use Photoshop® or other TWAIN-compliant applications, you can transfer your pictures directly into your program from the camera. Follow these steps:

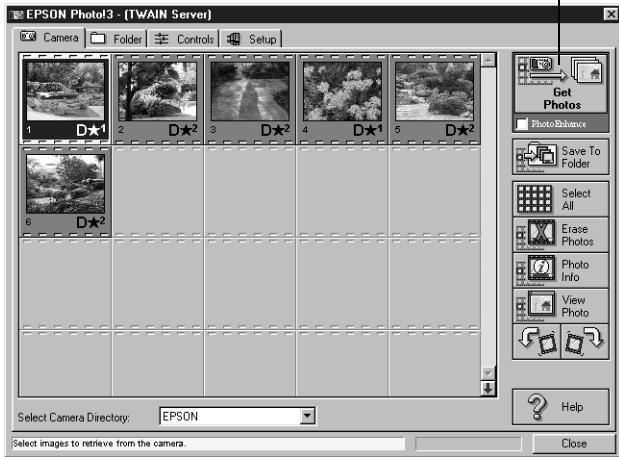
- 1 Start your application.
- 2 Choose **Import**, then **Select TWAIN_32 Source** if you're running Windows (or **Import**, then **TWAIN Select** if you have a Macintosh) from the File menu.

NOTE

*The commands you choose from the File menu differ from one host application to another. With other host applications, you might choose **Acquire** or **Select Source**. Some applications let you download only one photo at a time.*

- 3 For your TWAIN source, choose **EPSON Photo!3 Ver.1** (Windows), or **Photo!3 Ver.1** (Macintosh).
- 4 For Windows, choose **Import**, then **TWAIN_32** from the File menu. For Macintosh, select **Import**, then **TWAIN_Acquire**.

The EPSON Photo!3 screen appears, with thumbnail images of your photos. (If you see the message **The Camera Is Not Responding**, see page 8-14.)



5 Select the picture you want and click **Get Photos** to transfer the picture. Or click **Select All** and then **Get Photos** to transfer all the pictures.

NOTE

To select more than one image, hold down the Ctrl key while you click. To deselect, click another image.

You can also select a picture and do the following before you transfer it:

- ▶ Click **View Photo** to see a full-size image.
- ▶ Click one of the rotation buttons to turn the picture 90 degrees.
- ▶ Click **Photo Info** to see the capture time and date, image resolution, and other information.
- ▶ Check **PhotoEnhance** to automatically improve the picture during transfer. (You can select and enhance all the pictures at once. However, this feature makes the transfer take significantly longer. The optional AC adapter is recommended for this feature.)

6 After transferring, click **Erase Photos** if you want to remove the picture(s) from your camera.

7 If necessary, click **Close** to exit the EPSON Photo!3 screen and return to your application. You see the picture or pictures in the work area.

Getting Images That You Can Import

Most methods of transferring images from the camera save your pictures as JPEG files. If your word processor or other application doesn't support the JPEG format, you have to convert the files one by one. Or you can use the export feature of EPSON Photo!3 to automatically convert the files as you transfer them.

Follow these steps to export and convert your pictures with EPSON Photo!3:

- 1 Start your EPSON Photo!3 software. Under Windows 95 or 98, click **Start**, and then point to **Programs, EPSON Photo!3 Ver.1, EPSON Photo!3 Ver.1**.

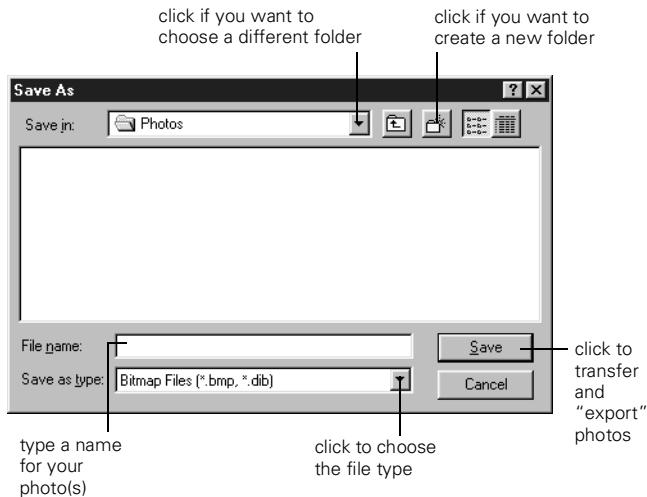
You see a screen like the one below. (If you see a Setup screen that says **The Camera Is Not Responding**, see page 8-14.)



- 2 Click the picture you want, or click **Select All**.

You can also view, rotate, or enhance the picture(s) or see picture information before you export, as described on page 8-11.

3 Click the Export Photos button. The Save As dialog box appears:



4 Type a file name. If you're exporting more than one image, the software will add numbers to identify each one.

5 Select the file type from the drop-down menu. You can choose any of the following formats:

- ▶ PICT (Macintosh only)
- ▶ JPEG
- ▶ Bitmap (BMP)
- ▶ PCX

6 Click Save. Your pictures are transferred one by one.

NOTE

You cannot open exported photos in EPSON Photo!3. Use Image Expert to view and edit the exported images.

7 Click Erase Photos if you want to remove the pictures from your camera.

Here are some additional things you can do with EPSON Photo!3:

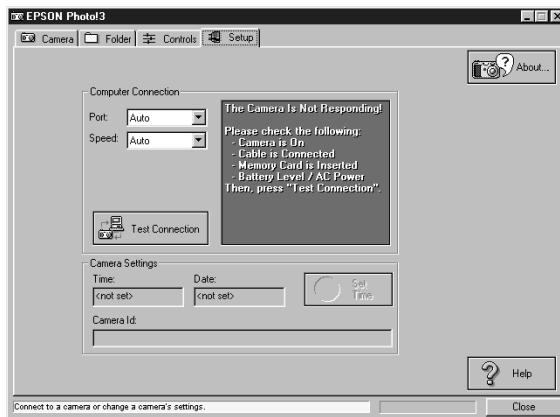
- ▶ Select the **Folder** tab and click **Browse** to locate and display pictures you have downloaded. You can then select a picture and click **Upload** to transfer a picture from your computer to the camera or an optional memory card. See Chapter 13 for more information.
- ▶ Select the **Controls** tab to change camera settings or view a live preview and take pictures from your computer. See Chapter 12 for more information.
- ▶ Set the camera's date and time from the **Setup** tab, or change your computer connection settings. See Chapter 12 for more information.

8 Click **Close** to exit EPSON Photo!3.

You can now insert your exported pictures in documents and other projects. For instructions, see page 9-2.

What To Do If the Camera Is Not Responding

When you try to acquire pictures from the camera or start the EPSON Photo!3 application, you may see a screen like the following:



Follow these steps to fix your camera connection:

- 1** Check the cable and make sure the connections are secure. Make sure the pins inside the connector are not bent.
- 2** Make sure your batteries have enough power, or your AC adapter is connected.
- 3** Click **Test Connection**. If you see the same screen, continue with step 5.
- 4** Select another port if necessary. In most cases, it's best to leave the **Port** setting at **Auto** because EPSON Photo!3 can detect the camera connection automatically.
- 5** Select a slower speed. EPSON Photo!3 automatically chooses the fastest speed that works with your system. This may actually be too fast for the configuration of your port. Try setting the speed to **57600**. You may need to experiment to choose the best speed.
- 6** Click **Test Connection** again. If you still don't see your pictures, see Chapter 16 for more troubleshooting tips.

If you have a serial device connected to one port and an internal modem on the other, you can try COM3 or COM4.

If you're using a USB port, try selecting **USB**, then remove the USB cable from your computer and reconnect it.

9

Getting Your Photos Into Documents

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PhotoPC 850Z provides several methods for getting your pictures into presentations, letters, and other projects. You can drag and drop a picture from an Image Expert album into a document or presentation. You can also import an image into your application, or copy and paste it. With Windows, you can use the Camio™ Viewer to drag a picture directly from the camera and drop it into your project. This chapter describes the following:

- ▶ Importing images into documents
- ▶ Getting images with copy and paste
- ▶ Using drag and drop from an album
- ▶ Getting images with the Camio Viewer

Although most of the instructions and illustrations in this chapter apply to Windows 95 and 98, you can follow the same steps in Windows NT 4.0 or on a Macintosh.

Importing Images Into Documents

Once your pictures are transferred and saved on your hard drive, you can import them into your applications. You may need to convert your images if you didn't export them from the camera (as explained in Chapter 8) and your application can't import JPEG files. Or you can use the Save As feature of Image Expert to convert image files.

NOTE

Your picture may display poor image quality on the screen after you import it. However, in most cases it will print correctly.

Follow these steps to import a PhotoPC 850Z picture into your document:

- 1 Start your application.
- 2 Open the document where you want to use the picture.

3 Select the point where you want to place your picture.

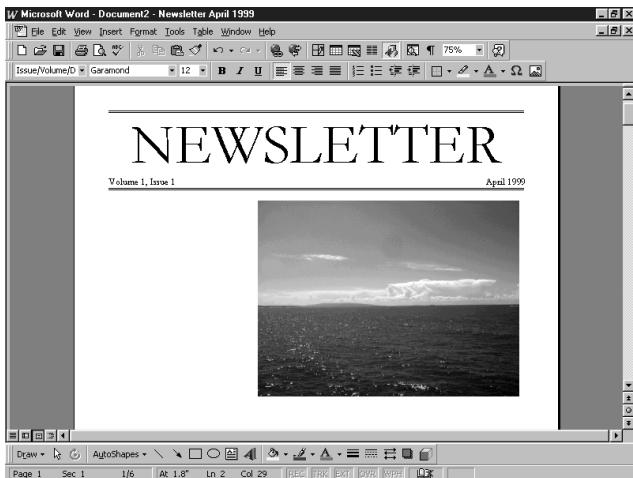
4 Select **Picture** from the **Insert** menu. (In some applications you may need to select a different command, such as **Import Picture**, which is usually in the **File** menu.)

An Insert Picture dialog box appears (your dialog box may look different, depending on your application):



5 Locate and select the image you want to insert. In some applications you can see a preview of your picture.

6 Click OK (or Insert, Import, or whatever command your application uses) to insert your picture. The picture appears in your document.



NOTE

In some applications, you can add a frame around the picture if you want to move it around on the page or resize it. In other applications, you create a frame first and then place the picture in it. For instructions, see your application's online help or documentation.

Getting Images With Copy and Paste

You can use this method to place a picture in just about any type of document or project. You should already have transferred your picture from the camera to your hard disk. Follow these steps:

- 1 Start Image Expert. (See page 8-6.)
- 2 Click View Pictures from an Existing Album. Or, from the Image Expert screen, click the Open Album button or select Open Album from the File menu.

You see a dialog box like the following:



- 3 Locate the album you want and double-click it to open it. When a filmstrip of album images appears in the Image Expert window, click the picture you want to copy.
- 4 Click the **Copy** button or select **Copy** from the Image Expert Edit menu.
- 5 Start your word processor or other application.
- 6 Open the document where you want to use the picture.

- 7 Choose **Paste** (or **Paste Special**) from your application's Edit menu. A copy of the picture appears in your document.

Using Drag and Drop From an Album (Windows Only)

Once you have transferred your pictures into albums, you can easily drag and drop them into documents or other projects.

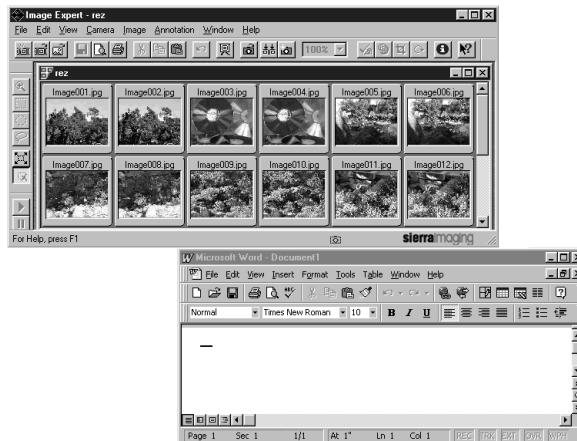
NOTE

Dragging and dropping an image into a document works only with OLE-2.0-compliant applications, such as Microsoft Word,[®] PowerPoint,[®] WordPerfect,[®] or Lotus SmartSuite.[®] Depending on how well your application supports OLE 2.0, your images may not look as good when you drag and drop them as when you import them.

Follow these steps:

- 1** Start Image Expert as described on page 8-6.
- 2** Click **View Pictures from an Existing Album**, or click the Open Album button  from the Image Expert screen.
- 3** Locate the album you want and double-click it to open it.
- 4** Start your word processor or other application.
- 5** Open the document where you want to use the picture.

You should have both the Image Expert album and the document displayed on your screen, as shown:



- 6** Click the image you want.
- 7** While holding down the mouse button, drag the image to the location where you want it in your document.
- 8** Release the mouse button. The picture appears in your project or document.

If you want to edit or modify the picture, just double-click it on the Image Expert window to bring up the Image Expert menus and toolbar.

Getting Images With the Camio Viewer (Windows)

The Camio Viewer is a quick and easy way to get pictures from the camera. You can transfer all images to your computer, or just display the pictures in the camera. Then you can drag a picture directly into a presentation or document.

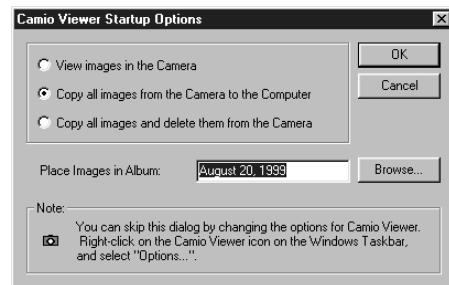
NOTE

Dragging and dropping an image with the Camio Viewer works only with OLE-2.0-compliant applications running under Windows 95, Windows 98, or Windows NT.

First you need to connect the camera to your computer as described in Chapter 8. Then follow these steps:

- 1 Double-click the camera icon  on the right end of your Windows taskbar.

You see the Camio Viewer Startup Options dialog box:



2 Choose one of the following options:

► **View images in the Camera**

Displays a filmstrip of your pictures. You can then select an image to drag and drop into a document or presentation. (The image will be embedded in your document, and will not be available as a separate file.)

► **Copy all images from the Camera to the Computer**

Transfers your pictures to an album (folder) on your hard drive. You can then select an image to drag and drop.

► **Copy all images and delete them from the Camera**

Transfers your pictures to an album (folder) on your hard drive and deletes them from the camera. You can then select an image to drag and drop.

3 Continue with the steps in one of the following sections, depending on the option you chose in step 2.

Dragging and Dropping a Picture Into a Document

Follow these steps if you chose **View images in the Camera**:

1 Click **OK**. Your pictures appear in a strip of thumbnail images:



2 Open the application and document where you want to use the picture.

- 3 Click the picture you want to use. Without releasing the mouse button, drag the picture to your document. When your pointer is over the location where you want the picture to appear, release the mouse button. The picture is downloaded from the camera, and it appears in your document.

If you want to edit or modify the picture, just double-click it in the Camio Viewer filmstrip to bring up the Image Expert menus and toolbar. For more information about the Camio Viewer, choose **Quick Tour** from the Image Expert Help menu.

NOTE

When you drag and drop with the Camio Viewer, your picture is not saved as a separate image file on your hard drive. You have to transfer your image first if you want it to be available as a separate image file.

Transferring Images Before Placing Them

Follow these steps if you chose **Copy all images** from the camera to the computer:

- 1 Click **OK** to copy your pictures to an album named with the current date. Or, type a new name for the album and click **OK**. Your pictures are transferred one by one. They appear in a strip of thumbnail images, as shown on the previous page.
- 2 Follow steps 2 and 3 in the previous section to drag and drop a picture into a document or other project.

10

Working With Photos and Albums

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You can use Image Expert albums to organize and display your pictures. You can print using dozens of predefined layouts. On Windows systems, you can also record sounds for each image, copy an album to diskette, use your images as wallpaper, and more. This chapter covers the following:

- ▶ Organizing Image Expert albums
- ▶ Printing an image or album
- ▶ Adding sound to an image
- ▶ Displaying albums as slide shows
- ▶ Using an album as a screen saver
- ▶ Setting an image as wallpaper
- ▶ Copying to diskette or Zip™ disk
- ▶ Sending pictures and sound by e-mail

Organizing Image Expert Albums

Image Expert albums provide a convenient way to organize your pictures. Here are some of the things you can do:

- ▶ Organize pictures in albums
- ▶ Rename a picture
- ▶ View picture information

Copying and Moving Pictures in Albums

Although Image Expert initially sorts your pictures by date, you can easily drag and drop images between albums to organize them by subject matter or in any way you want.

Follow these steps to copy or move images from one album to another:

- 1 Open the album you want to copy the images to and the album where the pictures are located.

If you want to create a new album, click the **New Album** button  or select **New Album** from the File menu.



- 2 Select the image or images you want to move or copy. Hold down the **Ctrl** (**Option** on Macintosh) or **Shift** key to select multiple images.
- 3 To copy or move images, click inside one of the selected images and hold down the mouse button.
- 4 Drag the image(s) to the other album.

5 When the second album is highlighted, let go of the mouse button.

The images are copied to the album. You can sort the pictures and save or rename the new album.

Renaming a Picture

You can easily rename a picture displayed in an Image Expert album. Follow these steps:

1 Click the picture to select it, then click the name that appears above the picture. The name is highlighted.



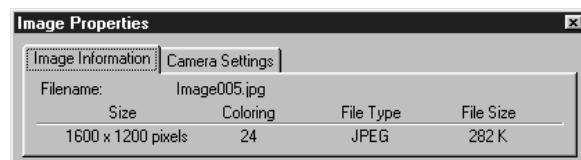
2 Type in the new name and press **Enter** or click outside of the name area. The new name appears above the picture and is saved.

Viewing Picture Information

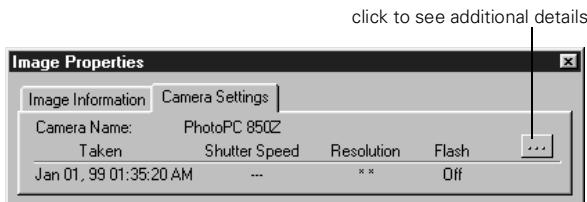
You can display information about any image file and the camera settings that were used to capture it. Follow these steps:

1 Click the picture to select it, or double-click it to open it.

2 Click the **Properties** button  or select **Properties** from the **Image** menu. You see the following information:



3 Click the **Camera Settings** tab to display the following information:



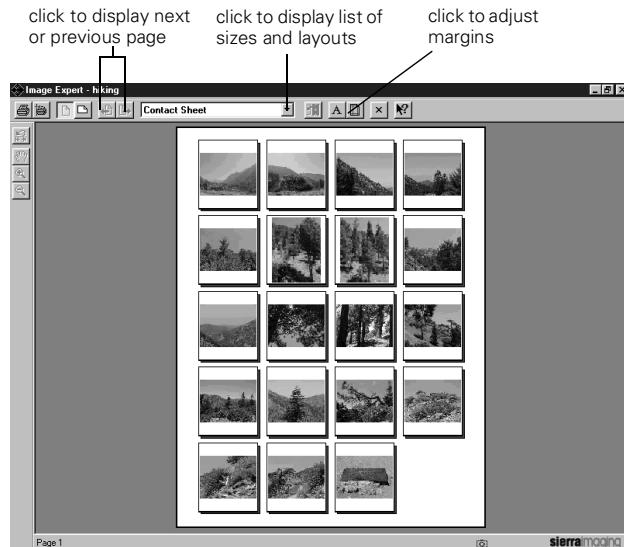
4 Click another image to view its information, or close the Properties box.

Printing an Image or Album

Image Expert offers many choices for printing an individual picture or album with titles, labels, or any text you want to add. You can print an image at full size (one per page) or choose the number of prints per sheet of paper. You can also specify a size, or print combinations with standard sizes for framing.

Follow these steps to print:

- 1 Open the image or album you want to print.
- 2 Click the **Print Layout** button  or choose **Print Layout** from the File menu. The Print Layout window appears with a preview of your printout.



- Follow the instructions in the sections below to choose your layout style, add text, select album images, and adjust the printed area for your images.
- When you're finished designing your layout, click the **Print** button  to print your picture(s).

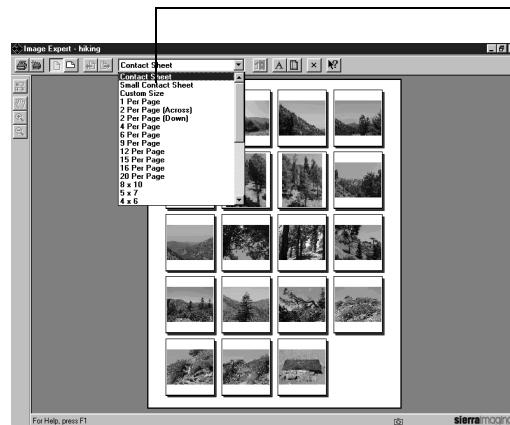
Choosing the Layout Style

You can choose portrait or landscape orientation and select from a variety of layouts.

Follow these steps:

- Click the **Print Setup** button  if you need to select your printer or paper size. Otherwise, all layouts are set up for a standard letter-size sheet.
- Click the **Portrait** button  or **Landscape** button  to change the orientation of the page.

- Click the down arrow next to the size box to display the drop-down list of sizes and layout choices:



when you're printing an album, you can choose from two types of contact sheets

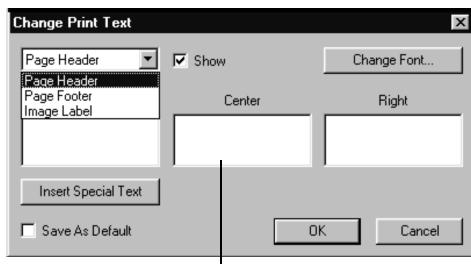
- Choose the size and number of images you want per page. If you need a custom size, choose **Custom Size**. You can then enter exact dimensions for your picture, or size it in the layout window.

5 When the preview shows the layout you want, you can click the **Print** button  or follow the instructions in the next sections to make other adjustments to your printout.

Adding Text

If you want to have image labels or page headers or footers printed with your pictures, follow these steps:

1 Click the **Edit Text** button . The **Change Print Text** dialog box appears:



Type here if you want your text centered under the picture or on the page. Otherwise, type it in the Left or Right box.

2 Select **Page Header**, **Page Footer**, or **Image Label**, and then type the text you want to use in the **Left**, **Center**, or **Right** boxes (depending on how you want it to display). You can type different text for each box.

3 Click **Change Font** to set the font size, style, color, and so on for your header, footer, or labels.

4 Click **Insert Special Text** to choose one of the following for your header, footer, or labels (only some of the choices are available for each):

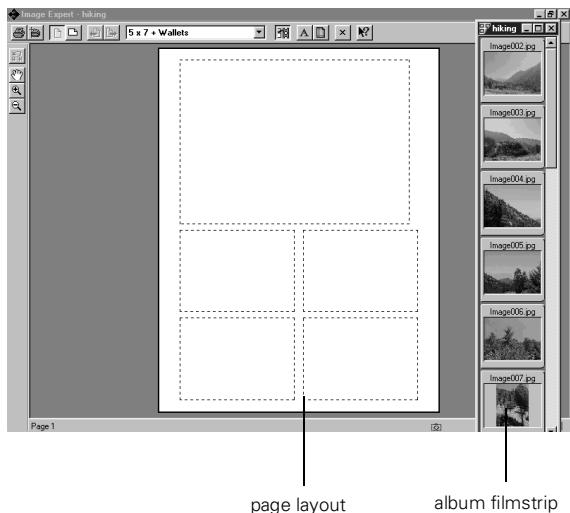
Date Taken	(%d)
Time Taken	(%t)
Date Printed	(%D)
Time Printed	(%T)
Album Name	(%n)
Image Name	(%N)
Page Number	(%p)

5 When you're finished designing your text, click **OK**. The text is previewed on your layout in the center of the screen.

Choosing Album Images

If you're printing an album, Image Expert uses as many pages as necessary to print the entire album. If you don't want to print all the images, you can choose the ones you want and position them in your layout. Follow these steps:

- 1 Click the Pick Images button . Your album appears in a "filmstrip" on the right side of your screen.



- 2 Choose the images you want to print, and drag each one where you want it to appear in the layout.

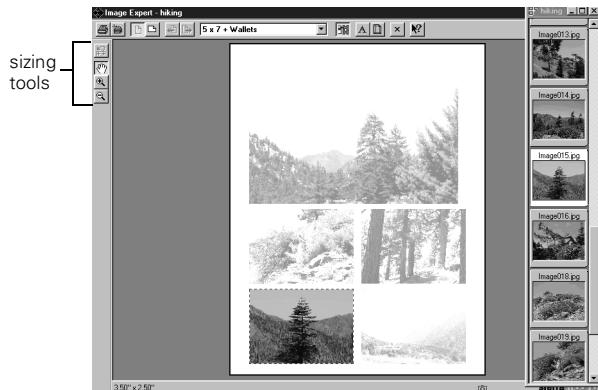
You may notice that some images are cropped. If you want to adjust the cropping, or zoom an image in or out, follow the instructions in the next section.

Adjusting the Printed Area

You can zoom in on an image, and then move it around to display just the portion you want. Follow these steps to adjust the printed area:

- 1 Double-click the image you want to adjust.

The other images fade out, and the sizing tools on the left side of the screen become active.



- 2 Click the **Zoom In** tool  and then click on an image to enlarge and crop it.

You can also click the **Zoom Out** tool  to reduce your image and display more of it.

- 3 Click the **Move** tool  and then click on an image to move it and choose the portion you want to display.

- 4 Click the **Reset Size** button  to return to the default size and layout.
- 5 When the preview shows the layout you want, you can click the **Print** button  to produce your printout.

Adding Audio to an Image

If your Windows system includes a microphone and a 16-bit sound card with speakers, you can add voice or musical annotations to your pictures. Follow these steps to add an audio recording to a picture in Image Expert:

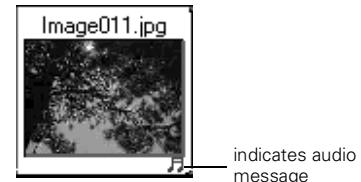
- 1 Select an image in an album or open an image.
- 2 Click the **Record** button  on the left side of your screen or select **Record Audio** from the **Annotation** menu to open the Record dialog box:



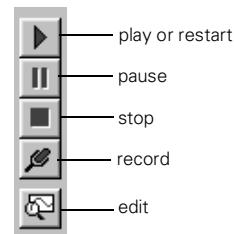
- 3 Select the option you want:
 - ▶ To add audio to an image, choose **Record New**.
 - ▶ To add additional sound to an existing audio clip, choose **Record Additional**.
 - ▶ To end your recording, choose **Stop**.
 - ▶ To listen to your new recording, choose **Play New**.
 - ▶ To listen to your original recording, choose **Play Original**.
- 4 If you like your new recording, click **OK**. Otherwise, click **Undo** to delete the new recording, then repeat step 3 to make a new recording.

Playing Back Sounds

When you open an image that has audio attached to it (indicated by a musical note), the audio clip automatically plays.



You can also select an image and use the buttons on the left side of the Image Expert window to listen to its audio clip:



Editing Sounds

You can use Image Expert to modify your recorded sounds by cutting or copying and pasting from one clip to another. Follow these steps:

- 1 Select an image that has an audio clip.
- 2 Click the **Edit Audio** button , or choose **Edit Audio** from the Annotation menu. The sound wave window opens:



- 3 Click and drag to select a section of the audio clip, or the entire clip. You can perform the following operations:
 - ▶ Click the **Play** button to hear the section you selected.
 - ▶ Select **Cut** from the Edit menu to remove it.
 - ▶ Click **Copy** from the Edit menu to copy it.

- ▶ Select another image and click **Paste** from the Edit menu to add the sound clip to the new image.

NOTE

*To adjust recording or playback volume or modify other features, select **Audio Properties** from the Annotation menu. You can also click the sound icon on your Windows taskbar. Use the volume control on your speakers to quickly adjust playback volume.*

Deleting Sounds

To delete an audio clip, follow these steps:

- 1 From an album, select the image with the sound you want to delete. (Don't open the image.)
- 2 Select **Delete** from the Edit menu, or press the **Delete** key on your keyboard. The following message appears:



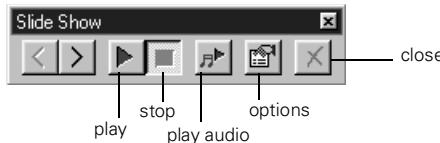
3 Check the Only delete the audio box, then click Yes.

Displaying Albums as Slide Shows

When you display an Image Expert album as a slide show in Windows, you can have it play automatically with various transition effects between images. Follow these steps:

- 1 Open your album.
- 2 Click the **Slide Show** button  or select **Slide Show** from the View menu.

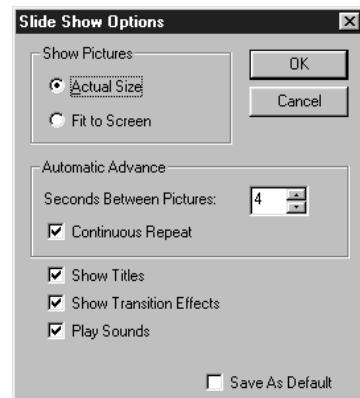
The first image appears on your screen with the slide show controls:



- 3 Click the **Play** button  to see the slide show.

- 4 To change the look of your slide show, click the Options button .

The Slide Show Options dialog box appears:



- 5 Set any of the following options and click **OK**:

- ▶ To stretch your pictures across the whole screen, click **Fit to Screen**.
- ▶ To change the display period for each picture, change the number in the **Seconds Between Pictures** box.

- ▶ To play the slide show only once, click **Continuous Repeat** to deselect it.
- ▶ To hide the titles of your pictures, click **Show Titles** to deselect it.
- ▶ To turn off the fades and dissolves that play between pictures, click **Show Transition Effects** to deselect it.
- ▶ To turn off audio clips attached to your images, click **Play Sounds** to deselect it.

6 Click the Close button  to stop the slide show.

Using an Album as a Screen Saver

If you're using Windows, it's easy to make your own screen saver with your favorite pictures. Follow these steps:

- 1** Open the Image Expert album you want to use.
- 2** Choose **Set Screen Saver** from the File menu. Image Expert asks you to confirm your choice.
- 3** Click **Yes**.

Windows will play a slide show of your album whenever your system is idle.

NOTE

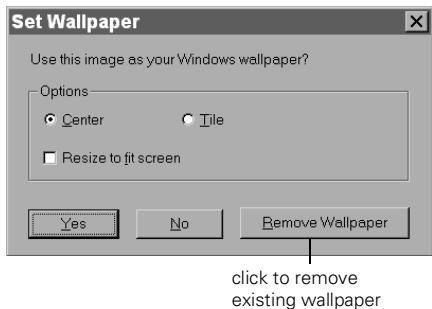
The screen saver slide show doesn't include controls. If you want to change the way your pictures are displayed, you have to use the screen saver settings in your Control Panel. See your Windows documentation or Help system for more information.

Setting an Image as Wallpaper

If you're using Windows, you can use one of your own pictures as your desktop background. Follow these steps:

- 1** Open or select your image in an Image Expert album.

2 Choose **Set As Wallpaper** from the File menu. The following dialog box appears:



3 Choose **Center** to place your picture in the middle of the screen or **Tile** to fill the screen with copies of your picture.

4 If you want the image to be stretched across the whole screen, click **Resize to fit screen**.

5 Click **Yes**. (If you change your mind, click **Remove Wallpaper**.)

You can minimize Image Expert to see your new wallpaper.

Copying to Diskette or Zip Disk

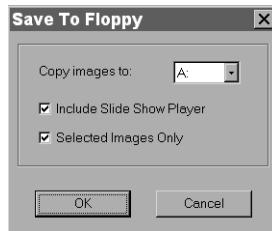
If you're using Windows, you can copy Image Expert albums or individual images to diskettes or Zip disks. You can also include a player, so your friends and business associates can view your pictures on their computers. This makes your images and albums completely portable.

Follow these steps:

- 1 Insert a diskette into your diskette drive or a Zip disk into your Zip drive.
- 2 Open the Image Expert album you want to copy.

If you don't want to include all of your images, select the images you want to add. To select more than one image, hold down the **Ctrl** or **Shift** key.

3 Select **Save To Floppy** from the File menu. You see the following dialog box:



4 Make sure your diskette drive or Zip drive letter appears in the **Copy images to** box.

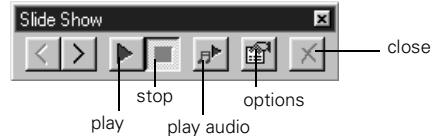
5 To include a slide show player to view the pictures, make sure **Include Slide Show Player** is checked.

6 If you want to copy the whole album, make sure there is no check mark next to **Selected Images Only**.

7 Click **OK** to copy your files.

Viewing the Pictures on Diskette or Zip Disk

To run the slide show player, double-click the player icon or player.exe file on your diskette or Zip disk. The pictures appear on your screen with the slide show controls, as shown below:



The slide show player works the same way that the slide show works in Image Expert. See page 10-11 for instructions on setting slide show options.

Sending Pictures and Sound by E-mail

If you're using Windows and your e-mail application complies with the MAPI (messaging application programming interface) standard, you can send a picture directly from Image Expert. For example, you can use Inbox or Microsoft Exchange. You need to set up Microsoft Exchange to work with your Internet service.

NOTE

If you can't e-mail pictures directly from Image Expert, you can always send an e-mail message as you do normally and attach one or more image and sound files.

Before you start, make sure your modem and Internet service are working correctly and your e-mail application is configured. Then follow these steps:

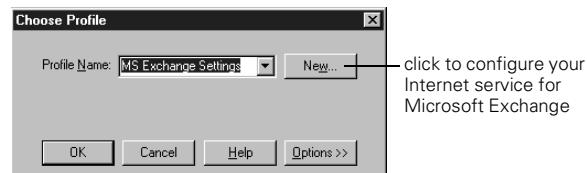
- 1 Open an album in Image Expert.

- 2 Select or open the image(s) you want to send. Some e-mail systems may limit the number of images you can send in a single message.

NOTE

If no images are selected, all images in the album will be sent.

- 3 Choose **Send** from the File menu. You see the Choose Profile dialog box:



- 4 Choose the profile you want to use. Click **New** if your Internet service has not been set up to work with Microsoft Exchange. For more information about setting up Microsoft Exchange, see your Windows documentation or Help system.

- 5 Click OK. Your e-mail application opens, and the image(s) you selected appear as attachments.
- 6 Type the e-mail address where you're sending the picture(s). You can also type in a subject heading and message if you want.
- 7 When your e-mail is ready, click whatever button your application uses to send. The picture(s) are mailed.

Your e-mail application closes, and Image Expert becomes active again.

11

Editing Images



photograph with "Invert" special effect

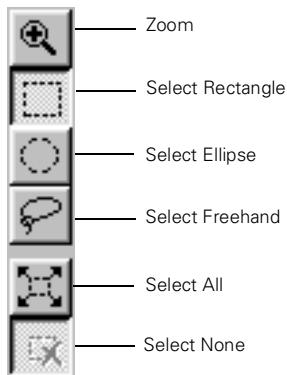
You can edit your images to enhance their appearance, crop, rotate, and resize them, or create special effects. This chapter describes the following Image Expert features:

- ▶ Viewing and selecting images
- ▶ Applying Quick Fix
- ▶ Correcting an image
- ▶ Cropping an image
- ▶ Resizing an image
- ▶ Rotating and flipping an image
- ▶ Applying special effects
- ▶ Changing the number of colors

Viewing and Selecting Images

When your image is displayed in an album, you can rotate it or do a quick fix. However, to use any other editing features, you need to open the image by double-clicking it or selecting **Open Image** from the File menu.

Before you edit your image, you may want to use the Zoom and selection tools on the left side of your screen.



- ▶ Click **Zoom**, and then click anywhere on your image to enlarge your view. Right click or hold down the control key and click to zoom out.
- ▶ Use one of the three selection tools (**Select Rectangle**, **Select Ellipse**, **Select Freehand**) to isolate a part of your image before you edit it. Click the tool, then click and drag on your image to select the portion you want to work on.
- ▶ Click **Select All** to select your entire image or all the images in an album.
- ▶ Click **Select None** to deselect your image or images.

NOTE

For more information about any of the editing tools described in this chapter, use the Help menu.

Applying Quick Fix

The easiest way to improve your image is to have Image Expert automatically “correct” it with the Quick Fix command. Follow these steps:

- 1 Double-click your image to open it in the Image Expert window.
- 2 Click the Quick Fix tool  or select Quick Fix from the Image menu.

If you don’t like the results, simply select Undo Quick Fix from the Edit menu.

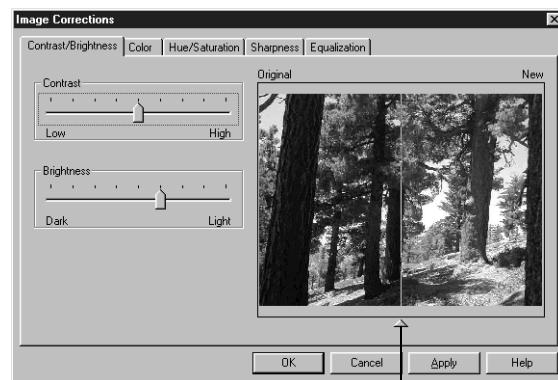
NOTE

If you Quick Fix an image displayed in an album (without opening it in the Image Expert window), you can’t undo it.

Correcting an Image

To fine-tune an image, follow these steps:

- 1 Double-click your image to open it.
- 2 Click the Corrections tool  or choose Corrections from the Image menu. You see a window like the following:



3 Click the tabs at the top of the screen to make these kinds of corrections:

► **Contrast and Brightness**

For adjusting the amount of light in your image and the difference between light and dark areas.

► **Color**

For correcting color casts and adjusting the balance of cyan (blue), magenta (red), and yellow; and red, green, and blue in your picture.

► **Hue/Saturation**

For adjusting colors around the “color wheel,” the strength or purity of color, and the brightness of your image.

► **Sharpness**

For emphasizing or de-emphasizing edges and details.

► **Equalization**

For increasing and brightening detail in dark areas of your image.

Each dialog box tab includes sliders for quickly and easily correcting your image. Simply move the slide indicator left or right to make your edit.

The preview window shows your image with the original view on the left and the corrected image on the right. If you want to adjust the division between the original and edited image, click and drag the triangle below the image. You can also zoom in on your image to see more detail.

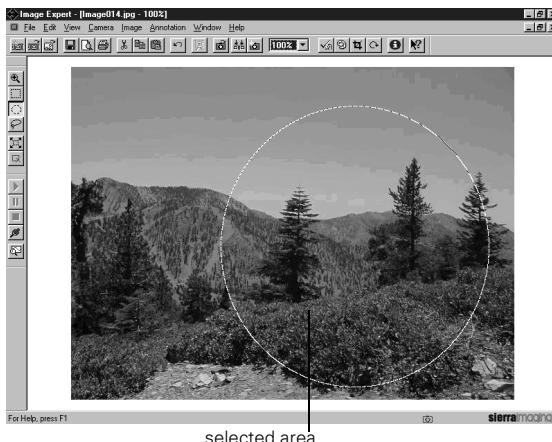
4 Do one of the following:

- Click **Apply** to make your changes on the current tab. Your edited image becomes your new original and the slide indicators move to the center of the range.
- Click **OK** to save the changes you made on all the Corrections tabs and return to the main screen.
- Click **Cancel** to cancel the changes on the current tab and return to the main screen.

Cropping an Image

If you want to save only part of your image, use the crop function to cut out the rest of the image. Follow these steps:

- 1 Double-click your image to open it in the Image Expert window.
- 2 Click one of the selection tools.
- 3 Click and drag the mouse over the area you want to save. A dashed border indicates the area you selected.



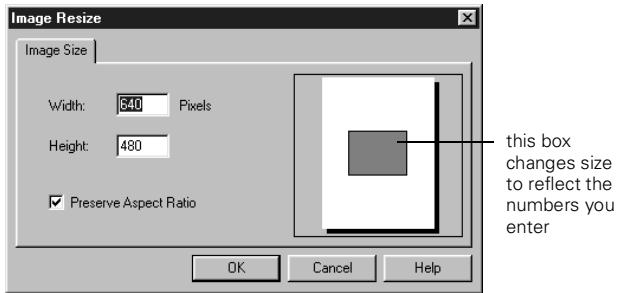
- 4 If you change your mind about which part of the image to crop, simply click anywhere outside the selected area of the image and repeat step 3.
- 5 Click the Crop tool  or choose Crop from the Image menu. The part of the image that was outside the dashed line disappears.

Resizing an Image

You can resize your image by changing the number of pixels. This lets you maintain the image's original resolution or pixels per inch.

- 1 Double-click your image to open it in the Image Expert window.

2 Choose **Resize** from the **Image** menu. You see a dialog box like the following:



3 Type a new number for the width or height.

To maintain your image's proportions, both numbers change together. If you want to distort your image, click **Preserve Aspect Ratio** to deselect it.

Rotating an Image

You can click the Rotate tool  to quickly rotate a picture to the right. For more options, open the image you want to change and select **Rotate** from the **Image** menu.

NOTE

*If you rotate an image displayed in an album (without opening it in the **Image Expert** window), you can't undo it.*

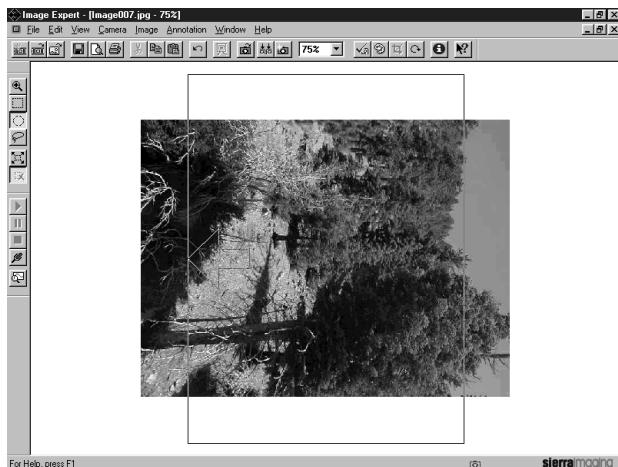
You can choose one of the following:

- ▶ **Left** (90 degrees counterclockwise)
- ▶ **Right** (90 degrees clockwise)
- ▶ **Exact** (specify the degree of rotation)
- ▶ **Free** (interactive rotation, as described below)

If you want to experiment with rotation, choose **Free** and follow these steps:

- 1 Click on your image and hold down the mouse. Your pointer turns into the rotation tool.

A rectangular outline of your image and an arrow appear, as shown:



- 2 Move the pointer to rotate your image.

- 3 Release the mouse when your picture is at the angle you want.

Flipping an Image

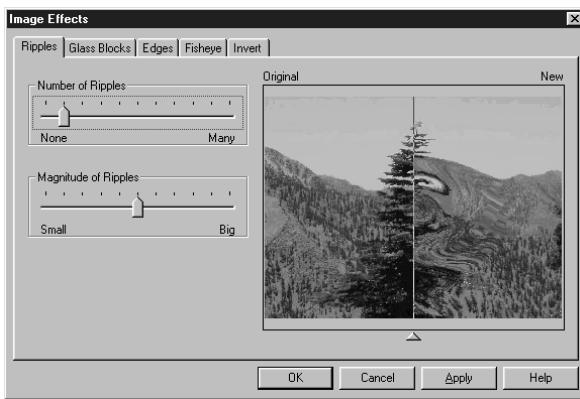
You can reverse your image by following these steps:

- 1 Double-click your image to open it in the Image Expert window.
- 2 Do one of the following:
 - ▶ Select **Flip Horizontal** from the Image menu.
(This is useful for printing T-shirt transfers.)
 - ▶ Select **Flip Vertical** to turn your image upside down.

Applying Special Effects

To transform or distort your images in interesting ways, follow these steps:

- 1 Open your image in the Image Expert window, then choose **Effects** from the Image menu. You see a dialog box like the following:



- 2 Click the tabs at the top of the screen to add these effects:

- ▶ **Ripples**

For an underwater effect. You can create whirlpool effects or just a slight distortion.

- ▶ **Glass blocks**

You can change the number and size of the blocks.

- ▶ **Edges**

To sharpen edges. You can also blend the image into a light or dark background.

- ▶ **Fisheye**

To distort the center of the image, as if looking through a glass ball.

- ▶ **Invert**

To create a negative of your image, or to “solarize” it.

Each dialog box tab includes sliders for applying the effect. Slide the indicator to the right to increase the distortion. You can combine several filters for even more unusual effects.

The preview window shows your image with the original view on the left and the distorted image on the right. If you want to adjust the division between the original and filtered image, click and drag the triangle below the image. You can also zoom in on your image to see more detail.

3 Do one of the following:

- ▶ Click **Apply** to make your changes on the current tab. Your distorted image becomes your new original and the slide indicators move to the center of the range.
- ▶ Click **OK** to save the changes you made on all the Effects tabs and return to the main workspace.
- ▶ Click **Cancel** to cancel the changes on the current tab and return to the main workspace.

Changing the Number of Colors

To convert the color format of your image, open it and select **Number of Colors** from the Image menu. You can choose from the following:

- ▶ **24 Bit (Millions of Colors)**
The way your images are originally captured.
- ▶ **8 Bit (256 Colors)**
For low-resolution display systems or certain types of software.
- ▶ **Grayscale (256 Shades of Gray)**
For printing in black and white.

If you save your image as 8 Bit or Grayscale, you cannot switch back to 24 Bit color.

NOTE

Unlike the other editing options, changing the number of colors applies to the whole image. You can't change the number of colors for a selected area only.

Operating the Camera From Your Computer

When the camera is connected to your computer, you can take pictures with a live preview on your computer screen to help you frame each shot. You can also set the camera's clock and adjust a number of other settings from your computer.

This chapter covers the following:

- ▶ Taking pictures from your computer
- ▶ Adjusting camera settings from your computer

NOTE

You can use either Image Expert or EPSON Photo!3 to take pictures from your computer, adjust camera settings, and transfer images. PhotoPC 850Z allows you to choose the application that best meets your needs and preferences.

Taking Pictures From Your Computer With Image Expert

When you connect the camera and take pictures from your computer, you see a live preview of each shot before you capture it. You can control camera settings from your computer, and even set the shutter speed.

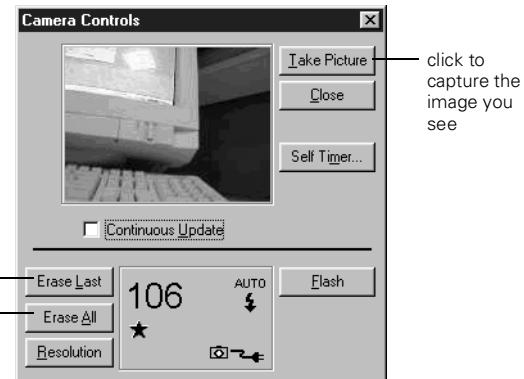
NOTE

If you have the optional AC adapter, you can save on batteries by using it when you connect the camera to your computer. The AC adapter should be available where you bought your PhotoPC 850Z, or you can order it from EPSON Accessories. See page A-2 for more information.

Follow these steps to take pictures from your computer:

- 1 Connect the camera to your computer as described in Chapter 8.
- 2 Position the camera facing the subject. Using a tripod will give you the most control when setting up your shots. See page A-3 for instructions.
- 3 Turn on your computer, then turn the camera dial to either  or .
- 4 Start Image Expert as described on page 8-6.
- 5 If necessary, close the Quick Tour and the Image Expert tip screen.
- 6 Click the **Camera Controls** button  or choose **Controls** from the Camera menu.

You see a dialog box like the following:



- 7 Click **Continuous Update** to activate the live preview feature. The image you see is updated every 8 to 10 seconds, depending on your connection speed. You may need to move the camera or your subject until you see the image you want to capture.

The colors in your live preview image may appear pale and washed-out. This will not affect the colors in your actual photograph.

You can click the **Flash** and **Resolution** buttons on the screen to adjust these settings just as you would by using the buttons on the camera. For more information about the flash and resolution (image quality) settings, see Chapter 2.

NOTE

When the camera is connected to your computer, you can't use any of the control buttons or the shutter button on the camera. You can operate these features only through your computer.

- 8 When your shot is ready, click **Take Picture**. The image is captured and processed.
- 9 Click **Close** when you're finished taking pictures from your computer.

NOTE

The live preview feature quickly drains your batteries. Make sure you turn it off as soon as you're finished, or use the optional AC adapter.

Using the Self Timer

You can use this feature to have your computer take a picture automatically, after a delay period that you can set. This allows you to take self-portraits and other specialized shots.

Follow these steps:

- 1 Click **Self Timer**. You see the following dialog box:



- 2 Enter a number for the delay period you want to use. You can set up to a 120-second delay.
- 3 Click **Start/Stop** to start the countdown and take the picture. The red timer light on the camera remains on for the delay period you entered. Then the light flashes rapidly for 2 seconds and the shutter is released.

The camera clicks and processes your picture.

Taking Pictures With EPSON Photo!3

You can use your EPSON Photo!3 application to take pictures from your computer, in the same way as Image Expert.

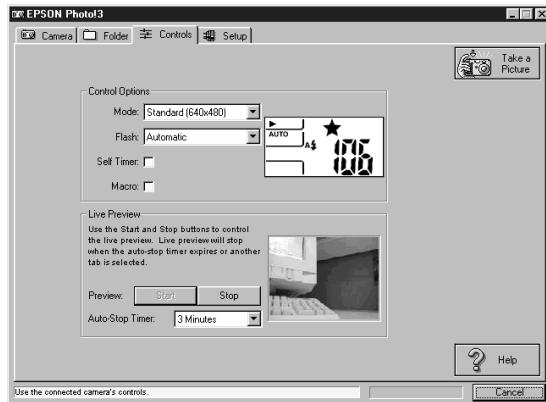
- 1 Connect the camera to your computer as described in Chapter 8, and then position the camera facing the subject.

NOTE

Using a tripod will give you more control when setting up your shots. (See page A-3 for instructions on using a tripod.)

- 2 Turn on both your camera and your computer, then open the camera lens. Make sure the camera dial is set to  or .
- 3 Start EPSON Photo!3. (Click Start, and then point to Programs, EPSON Photo!3 Ver.1, EPSON Photo!3 Ver 1.)

- 4 Click the Controls tab. You see a dialog box like the following:



- 5 Click Start to display the live preview.

The colors in your live preview image may appear pale and washed-out. This will not affect the colors in your actual photograph.

You can use the **Mode**, **Flash**, **Self Timer**, and **Macro** controls on the screen to adjust these settings just as you would by using the buttons or LCD menus on the camera.

- 6 When your shot is ready, click **Take a Picture**. The image is captured and processed.
- 7 Click **Close** when you're finished taking pictures from your computer.

The Auto-Stop Timer shuts off the live preview after one minute to save battery power. You can set the timer from .30 seconds to 5 minutes.

NOTE

*If you have an external flash unit attached and have changed the flash setting to **EXT** (external), you can't change the flash mode. To change the setting back to **INT** so you can use the camera's built-in flash, see page A-5.*

Adjusting Camera Settings From Your Computer

You can use either Image Expert or EPSON Photo!3 to change the following camera settings:

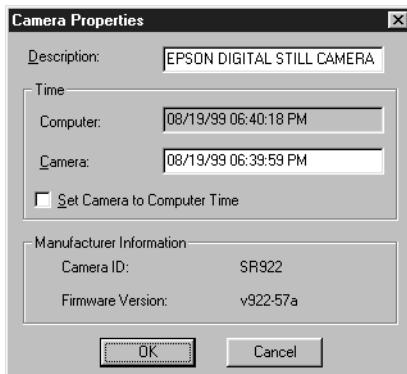
- ▷ Time
- ▷ Date
- ▷ Camera ID
- ▷ Connection Port
- ▷ Connection Speed

Changing Settings With Image Expert

You can change settings in Image Expert while you're viewing pictures in the camera. Follow these steps:

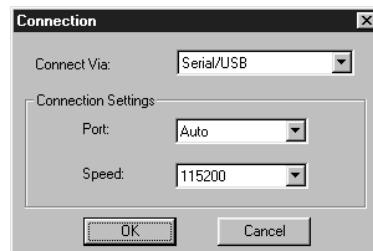
- 1 Connect the camera to your computer as described in Chapter 8.
- 2 Turn the camera dial to , then turn on your computer system.

3 Start Image Expert, then select **Properties** from the **Camera** menu. The Camera Properties menu appears:



4 Click **OK** to save your settings and exit the Camera Properties dialog box.

5 If you want to adjust your port settings, select **Connection** from the **Camera** menu. You see the Connection dialog box:



- ▶ Enter a new **Description** of the camera to change the default. This might be useful if you have more than one camera and you want to record its description in your picture data.
- ▶ Type in the **Camera Time** box to change the time and date. Or, click **Set Camera to Computer Time** to automatically synchronize your camera to your computer.

- ▶ If necessary, select a new source. The standard selection is **Serial/USB**. If you're using a PCMCIA adapter to access a PC card slot, select **PC Card** in the **Connect Via** drop-down list. (**FlashPath** is not implemented on the PhotoPC 850Z.)

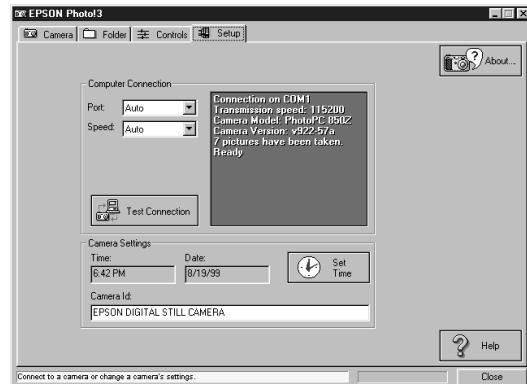
- ▶ Select another port if you want to change your connection. In most cases, it's best to leave the **Port** setting at **Auto** because Image Expert can detect the camera connection automatically.
- ▶ Select a different communication speed. Image Expert automatically chooses the fastest speed that works with your system. This may actually be too fast for the configuration of your port. You may need to experiment to choose the best speed. (See your Windows documentation or help system to change the port speed for your computer.)

6 Click **OK** to save your settings and exit the Connection dialog box.

Changing Settings With EPSON Photo!3

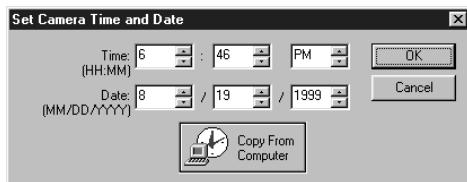
You can also change settings in EPSON Photo!3 while you're viewing pictures in the camera. Follow these steps:

- 1 Connect the camera to your computer as described in Chapter 8.
- 2 Turn the camera dial to , then turn on your computer system.
- 3 Start EPSON Photo!3, then click the **Setup** tab to display the following dialog box:



- 4 Change any of the following **Computer Connection** settings:
 - ▶ Select another port if you want to change your connection. In most cases, it's best to leave the **Port** setting at **Auto** because EPSON Photo!3 can detect the camera connection automatically.
 - ▶ Select a different communication speed. EPSON Photo!3 automatically chooses the fastest speed that works with your system. This may actually be too fast for the configuration of your port. You may need to experiment to choose the best speed.
- 5 Click **Test Connection** to make sure your new settings work with your system.
- 6 Click the **Set Time** button to change the camera's time and date settings.

You see a dialog box like the following:



Enter new values for the settings, or click **Copy from Computer** to have your camera automatically synchronized to your computer. Click **OK** to return to the Setup dialog box.

- 7 Enter a new **Camera ID** if you want to change the default. This might be useful if you have more than one camera and you want to be able to have its ID recorded in your picture data.

13

Using Your Camera for Presentations

You can connect your camera to a multimedia projector or television and show not just photos, but also text and graphics. The EPSON Photo File Uploader3 lets you transfer images and sounds from your computer to your camera's memory card. Anything you can display on your computer screen can be captured, converted, and uploaded. You can create and show a presentation without printing overhead transparencies or slides, and without a laptop computer.

This chapter explains the following:

- ▶ Uploading images to the camera's memory card
- ▶ Converting presentations
- ▶ Projecting your presentation

Uploading Images to the Camera

The EPSON Photo File Uploader3 software allows you to convert any image or presentation slide to the EPSON Photo file format and upload it to your CompactFlash memory card.

You can upload images in 640×480 pixel, 1600×600 pixel, or 1600×1200 pixel sizes. EPSON Photo File Uploader3 automatically converts images from their original size to whichever of these sizes you choose.

NOTE

Images that have been cropped will display black strips in the areas that have been cropped out.

Uploading Images From Your Windows PC

Before you start, make sure the camera is connected to your computer, the computer is on, and the camera dial is turned to . Then follow these steps:

- 1 Start the EPSON Photo File Uploader3 program. Click **Start**, point to **Programs**, **EPSON PhotoFile Uploader3**, then click **EPSON Photo File Uploader3**. You see a screen like the one on the right.

NOTE

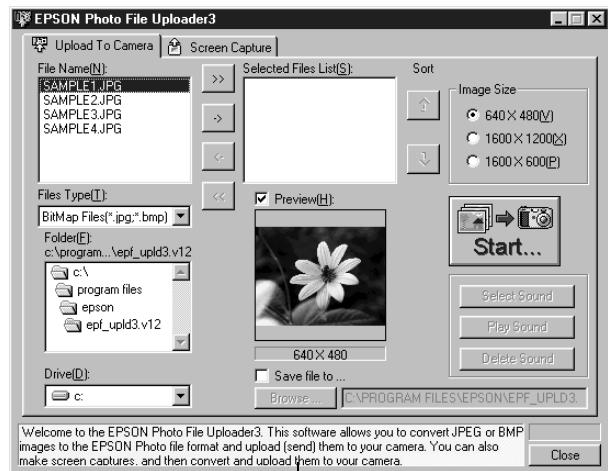
Only one application at a time can access the camera. Make sure neither EPSON Photo!3 nor Image Expert are running.

- 2 Use the **Drive** and **Folder** lists to locate the folder containing the images you want to upload. Double-click the folder to select it.

The images in the folder are listed in the **File Name** box.

NOTE

If you want to upload images from a network drive, you may need to map the drive before opening the EPSON Photo File Uploader3 software. See your Windows documentation for more information.



check this box for helpful information

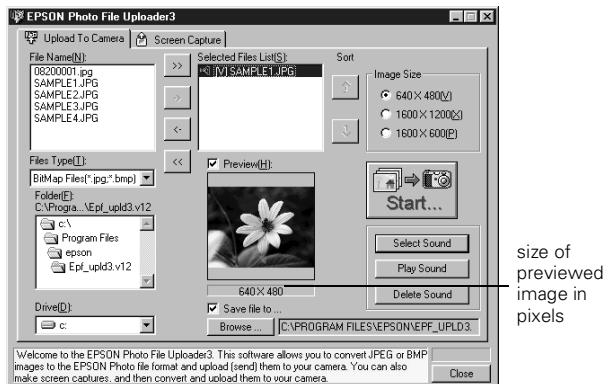
- 3 Select the format of the images you want to upload from the **Files Type** list.
- 4 Select the images you want to upload in the **File Name** list. Then click the **→** button. If you want to upload all the images in the list at once, click the **>>** button.

As you select files, they appear in the **Selected Files List** in the order they will be uploaded. This determines the sequence in which you can display the images.

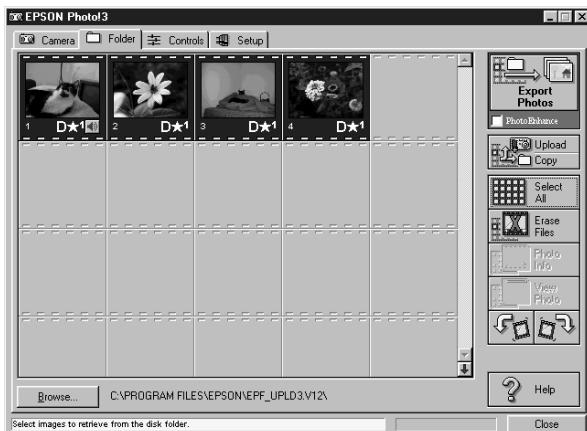
- ▶ To rearrange the uploading (and display) order, select the image you want to reorder, then click the **↑** or **↓** sort arrow.
- ▶ If you want to change your selection, click the **<-** button to remove selected files or click the **<<** button to remove all the files from the **Selected Files List**.
- ▶ If you want to preview a selected image and confirm its size, click the **Preview** checkbox.

- 5 For each file in the **Selected Files List**, choose an image size from the **Image Size** box. The File Uploader resizes your files during the transfer process.

If you want to save copies of the converted files on your computer, click the **Save file to** checkbox. Click **Browse**, then select the folder where you want to save the files. Click **OK**. The folder you selected is displayed to the right of the **Browse** button.



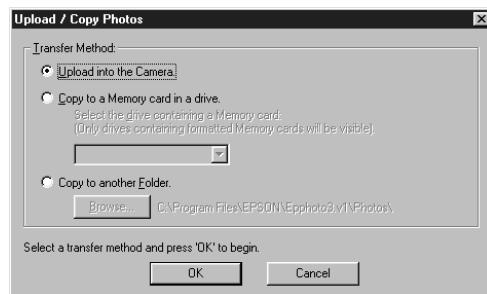
- 6 If you want to upload an audio recording with a file, highlight the file name in the Selected Files List and click the **Select Sound** button. From the Open dialog box, select your sound file and click **Open**. If you want, click the **Play Sound** button to play the sound or the **Delete Sound** button to remove it.
- 7 Click the **Start** button. EPSON Photo!3 opens and displays the images you selected:



Depending on the number of images, you may have to wait a minute or so for EPSON Photo!3 to open.

- 8 Click **Select All** to select all the images, or select individual images by clicking the thumbnails in the image selection window.
- 9 Click **Upload/Copy**.

The Upload/Copy Photos dialog box appears:



10 Click **Upload into the Camera** to upload the images to your camera's memory card, or click **Copy to a Memory Card in a drive** to upload to a memory card installed in your computer's PCMCIA drive; then click **OK**.

NOTE

If your camera's memory card can't hold all the images, you can purchase a larger card. See Appendix A for details.

The images are uploaded to the destination you selected. If you clicked the **Save file to** checkbox in step 5, the converted images are also saved to the folder you specified.

Uploading Images From Your Macintosh

Follow these steps to upload images to your camera from your Macintosh:

1 Make sure the camera is connected to the computer, the computer is turned on, and the camera dial is turned to .

2 Double-click the **EPSON Photo File Uploader 3** icon in the **EPSON Photo File Uploader** folder. The **EPSON Photo File Uploader3** dialog box opens, as shown on the next page.

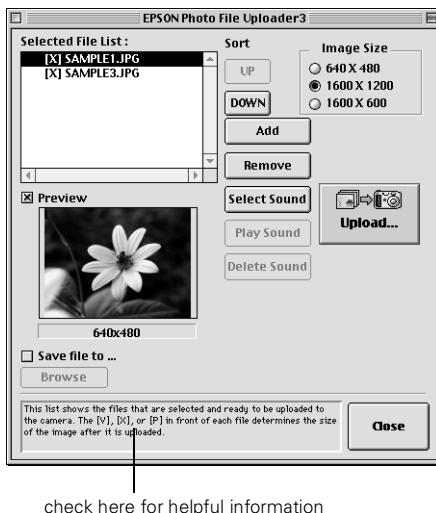
NOTE

Only one application at a time can access the camera. Make sure neither EPSON Photo!3 nor Image Expert are running.

3 Click **Add**. The **Select Files** dialog box appears.

4 Double-click the folder containing the images you want to upload, then select each file you want to upload and click **Select**.

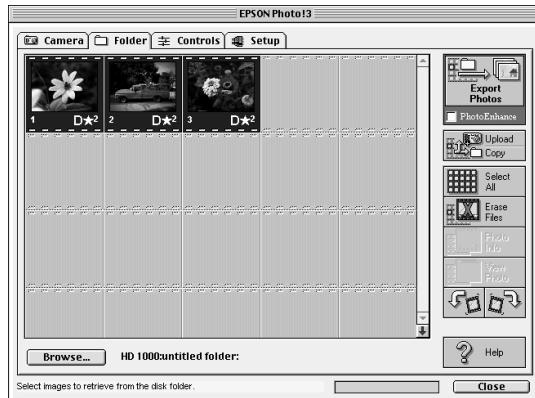
If you want to preview a selected image and confirm its size, click the **Preview** checkbox. It takes a few seconds longer to select images with previews displayed.



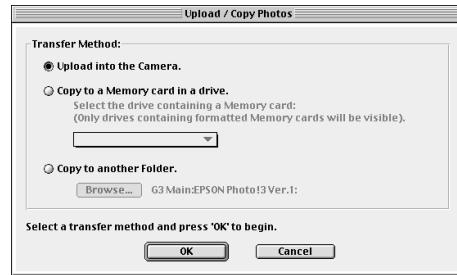
- 5 When you finish selecting image files, click **Done** to close the Select Files dialog box. The selected images appear in the **Selected File List** in the order they will be uploaded. This determines the sequence in which you can display the images.
 - ▶ To rearrange the uploading order, select the image you want to reorder, then click **Up** or **Down**.
 - ▶ To remove files from this list, select the file(s) and click **Remove**.
- 6 For each file in the **Selected File List**, select an image size from the **Image Size** box. The File Uploader will resize your files during the transfer process.

If you want to save copies of the converted files on your computer, click the **Save file to** checkbox. Click **Browse** to open the Select Folder dialog box, then select the folder where you want to save the files. Click **Select**: to close the Select Folder dialog box. The folder you selected is displayed to the right of the **Browse** button.

- 7 If you want to upload an audio recording with a file, highlight the file name in the Selected Files List and click the **Select Sound** button. From the Open dialog box, select your sound file and click **Open**. If you want, click the **Play Sound** button to play the sound or the **Delete Sound** button to remove it.
- 8 Click **Upload**. A window opens to show you the progress of the file conversion. Then EPSON Photo!3 opens and displays the images you selected:



- 9 Click **Select All** to select all the images, or select individual images by clicking the thumbnails in the image selection window.
- 10 Click **Upload**. The Upload/Copy Photos dialog box appears.



- 11 Click **Upload into the Camera** to upload the images to your camera, or click **Copy to a Memory Card in a drive** to upload to a memory card installed in the PCMCIA drive of your Macintosh; then click **OK**. The images are uploaded to the destination you selected.

If you clicked **Save file to** in step 6, the converted images are also saved to the folder you specified.

- 12 Click **Close** to exit EPSON Photo!3.

Converting Presentations

If you want to upload a presentation or document that is not saved as a standard image file, you can make a “screen capture” of your computer desktop with the file open. This lets you turn any document or presentation into a series of image files that you can convert and upload to your camera’s memory card.

NOTE

If you want to upload a PowerPoint® presentation, you don’t need to use this conversion procedure. You can save the slides as JPG files in PowerPoint, and then upload them into the camera.

*Choose **Save As** from the PowerPoint File menu and choose JPEG File Interchange Format as the file type.*

Windows users can make screen captures from within the EPSON Photo File Uploader3 utility; Macintosh users need to use the standard Macintosh screen capture function.

Capturing Windows Screens

Before you start, make sure the camera is connected to your computer, the computer is turned on, and the camera dial is turned to . Then follow these steps:

- 1 Start the EPSON Photo File Uploader3 program. Click **Start**, point to **Programs**, **EPSON Photo File Uploader3 Ver.1**, then click **EPSON Photo File Uploader3**. You see the EPSON Photo File Uploader3 window.

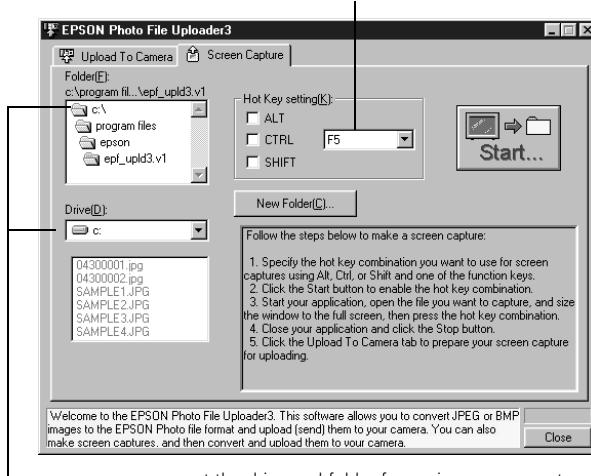
NOTE

Only one application at a time can access the camera. Make sure neither EPSON Photo!3 nor Image Expert is running.

- 2 Click the **Screen Capture** tab. The Screen Capture dialog box appears, as shown on the next page.

- 3 Use the **Drive** and **Folder** lists to select the folder where you want to save the screen capture. To create a new folder for the images, click the **New Folder** button.
- 4 Specify the key combination you want to use for screen captures in the **Hot Key** setting box. Click the **ALT**, **CTRL**, or **SHIFT** checkbox, then select a function key from the hot key list. The default hot key is **F5**.

choose the key combination to use for capturing screens



set the drive and folder for saving screen captures

- 5 Click **Start** to activate the key combination. When the key combination is activated, the **Start** button changes to a **Stop** button. The key combination remains active only for the current session. To deactivate the hot key combination, press the **Stop** button.
- 6 Start your application and open the file to the page or image you want to capture.

NOTE

The entire screen is captured, not just the active window. Make sure you maximize your presentation before you capture it. If you set your application to "slide show" mode (or the equivalent) you can capture just the image you want, without menus and other screen elements.

- 7 Press the hot key combination you selected. Your screen capture is assigned a file name and saved to the folder that you specified.

You can make as many screen captures as you'd like; simply open each file you want to capture and press your screen capture key combination again.

- 8 When you're finished, close your application and click the **Stop** button on the Screen Capture dialog box. The key combination you selected is erased.

If you want to upload your screen captures to the camera's memory card right away, click the **Upload To Camera** tab. The screen capture files appear in the **File Name** list. Then follow the uploading instructions starting with step 4 on page 13-3.

TIP

Presentations using large fonts (at least 18 point) work best.

Capturing Macintosh Screens

EPSON Photo File Uploader3 for the Macintosh does not have a screen capture feature. However, you can make screen captures using your Macintosh system software, then use EPSON Photo File Uploader3 to upload the screen captures to your camera's memory card.

The procedure may differ slightly, depending on your Macintosh. See your computer manual for more information.

Make sure the camera is connected to your Macintosh, the computer is turned on, and the camera dial is turned to . Then follow these steps:

- 1 Start EPSON Photo File Uploader3. Double-click the **EPSON Photo File Uploader 3** icon in the **EPSON Photo File Uploader** folder. The EPSON Photo File Uploader3 dialog box appears.
- 2 Start your application and open the file for the image you want to capture.
- 3 Press the **Command**, **Shift**, and **3** keys on your computer keyboard at the same time. Your Macintosh names and saves the screen shot on your hard drive (not in a folder).

You can make as many screen shots as you'd like; simply repeat this step.

NOTE

- ▶ If you're running OS 8.0 or later, you can capture just the active window. Press the **Command**, **Shift**, and **4** keys at the same time, then click the window you want to capture, or drag the cursor around that portion of the screen you want to capture.
- ▶ If you're running OS 7.5x, the entire desktop is captured, not just the active window. Make your document window as large as possible before you capture it. If you set your application to "slide show" mode (or the equivalent), you can capture just the image, without other screen elements.

4 When you're finished, close your application.

To upload your screen shots to the camera, click the EPSON Photo File Uploader3 window to make it active, then follow the uploading instructions starting with step 3 on page 13-5.

Projecting Your Presentation

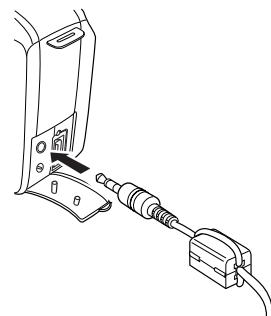
You can display the uploaded images and sounds on a multimedia projector, television, or other video output device. Use the video cable that came with your camera.

NOTE

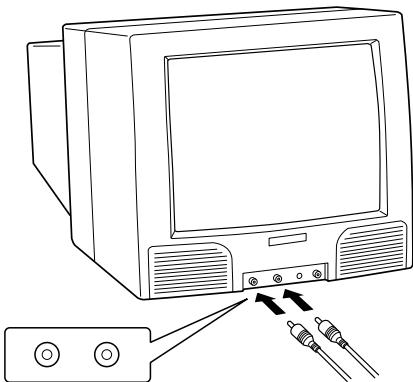
Using the optional AC adapter is highly recommended when you project your presentation. See page A-2 for instructions and ordering information.

Follow these steps:

- 1 Make sure your camera and TV or video projector are turned off.
- 2 Open the camera's connector cover and connect the black end of the video cable to the AV Out port, as shown below:



- 3 Connect the yellow end of the video cable to the **VIDEO IN** port and the white end of the cable to the **AUDIO IN** port on the TV or projector.



- 4 Turn on the TV or video projector and switch it to video mode.
- 5 Turn the camera dial to **■**.

The last image that you uploaded to the camera is projected. If you are using the optional AC adapter, you can also see the image on the LCD screen.

You can use the camera's slide show feature to play your images and sounds automatically, or play them one at time using the navigation buttons. You can use all of the camera's other playback features to show your presentation.

Printing Directly From the Camera

Your PhotoPC 850Z camera lets you print your pictures directly to any of several EPSON Stylus® color ink jet printers, without using a computer. You can choose from a number of layout options, select the type and size of the paper you want to use, and print using optional filters and print modes. You can print directly from the camera to any of the following printers:

- ▶ EPSON Stylus Photo
- ▶ EPSON Stylus Photo 700
- ▶ EPSON Stylus Photo EX
- ▶ EPSON Stylus Photo 750
- ▶ EPSON Stylus Photo 1200
- ▶ EPSON Stylus COLOR 740

NOTE

Using the optional AC adapter is highly recommended when you're printing from the camera. The adapter should be available where you bought your camera. Or, see Appendix A for information on ordering an adapter from EPSON Accessories.

This chapter includes the following information about using the Direct Print program, which comes preinstalled in your camera:

- ▶ Connecting the camera to the printer
- ▶ Starting Direct Print
- ▶ Printing
- ▶ Removing and reinstalling the Direct Print program
- ▶ Reading error and status messages

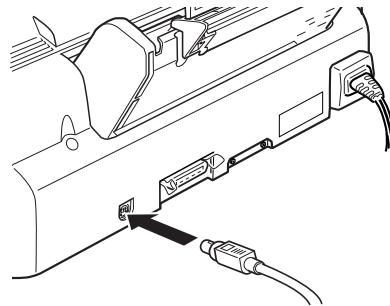
NOTE

The Direct Print program is designed to print on special ink jet media, including Photo Quality Ink Jet paper or cards, glossy film, Photo Paper, and photo stickers. If you use plain paper, your pictures will not print with the highest quality. See your printer manual for information on special ink jet media available from EPSON.

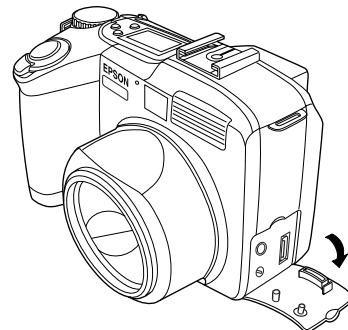
Connecting the Camera to the Printer

Before you start, make sure you have the Macintosh/Direct Print serial cable that came with your camera. Then follow these steps to connect your camera to the printer:

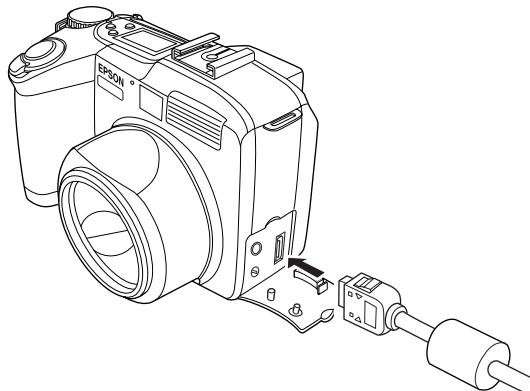
- 1 Make sure both the camera and printer are turned off.
- 2 Connect the round end of the serial cable to the serial connector on the back of the printer. Make sure the arrow on the connector faces up.



- 3 Open the connector cover on the side of the camera.



- Align the connector on the square end of the serial cable and the camera's serial port. Then insert the connector.



NOTE

To disconnect the cable from the camera, squeeze and hold the two connector lock buttons on the sides of the connector while you pull the cable out.

Starting Direct Print

Follow these steps to start Direct Print:

- 1 Make sure the printer is turned off.

- 2 If you have the optional AC adapter, connect it to the camera to save battery power (see page A-2).
- 3 Turn the camera's dial to .
- 4 DirectPrint appears on the LCD screen. Press the button next to DirectPrint.

You see the Direct Print main menu:



Follow the steps in the next section to print different types of projects.

NOTE

You can usually press the bottom right button (under Back) to return to the previous screen while using Direct Print.

Printing

You can print any selected image(s) or all the images in your camera on various types of paper. You can print full size images, sticker sheets with multiple copies of the same image, and greeting cards. You can even create an album of your images with descriptive text next to each photo. The Direct Print main menu offers these choices:

Print format	Description
Print All	Prints all the images stored on the memory card. You can print more than one copy of selected images.
Print	Lets you select the image(s) you want to print. You can print more than one copy of selected images.
Index	Prints a small thumbnail image of every picture on your memory card on contact sheets.
Album	Lets you print an album of selected pictures, with up to three different images on one sheet of paper. You can print one copy of each image.
Sticker	Prints 16 small copies of selected images on sheets of EPSON Photo Stickers.

The following sections explain how you use these print formats to set up and print different types of projects.

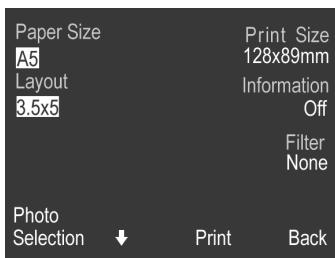
Printing Single and Multiple Images

The Print and Print All formats let you print both single and multiple images on a page. These formats allow the greatest variety of options. You can print on different paper sizes with an assortment of layouts, and you can use any of the available filters, paper types, or print modes. The following table shows the way the printout appears for different paper sizes.

Layout options	Paper Size options			
	Letter	A6	A3	A4
3.5 × 5			—	
5 × 7		—	—	
6.5 × 8.5		—		
8 × 10	—	—		—
10 × 12	—	—		—

Turn on the printer and load your paper following the instructions in your printer manual, then follow these steps:

- 1 On the Direct Print main menu (shown on page 14-3), select your print format. If you want to print all the images on your memory card, press the top button (next to **Print All**). If you want to print selected images, press the + button (next to **Print**). You see a screen similar to the following:

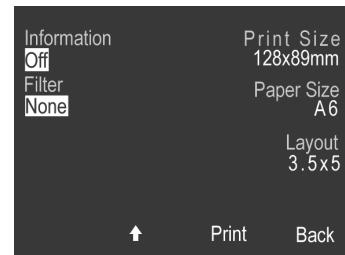


- 2 Select your Paper Size and Layout settings by pressing the button next to the setting. For example, to select **Letter** as the Paper Size setting, press the button next to **Paper Size** (the top left button) until you see **Letter** displayed beneath the setting.

NOTE

The Paper Size and Layout settings are linked, so sometimes you'll see the Layout setting change as you cycle through the available Paper Size options.

- 3 Press the **ISO** button (below the down arrow) if you want to change the Information or Filter settings. You see a screen similar to the following:



Press the top left button (next to **Information**) to change the Information setting. When the Information setting is **On**, your pictures print with the date and time they were taken.

Press the + button (next to **Filter**) if you want to modify the color of your printout. You can choose **Monochrome** to print your images in black and white, **Blue** to print them in blue tones, or **Sepia** to print them in brown tones for an old-fashioned look. If you select **None**, your color images print in color and your black and white images print in black and white.

- 4 When you're done making changes to the Information and Filter settings, press the **ISO** button again to return to the previous screen.



- 5 If you want to select specific images (or print more than one copy of some images), press the bottom left button (next to **Photo Selection**).

You see thumbnail images of the first nine photos in the camera's memory card, with the currently selected image framed in white:



NOTE

*You don't have to select images if you're using the **Print All** format. However, you can choose to print more than one copy of some images.*

- 6 To select a different picture, press the **ISO** button (below the left arrow) or the **W.B.** button (below the right arrow) to move the selection frame backward or forward through your pictures.

- 7 Now select the number of copies of your picture that you want to print (up to 99 for Print or Print All, one for other formats). Press the + button (next to the up arrow) or the – button (next to the down arrow) to increase or decrease the number of copies. A checkmark appears on your selected photo. (If you select 0 copies, the checkmark disappears.)
- 8 To rotate the photo 90 degrees in either direction, press the bottom left button (next to **Rotation**) once (clockwise) or twice (counter-clockwise). An icon appears on the image, indicating the orientation of the photo when printed.

NOTE

Some formats don't allow you to rotate the image.

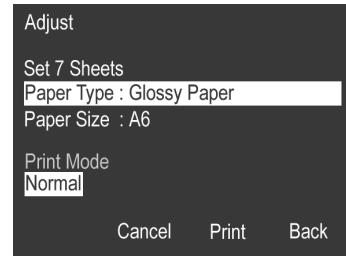
- 9 When you're finished selecting your picture(s), press the bottom right button (under **Back**). You see a confirmation of your selection. If your selection is correct, press the bottom left button (next to **Done**).

If you need to change your selection(s), press the bottom right button (under **Back** or **Select All**) and repeat steps 6 through 9.

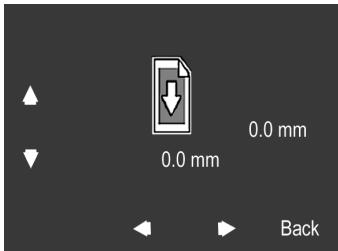
Producing Your Printout

Before you print, you'll need to make a few more Direct Print settings. Follow these steps:

- 1 Press the **W.B.** button (beneath **Print**). The current print settings appear on the screen (your settings may vary).



- 2 Press the + button (next to **Paper Type**) to select the type of paper or film you loaded in the printer. (The **Paper Size** setting you previously selected is displayed beneath this setting.)
- 3 Press the bottom left button (next to **Print Mode**) to select either **Normal**, **Fine**, or **Fast** printing mode. **Fine** print mode produces a higher-resolution, slower printout. **Fast** print mode produces a quicker, lower-resolution printout.
- 4 If you need to adjust the printing position of your paper, press the top left button (next to **Adjust**). You see an adjustment screen like this one:



- 5 Press the + button (next to the up arrow) or the – button (next to the down arrow) to adjust the vertical position. Press the **ISO** button (under the left arrow) or the **W.B.** button (under the right arrow) to adjust the horizontal printing position.

The position moves 0.2 mm each time you press a button, and the current adjustment distance is displayed on the screen. You can adjust the position up to 10 mm in any direction.

- 6 When you're finished, press the bottom right button (under **Back**) to return to the print settings menu.
- 7 Press the **W.B.** button (under **Print**) to begin printing. You see a confirmation message, then the LCD screen goes blank. The status light begins blinking and star icons march across the status display panel on top of the camera. Depending on the Print Mode option, it may take a moment for your printer to begin printing.

If you see an error message while printing, see page 14-17 for instructions.

NOTE

If you need to cancel printing, hold down the **MENU** button. The status light turns red and a cancellation message appears briefly on the LCD screen. You see the print settings screen again. Repeat step 7 to resend your print job.

8 When you finish printing, the print settings screen reappears on the camera's LCD screen. Press the bottom right button (under **Back**) several times to exit Direct Print. Then turn the camera dial to **Off** and turn off the printer.

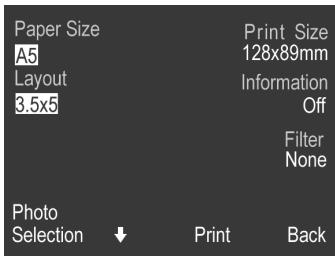
Printing a Card

You also use the **Print** format to print cards. EPSON Photo Quality Ink Jet cards are perfect for snapshots, photo postcards, and many other uses. The following table shows the available paper sizes and layouts for your cards.

Layout options	Paper Size options				
	Letter	A6	A3	A4	PhotoCard
Card Top	—		—	—	—
Card Middle	—		—	—	—
Card Bottom	—		—	—	—
PhotoCard	—	—	—	—	

Follow these steps:

- 1 On the Direct Print main menu (shown on page 14-3), press the + button (next to **Print**) to select your print format. You see a screen similar to the following:

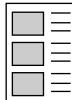
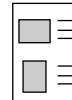
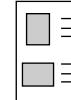
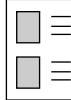


- 2 Select your Paper Size and Layout settings by pressing the button next to the setting. Available paper sizes for cards are **A6** and **PhotoCard**. (If your Paper Size is set to **PhotoCard**, the Layout is automatically set to **PhotoCard**.)

- 3 Press the **ISO** button (below the down arrow) if you want to change the Information or Filter settings. (See page 14-5.) When you're done, press the **ISO** button again to return to the previous screen.
- 4 Press the bottom left button (next to **Photo Selection**) to select your image. Select a single image for your card. If your Paper Size setting is **A6**, you can rotate your image. (See page 14-7.)
- 5 When you're ready to print your card, follow the steps on page 14-7.

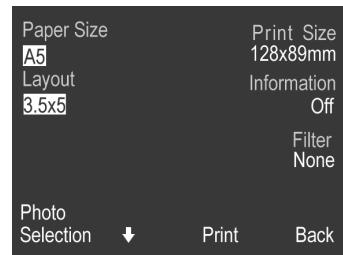
Printing Album Images

The **Album** print format lets you print an “album” of selected images on Letter or A4-size paper. Up to three images are lined up on the left side of the page. If the **Information** setting is **On**, descriptive information about each image is automatically added on the right. The following table lists Layout and Paper Size options, and shows the way your printouts appear:

Layout options	Paper Size options			
	Letter or A4			
Album				

Load your paper in the printer, then follow these steps to print album images:

- 1 On the Direct Print main menu (shown on page 14-3), press the bottom left button (next to **Album**) to select your print format. You see a screen similar to the following (the Paper Size setting defaults to **A4** or **Letter**):



- 2 Select your Paper Size setting by pressing the button next to the setting. (The Layout setting is automatically set to **Album**.)

- 3 Press the ISO button (below the down arrow) if you want to change the Information or Filter settings. (See page 14-5.) When you're done, press the ISO button again to return to the previous screen.
- 4 Press the bottom left button (next to Photo Selection) to select your images. (See page 14-6.)
- 5 When you're ready to print your album, follow the steps under "Producing Your Printout" on page 14-7.

Printing Stickers

When your print format is set to **Sticker**, you can print 16 small copies of a single image on sheets of EPSON Photo Stickers. You can select the following Paper Size and Layout settings:

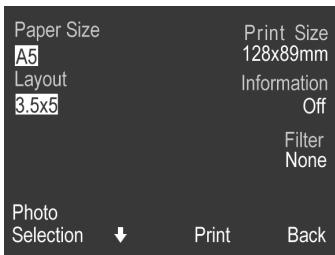
Layout options	Paper Size options	
	Stickers 4	Sticker 16
1 photo × 16 2 photos × 8 4 photos × 4	—	

NOTE

You can order EPSON Photo Stickers (product code S041144) from EPSON Accessories at (800) 873-7766. Stickers 4 sheets are not available in the U.S.

Load your photo sticker sheets in the printer, following the instructions that came with the stickers. Then follow these steps:

- 1 On the Direct Print main menu (shown on page 14-3), press the **ISO** button (under **Sticker**) to select your print format. You see a screen similar to the following (your Paper Size setting defaults to **Sticker 16**):



- 2 Select your Paper Size setting by pressing the top left button (next to **Paper Size**).
- 3 Press the + button (next to **Layout**) to select your sticker Layout. You can choose **1 photo x 16**, **2 photos x 8**, or **4 photos x 4**.

NOTE

*You can't turn **Information On** or select a filter when the print format is set to **Sticker**.*

- 4 Press the bottom left button (next to **Photo Selection**) to select the image you want to print on your stickers. You see thumbnail images of the first nine photos on the camera's memory card, with the currently selected image framed in white.
- 5 To select a different picture, press the **ISO** button (beneath the left arrow) or the **W.B.** button (beneath the right arrow) to move the selection frame backward or forward through your pictures.
- 6 When you've selected your image, press the + button (next to the up arrow) to select **1 Copy**. (You can't rotate the image.) Then press the bottom right button (under **Back**). You see a confirmation of your selection.

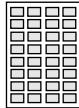
- 7 If your selection is correct, press the bottom left button (next to **Done**). If you need to change your selection, press the bottom right button (under **Reset**) and repeat steps 4 and 5.
- 8 When you're ready to print your stickers, follow the steps on page 14-7. You may want to make a test print to make sure your pictures are aligned properly. Then you can use the **Adjust** setting to align them for your final printout.

NOTE

*For stickers, the Paper Type setting is automatically set to **Glossy Film** and you can choose only **Fine** or **Normal** print modes.*

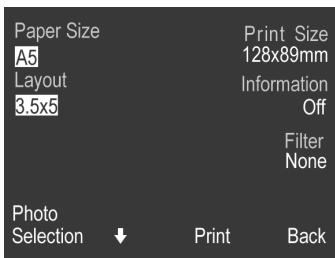
Printing an Index of Your Images

The **Index** print format lets you print a contact sheet with thumbnail images of all the images on your memory card. The following table shows how your printout will look:

Layout options	Paper Size options	
	Letter or A4	A6
Index		

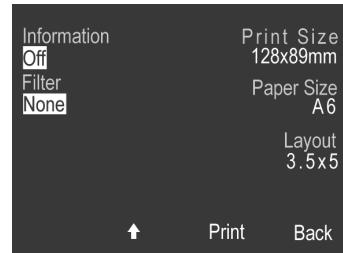
Follow these steps to print an index of all your images:

- 1 On the Direct Print main menu (shown on page 14-3), press the – button (next to **Index**) to select your print format. You see a screen similar to the following (your Paper Size setting will be different):



- 2 Select your Paper Size setting by pressing the top button (next to **Paper Size**). You can choose **Letter**, **A6**, or **A4**. The Layout setting is automatically set to **Index**.

- 3 If you want to print information for each image, press the **ISO** button (under the down arrow) to go to the following menu. Then press the top left button (next to **Information**) to turn it On.



NOTE

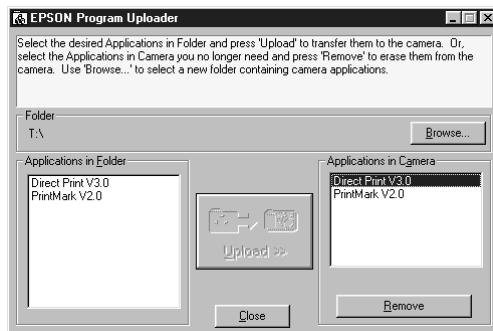
You can't apply special filters when you're using the Index print format.

- 4 When you're done, press the **ISO** button again to return to the previous menu.
- 5 When you're ready to print your index, follow the steps on page 14-7.

Removing the Direct Print Program

Direct Print comes pre-installed on your camera, but you can use the EPSON Program Uploader to remove it if you don't plan to use it. You can always install the program later, if you need it. Follow these steps:

- 1 Connect the camera to your computer. (See Chapter 8 for instructions.) Then turn the camera's dial to .
- 2 Start EPSON Program Uploader: Under Windows, click **Start**, then point to **Programs**, **EPSON Photo!3**, **EPSON Program Uploader**. You see a screen similar to the following:



- 3 Select Direct Print V3.0 in the Applications in Camera listbox.
- 4 Click **Remove**. You see a confirmation message asking if you're sure you want to remove it.
- 5 Click **Yes** to remove the program, or **No** to cancel. Then click **Close** to exit Program Uploader.

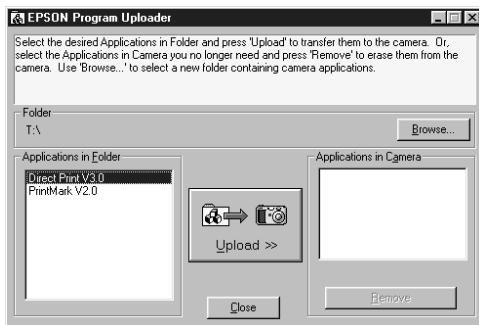
Reinstalling the Direct Print Program

Follow these steps to reinstall the Direct Print program to your camera:

- 1 Connect the camera to your computer and turn the camera's dial to .
- 2 Insert the PhotoPC 850Z CD-ROM in your drive. If the install program starts automatically, close it.
- 3 Start EPSON Program Uploader:
 - Under Windows, click **Start**, then point to **Programs**, **EPSON Photo!3**, **EPSON Program Uploader**.

- On a Macintosh, double-click the EPSON Program Uploader icon in the EPSON Photo!3 folder.

You see a screen similar to the following:



- Click **Browse** to navigate to the root directory of your CD-ROM drive.
- Select **Direct Print V3.0** in the **Applications in Folder** listbox.
- Click the **Upload** button. You see a progress meter, and after a moment Direct Print V3.0 appears in the **Applications in Camera** listbox. Click **Close** to exit.

Reading Error and Status Messages

If you see an error or status message on the camera's LCD screen or status display panel, check the following tables to respond to the message.

LCD screen messages

Message	Description
No Photos in Memory.	This message appears when there are no photos in memory. Press the button next to OK to return to the previous screen.
Please select at least one photo to print.	There are no photos selected to print. Press the button next to OK to return to the previous screen and select a photo.
Unsupported printer model. Please connect supported model.	<p>The camera is connected to an incompatible printer. Connect the camera to one of the compatible EPSON Stylus models listed on page 14-1. Hold down the MENU button to cancel printing.</p> <p>You selected a paper size that your printer does not support. Select an appropriate paper size. (For information on paper sizes, see your printer's documentation.)</p>
Connection or printer error.	Printing stopped because of a printer error. Check your printer and clear the error (you may need to turn the printer and camera off and then on again), then restart printing from the beginning. (See your printer manual for troubleshooting information.)

LCD screen messages (Continued)

Message	Description
OK to erase printing settings?	You are about to erase the current print settings. Press the button next to YES (the bottom button) to erase the settings, or press the button next to NO (the top button) to save the settings and return to the previous menu.
Batteries are low. Use AC adapter.	Battery power is almost out. If you have the optional AC adapter, connect it to continue. Otherwise, replace the batteries with batteries that have been fully charged.
Error. Settings reset to default.	An unknown error occurred and your settings were returned to their defaults. Press the bottom button to return to the main menu and enter your print settings again.
Insert a Memory Card in the camera.	No memory card is installed in the camera, or the memory card is not fully inserted into its slot. Insert a memory card as described on page 1-8.
Printing canceled.	You held down the MENU button to cancel printing. The message disappears after three seconds.
Printing canceled. Reset printer and camera.	A printing error occurred. The message disappears after three seconds. Turn off the camera and printer, then turn them on and try printing again.

Status display panel messages

Message	Description
E51: Another interface is active	The printer is receiving a print job from another source (through a different interface). When that print job is finished, the printer begins printing from Direct Print automatically.
E55: No ink	Printing has stopped because the printer ran out of ink. Replace the ink cartridges and restart printing from the beginning. See your printer manual for instructions on replacing ink cartridges.
E56: No paper or paper jam	Make sure paper is loaded in the printer, then press the printer's  Load/Eject button to begin printing. If paper is jammed in the printer, follow the instructions in your printer manual to clear the jam. Then restart printing from the beginning.

Your PhotoPC 850Z includes the Print Mark program that lets you set up your images for printing, so you can drop off your CompactFlash card at a photo finishing lab and get the exact printouts you need.

This chapter includes the following sections:

- ▶ Introduction to the DPOF standard
- ▶ Making the DPOF file
- ▶ Confirming and changing DPOF file settings
- ▶ Deleting DPOF files
- ▶ Removing and Reinstalling the Print Mark program
- ▶ Reading error messages

Introduction to the DPOF Standard

The Digital Print Order Format (DPOF) is a new digital print standard that lets you create a file containing all the information a photo finishing lab needs to print your photos. Simply select the photos you want to print, specify the number of copies, and store the information in a DPOF file on your camera's CompactFlash card. Give the card to any photo finishing lab capable of printing with the DPOF standard, and you'll get the exact printouts you want.

NOTE

The DPOF standard is new, and may not be available at your local photo finishing lab yet.

Making the DPOF File

The Print Mark program on your PhotoPC 850Z lets you make a Digital Print Order Format file and save it on your camera's CompactFlash card in one of two formats:

- ▶ Standard layout prints one photo per sheet
- ▶ Index layout prints several thumbnail photos per sheet

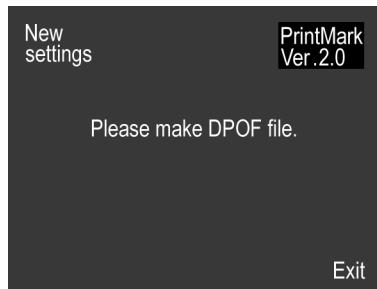
When you select Standard layout, you can choose to have an index sheet printed with your standard photo sheets, if you want.

Only one DPOF file can be stored on your camera's CompactFlash card at a time. However, you can always add or delete images in the file or change the way it is set up before printing.

Follow these steps to make a new DPOF file in Standard or Index layout:

- 1 Turn the camera's dial to .

- 2 Press the button next to PrintMark. The Print Mark program's main menu appears on the screen:



- 3 Press the top left button (next to **New settings**).

If you've previously made a DPOF file, you see a message asking if you want to delete it. Press the top left button (next to **Done**) to delete it and set up a new file, or press the bottom left button (next to **Cancel**) to save your settings and return to the main menu.

- 4 Press the + button (next to **Standard**) to select Standard layout for printing one photo per sheet. Or, press the – button (next to **Index**) to print several thumbnails of your photos on each sheet.

5 If you are using the Index layout and you want to print only selected images, press the + button (next to Index print), then go to step 6. If you want to print all your images in the index, skip to step 12.

For Standard layout, go to step 6 to select images.

6 Press the bottom left button (next to **Select Image**). You see your saved images:



7 Press the **ISO** and **W.B.** buttons (under the left and right arrows) to select photos. A white frame indicates your selection, and the number at the bottom of the screen shows the picture number.

To enlarge a selected picture, press the top left button (next to the magnifying glass). Press the bottom right button (under **BACK**) to return to the selection screen.

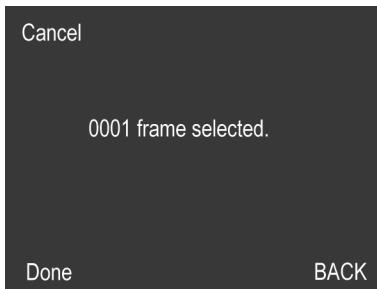
NOTE:

The Print Mark program displays up to 1000 pictures. Even if more pictures are stored in your memory card, the program displays only the first 1000.

8 Press the + or – button to specify how many copies (0 to 99) of each selected photo you want to print. When you select one or more copies for a photo, a checkmark appears in its upper right corner.

9 Repeat steps 6 and 7 to set the number of copies for each image you want to print. Once you have finished selecting photos, press the bottom right button (under **BACK**).

You see a screen confirming the number of original photo frames you have selected to print:



When you press the button next to **Done**, you see a screen like the following:



10 Press the bottom left button (next to **Done**) to save your selections. If you want to change your selections, press the bottom right button (under **BACK**). If you want to quit Print Mark and keep your previous file settings, press the top left button (next to **Cancel**).

11 If you want to add an index print to a Standard layout file, press the – button (next to **Add Index**). (If you are creating an Index layout file, go to step 12.)

Press the + button (next to **Index print**) to select **None**, **Selected** (the images you have selected for your index print), or **All**.

12 Press the ISO and W.B. buttons (under the left and right arrows) to select the number of copies (up to 99) for your index print. (If you are creating an index for a Standard layout file, press the bottom right button [under BACK].)

13 Press the top left button (next to Save).

14 At the Confirmation screen, check your settings and press the W.B. button (under Save) to save your DPOF file.

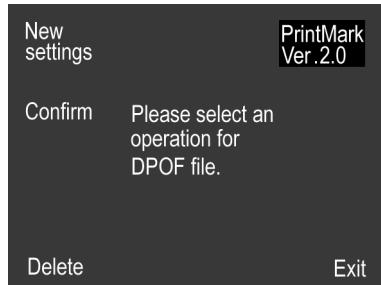
15 Press the bottom right button (under Exit) to quit the Print Mark program.

Confirming and Changing the DPOF File

Follow these steps to confirm or change a file:

1 Turn the camera's dial to .

2 Press the + button (next to PrintMark). The Print Mark program's main menu appears on the screen:



15

3 Press the + button (next to Confirm). You see the confirmation screen.

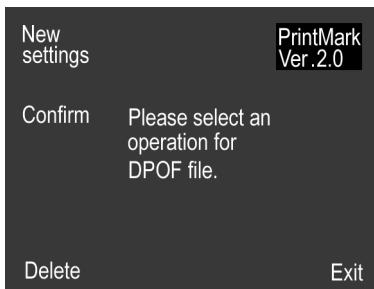
- ▶ To check the frame selections, press the W.B. button (under Conf. frame).
- ▶ To change the settings, press the ISO button (under Change) and follow steps 6 through 15 under "Making the DPOF File."

4 Press the bottom right button (under BACK) to return to the Print Mark main screen.

Deleting the DPOF File

Follow these steps to delete a DPOF file:

- 1 Turn the camera's dial to .
- 2 Press the + button (next to PrintMark). The main menu appears:



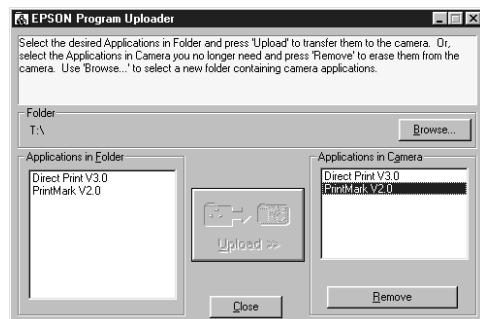
- 3 Press the bottom left button (next to Delete). You see a confirmation message.
- 4 Press the top left button (next to Done) to delete the DPOF file. To keep the file and return to the main menu, press the bottom left button (next to Cancel).

- 5 Press the bottom right button (next to Exit).

Removing the Print Mark Program

You can use the EPSON Program Uploader to remove Print Mark if you don't plan to use it. You can always install the program later, if you need it. Follow these steps:

- 1 Connect the camera to your computer. (See Chapter 8 for instructions.) Then turn the camera's dial to .
- 2 Start EPSON Program Uploader: Under Windows, click **Start**, then point to **Programs, EPSON Photo!3, EPSON Program Uploader**. You see a screen similar to the following:



- 3 Select PrintMark V2.0 in the Applications in Camera listbox.
- 4 Click **Remove**. You see a confirmation message asking if you're sure you want to remove it.
- 5 Click **Yes** to remove the program, or **No** to cancel. Then click **Close** to exit Program Uploader.

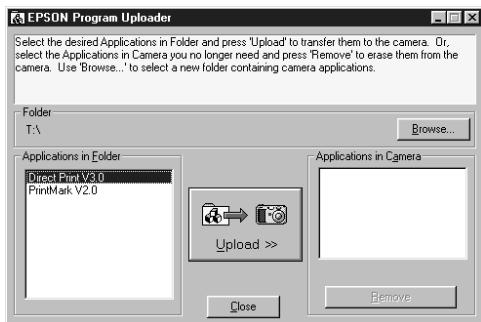
Reinstalling the Print Mark Program

Follow these steps to reinstall the Print Mark program to your camera:

- 1 Connect the camera to your computer and turn the camera's dial to .
- 2 Insert your PhotoPC 850Z CD-ROM in your drive. If the install program starts automatically, exit the program.
- 3 Start EPSON Program Uploader:

- ▶ Under Windows, click **Start**, then point to **Programs**, **EPSON Photo!3**, **EPSON Program Uploader**.
- ▶ On a Macintosh, double-click the **EPSON Program Uploader** icon in the **EPSON Photo!3** folder.

You see a screen similar to the following:



- 4 Click **Browse** to navigate to the root directory of your CD-ROM drive.
- 5 Select **PrintMark V2.0** in the **Applications in Folder** listbox.

- 6 Click the **Upload** button. You see a progress meter, and after a moment **PrintMark V2.0** appears in the **Applications in Camera** listbox.
- 7 Click **Close** to exit.

Reading Error Messages

If you see an error message on the camera's LCD screen, check the following table to respond to the message.

LCD screen messages

Message	Description
No Photos in Memory.	This message appears when there are no photos in memory. Press the button next to OK to return to the previous screen.
You can no longer select an image.	You have selected the maximum number of photos that the program will allow you to print.
No memory Card Inserted.	No memory card is installed in the camera, or the memory card is not fully inserted into its slot. Insert a memory card as described on page 1-8.
Error! Unable to access DPOF file.	This message appears if the memory card is removed while using the Print Mark program. (Never remove a memory card during any operation, otherwise you may be unable to use the photos in the card.) Turn off the camera and re-insert the memory card.

LCD screen messages (Continued)

Message	Description
Batteries are low. Use AC adapter.	Battery power is almost out. If you have the optional AC adapter, connect it to continue. Otherwise, replace the batteries with batteries that have been fully charged.
You lost last print settings. Are you sure?	There is already a DPOF file saved on the memory card. If you create a new file, you overwrite the saved print settings.
DPOF file made by other writer exists.	This message appears if the Print Mark program tries to read a DPOF file made by a different camera. Delete the file or create a new file.
Unable to save DPOF file. No memory space in card.	The memory card doesn't have enough space to save a DPOF file. To create a DPOF file, delete any unnecessary photos and try again.

Your PhotoPC 850Z camera is easy to take care of, and any problems you may have are easy to solve. This chapter includes the following sections:

- ▶ Caring for the camera and battery charger
- ▶ Solving camera problems
- ▶ Solving picture problems
- ▶ Where to get help

Caring for the Camera and Battery Charger

Your PhotoPC 850Z requires only basic care. Before you perform any maintenance procedures, be sure to read the safety instructions in Appendix C. Then follow these guidelines:

Cleaning the Camera and Battery Charger

- ▶ Unplug the battery charger before cleaning.
- ▶ Use a clean, dry cloth to wipe the camera free of dust.
- ▶ Use a damp cloth for cleaning the battery charger.
- ▶ Keep the battery charger terminals clean by wiping them with a dry cloth.
- ▶ Don't use harsh or abrasive cleaners. Don't use liquid or aerosol cleaners.
- ▶ To clean the lens, first blow off any loose dust or dirt. Then breathe on the lens and wipe off all moisture with a soft, lint-free cloth or lens cleaning tissue. To avoid scratching the lens, don't press too hard.

- ▶ If necessary, clean the battery contacts with a dry cloth.
- ▶ If the LCD screen gets fingerprints or smudges on it, use a soft, damp cloth to lightly wipe the screen.

Storing the Camera

- ▶ When you're not using the camera, make sure the camera dial is set to **Off**.
- ▶ When the camera is not used for long periods of time, remove the batteries and store them at a low temperature in a dry location. This prevents damage to the camera from battery leaks or corrosion.

Do not store the camera in the following locations:

- ▶ Where it will be exposed to direct sunlight, for example, on a car dashboard
- ▶ Near sources of bright light or high humidity
- ▶ Near heat sources or in a closed car or trunk
- ▶ In areas of excessive dirt or dust
- ▶ Where it will be exposed to strong vibrations or magnetic fields

Solving Camera Problems

Before you call for help, check this list of problems and possible solutions:

The camera has no power.

- ▶ If you're using batteries, the camera may have shut off automatically to conserve battery power. If your camera dial is set to   or , press the shutter button to turn the power back on. If your camera dial is set to   or , press any button on the back of the camera to turn the power on. (You can also turn the power on by turning the camera dial to **Off** and then back to its former position.)
- ▶ Check the batteries and make sure they're installed correctly and charged. The included batteries need to be charged before you can use them (see Chapter 1). Recharge or replace the batteries.
- ▶ If you are using the AC adapter, make sure it's plugged into a working outlet.

You can't take a picture with the camera.

- ▶ The flash may be recharging. Wait until the status light (beside the viewfinder) turns green, and try again.
- ▶ Make sure you've installed the CompactFlash memory card in your camera. If it's already installed, you may need to format or eject it (see Chapter 1). Check to see if a message is displayed on the camera's LCD screen.
- ▶ The CompactFlash memory card may be full. Check the picture counter on the display panel. Erase some pictures (see Chapter 6), or transfer the pictures to your computer and then erase them (see Chapter 8). Or replace your memory card with a new one.
- ▶ The batteries may be low. If you see the low battery icon, recharge or replace the batteries (see Chapter 1) or use the optional AC adapter (see Appendix A).
- ▶ The camera may be connected to your computer. When it's connected, you can't use any of the controls on the camera itself. See Chapter 12 for instructions on taking pictures from your computer.

- ▶ The Solar Assist panel may be open. Close the Solar Assist panel if the camera is not being used in direct sunlight.

The camera takes too long to take a picture.

- ▶ You may be pressing the shutter all the way down at once. This forces the camera to focus, make exposure adjustments, and capture the image all at once. By pressing the shutter button partially to focus, then the rest of the way to capture the image, your camera can process pictures more quickly (see Chapter 2).
- ▶ You can turn on quick shot mode to take pictures quickly (see Chapter 3).

The flash doesn't work.

- ▶ Make sure the flash is not set to the flash off setting .
- ▶ Check the batteries and make sure they're installed correctly. Recharge or replace the batteries if necessary.
- ▶ You can't use the flash in continuous shooting mode.

- ▶ Check to make sure your camera's flash setting is not set to use the optional external flash (see Appendix A).

Nothing appears on the LCD screen.

- ▶ Check your batteries and make sure they're installed correctly. Recharge or replace the batteries if necessary.
- ▶ Make sure you've installed and formatted the CompactFlash memory card.
- ▶ The camera may have shut off automatically. If your camera dial is set to , , or , press the shutter button to turn the power back on. If your camera dial is set to , , or , press any button on the back of the camera to turn power on. (You can also turn power on by turning the camera dial to **Off** and then back to its former position.)
- ▶ Make sure the camera is not in  viewfinder mode.
- ▶ The LCD screen turns off automatically when the camera is connected to a TV, or when you are using EPSON Photo!3.

The image on the screen is too dark.

- ▶ Adjust the brightness of the screen using the Camera Setup menu. See page 7-3 for instructions.
- ▶ Make sure the Solar Assist panel is not open. Set the panel's switch to .

The menus disappear while you're taking pictures with the LCD screen.

- ▶ The menus disappear when you press the **MENU** button. Press the **MENU** button again to make them reappear.

You can't take certain types of pictures or make all the settings you want.

- ▶ Some of the camera's settings and features can't be used at the same time. For example, you can't use quick shot mode and set the image quality to HyPict at the same time.

- ▶ To adjust certain settings like white balance, exposure, and sensitivity settings, you need to set your user mode to Program or Manual. See page 1-13 for details.

Nothing appears on the television or the sounds don't play when you connect your camera to it.

- ▶ Make sure the video and audio cables are connected correctly, as described on page 13-11, and the camera and TV are turned on.
- ▶ Make sure your camera dial is set to .
- ▶ If your TV has both Video and S-Video modes, make sure it is set to Video mode. See the manual for your television if you need help.
- ▶ Check your batteries and make sure they're installed correctly. Recharge or replace the batteries if necessary.
- ▶ Make sure your camera is set to the correct broadcast signal system (see Chapter 7). Also see your television's documentation for possible solutions.
- ▶ Check your playback settings to make sure the sound setting is turned on (see Chapter 6).

The “pictures remaining” number on the display panel doesn't decrease after you take a picture.

- ▶ Your camera is operating correctly. The total number of pictures you can store depends on your pictures' content. The number doesn't always change, especially when you're using standard image quality.

You get an error message when you try to transfer your pictures to the computer.

- ▶ Make sure the cable is connected correctly as described in Chapter 8.
- ▶ Make sure your camera is turned on and the batteries have enough power.
- ▶ Check the serial port settings in your Image Expert or EPSON Photo!3 software. You may need to change the Port and Speed serial connection settings to Auto.
- ▶ If you're using a Windows system and have trouble connecting to the COM port, check the computer's COM port settings. Make sure the port is properly

configured and that the Base I/O port address and the Interrupt Request Number (IRQ) assigned to the port are not in conflict with any other devices.

- ▶ Check the port setting in your Windows Control panel. You may need to set your port to a faster speed, lower the FIFO buffer size (advanced serial port configuration), or adjust the speed in your software. See “Adjusting Camera Settings From Your Computer” on page 12-5 for more information.
- ▶ If you’re using a Macintosh and the camera is sharing a serial port with another device, turn AppleTalk off.
- ▶ If your camera is connected to a USB hub, try connecting the camera directly to your computer.
- ▶ Make sure you don’t have both Image Expert and EPSON Photo!3 open at the same time.

You get a “The Camera Is Not Responding” error message when you’re using your PhotoPC 850Z software with the camera connected to your computer.

- ▶ Make sure the cable is connected correctly as described in Chapter 8. Also make sure your camera dial is not turned Off and the batteries have power.
- ▶ Check the serial port settings in your Image Expert or EPSON Photo!3 software. You may need to change the Port and Speed serial connection settings to Auto.
- ▶ If you were able to use the camera with the computer previously and then changed or added other settings on your system, you may have a COM port conflict. Try using a different COM port or reconfiguring the COM port settings. (See your Windows documentation for instructions.) If you were not able to use the camera with your computer previously, you may have an inoperable serial cable. Try using another cable.
- ▶ If your camera is connected to a USB hub, try connecting the camera directly to your computer.

- ▶ Avoid opening or working with other software applications while the camera and computer are communicating.

You are unable to drag and drop photos into a document.

- ▶ If your system has less than 32MB RAM, you may not be able to use drag and drop. Make sure you don't run too many applications at the same time. You may need to add memory to your system or use another method of getting photos into your documents.
- ▶ Your application may not support this method of adding pictures.

You are unable to copy and paste or import your photo into a document on your Macintosh.

- ▶ Try increasing your virtual memory using the Memory Control Panel. Also increase the memory allocation for your word processor or other application. (Select the application and choose **Get Info** from the File menu.)
- ▶ Try turning off any unnecessary extensions. See your Macintosh documentation for more information.

The pictures transfer to your computer too slowly.

- ▶ If your system has less than 32MB RAM, the transfer speed may be slow. Try using virtual memory. See your computer documentation or system help for more information.
- ▶ Check the port setting in your Windows Control panel. You may need to set your port to a faster speed. See your Windows documentation or help system for more information.
- ▶ If you're transferring pictures to an application through EPSON Photo!3 and you use the PhotoEnhance feature, the transfer will take longer. Try transferring without PhotoEnhance.

You get a TWAIN error message when you try to transfer images with Adobe® Photoshop.

- ▶ Make sure you select TWAIN_32, not TWAIN.

You are unable to format or use a CompactFlash storage card with your camera.

- ▶ Make sure you're using an ATA-compatible CompactFlash card. Other cards may not work with PhotoPC 850Z. If you need help with a card, call the appropriate manufacturer's number. Some are listed below:
 - ▶ Lexar Media, (800) 789-9418
 - ▶ SanDisk, (408) 542-0595
- ▶ Make sure you've installed the card correctly. The card's label should be facing the front of the camera, and the arrow(s) on the label should point down.

Your notebook computer's PCMCIA drive can't access a CompactFlash storage card with a PCMCIA adapter.

- ▶ If you're using an IBM® Thinkpad,TM you may need an updated driver for your PCMCIA port. Call IBM technical support.

When you upload pictures to a storage card in your computer, your system appears to hang.

- ▶ Check the status bar at the bottom of your screen. If it shows that the transfer is complete, your system is operating correctly. You may have to click your mouse to change the hourglass icon to a normal pointer.

When you copy image files from your computer to a storage card in your PCMCIA drive, the camera can't access the images.

- ▶ You can't use this method to upload pictures to the camera. You have to use the EPSON Photo File Uploader3 to convert and upload your images.

Solving Picture Problems

If you're not satisfied with some of the pictures you get from the PhotoPC 850Z, you may need to adjust some of the camera settings. Read the suggestions below.

Your pictures display poor image quality on the screen or when you print them out.

- ▶ PhotoPC 850Z captures images in 24-bit color (16.7 million colors). Your pictures will not display maximum image quality if your monitor or computer's video controller doesn't support this color depth. You may need to upgrade your system to achieve the best possible image quality.
- ▶ If your pictures look better on the screen than when you print them out, you may need to upgrade your printer. An EPSON Stylus ink jet printer, for example, provides excellent image quality. Also see your printer manual to change your print settings, if necessary.

- ▶ If you used drag and drop to insert your pictures, they may appear grainy. Try importing them into your documents instead.

When you preview images on your computer, they look distorted.

- ▶ If you are using an STB® Velocity 128 video card and have a screen resolution of 800×600 or 640×480 , you may notice this phenomenon. Slowing down the acceleration on your video card may solve this problem: Click **Start**, point to **Settings**, click **Control Panel**, then double-click **System Properties**. On the Performance tab, click the **Graphics** button. Select a slower acceleration and click **OK**. See your Windows documentation or help system for more information.

The colors in your picture don't look right.

- ▶ When you take pictures under certain artificial lighting conditions, the colors may be slightly distorted. You can adjust your camera's white balance setting to correct the colors while you are taking photos (see Chapter 5). If

you have already taken photos, you can use your Image Expert software to adjust their colors, as described on page 11-3.

Your picture is blurry or out of focus.

- ▶ Make sure your subject is within the camera's range. You should be at least 20 inches away to take a picture without the flash, and 20 inches to 8 feet away to take a picture with the flash. You can take a picture from as close as 8 inches in macro mode.
- ▶ When you take macro close-ups, make sure you have adequate lighting. Using a tripod will help you capture sharp pictures.
- ▶ Make sure that your subject isn't moving and that you hold the camera steady after you press the shutter button (until the camera status light or photo capture light starts flashing).
- ▶ If you want to photograph a moving subject, try increasing the shutter speed. See Chapter 5 for information about how to change the shutter speed.

- ▶ Make sure your flash is not set to flash off .
- ▶ When you focus on a nearby object, your picture's background may appear blurry. Try changing your focus.

Your picture is too dark (underexposed).

- ▶ You may need to use the flash. Make sure the setting is not flash off .
- ▶ If you're using the flash, make sure your subject is within the range of 8 feet.
- ▶ Use Image Expert to adjust the picture's brightness and contrast, as described on page 11-4.
- ▶ Try adjusting the camera's exposure or sensitivity settings (Use the Manual user mode). See Chapter 5 for details.
- ▶ If you're taking pictures in the Manual user mode, look for the **EV!** warning that appears on your LCD screen when you are taking pictures out of the ideal exposure range. If you have trouble setting both the aperture and

shutter speed manually, try adjusting one setting and letting the camera choose the other setting with Shutter Priority or Aperture Priority (see Chapter 5).

- ▶ If you're using the macro mode to take a close-up photo, be sure to provide adequate lighting for your subject.
- ▶ If you're taking a picture at night and you want to light up the background as well as your subject, use the camera's slow synchronized flash mode.
- ▶ If you need more light, attach an optional external flash to the camera's hot shoe (see Appendix A).

Your picture is too light (overexposed).

- ▶ If you're using the forced flash setting, it may be too bright. Try setting the flash to **Auto** .
- ▶ If you're facing a bright light source, you may need to shoot your picture from a different angle.
- ▶ Use Image Expert to adjust the picture's brightness, as described on page 11-4.
- ▶ Set user mode to **Manual** and adjust the camera's exposure setting (see Chapter 5).

Part of your picture is missing.

- ▶ Make sure you're not blocking the lens with your finger, wrist strap, clothing, or other object.

A horizontal or vertical red line appears on your picture.

- ▶ Red lines are caused by glare. Avoid photographing shiny surfaces that reflect excessive amounts of light into your lens.
- ▶ Try using the red-eye reduction flash mode when you are photographing areas that have shiny surfaces.

The wrong date and/or time are displayed on your pictures.

- ▶ When you change the batteries in your camera, you may need to reset the clock. You can use the LCD screen SETUP menu or set the camera's clock from your computer. See Chapter 7 or Chapter 12 for more information.

Your pictures don't look as good as they used to.

- ▶ Your camera's lens may be dirty or dusty. Try cleaning it by following the instructions on page 16-1.

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

- ▶ Make sure you look straight through the viewfinder. Keep in mind that the area visible through the viewfinder is slightly smaller than the area captured in the photo.
- ▶ If you're taking a close-up or macro mode picture, turn the camera dial to  so that you can use your LCD screen to preview your picture.

Where To Get Help

EPSON provides technical assistance through electronic support services and automated telephone services 24 hours a day.

The following tables list the contact information:

Electronic support services

Service	Access
World Wide Web	From the Internet, you can reach EPSON's Home Page at http://www.epson.com .
EPSON Internet FTP Site	If you have Internet FTP capability, use your Web browser (or other software for FTP downloading) to log onto ftp.epson.com with the user name anonymous and your e-mail address as the password.
EPSON Forum on CompuServe®	Members of CompuServe can type GO EPSON at the menu prompt to reach the Epson America Forum. For a free introductory CompuServe membership, call (800) 848-8199 and ask for representative #529.

Automated telephone services

Service	Access
EPSON SoundAdvice™	For pre-recorded answers to commonly asked questions about EPSON products 24 hours a day, seven days a week, call (800) 922-8911 .
EPSON FaxAdvice™	Access EPSON's technical information library by calling (800) 922-8911 . You must provide a return fax number to use this service.
EPSON Referral Service	For the location of your nearest Authorized EPSON Reseller call (800) 922-8911 .

To speak to a technical support representative, dial (562) 276-4303 (U.S.), or (905) 709-3839 (Canada), 6 AM to 6 PM, Pacific Time, Monday through Friday. Toll or long distance charges may apply.

Before you call, please have the following information ready:

- ▶ Product name
- ▶ Product serial number
- ▶ Computer configuration
- ▶ Description of the problem

You can purchase manuals and accessories from EPSON Accessories at (800) 873-7766 (U.S. sales only). In Canada, please call (800) 873-7766 for dealer referral. Or visit our website at www.epsonsupplies.com (U.S. sales only).

Software Support

If you are having problems with a software application included with the camera, you can call one of the following numbers for technical support:

- ▶ (800) 501-8902 for Sierra Imaging Image Expert software questions. Available weekdays 9 AM to 5 PM, Pacific Time. Or email support@sierraimg.com. Worldwide support number is (831) 461-4710.
- ▶ (562) 276-4303 for the EPSON Photo!3 application and TWAIN driver, the EPSON Photo File Uploader, the EPSON Photo!3 Program Uploader, and the Direct Print software.

Software Licensing

You can install EPSON Photo!3, the EPSON Photo File Uploader, and the EPSON Photo!3 Program Uploader on multiple computer systems. If you want to install Image Expert on multiple computer systems, please contact Sierra Imaging at (800) 501-8902 regarding the licensing fee.



Optional Accessories

You can use a variety of options with the PhotoPC 850Z to enhance its capabilities and convenience. This chapter describes how to use your camera with the following options:

- ▶ AC adapter
- ▶ Tripod
- ▶ Optional lenses and filters
- ▶ External flash
- ▶ PCMCIA adapter
- ▶ Image Authentication System software (for verifying that a photo has not been altered)

You can also purchase an additional NiMH Battery Pak (with 4 batteries) or replacement NiMH Power Pak (which contains a battery charger and 4 batteries). With a backup set of charged batteries, you'll have plenty of battery power. Additional CompactFlash memory cards are also handy to have to store more pictures. Your camera accepts Type I and Type II cards.

These options should be available where you bought your PhotoPC 850Z.

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You can order the following options directly from EPSON Accessories at (800) 873-7766 (U.S. sales only) or (800) 873-7766 (in Canada, for dealer referral).

Accessory	Product code
EPSON Universal AC Adapter	B867081
NiMH Battery Pak (4 batteries)	B818113
Universal NiMH Power Pak (charger and 4 batteries)	B818172
EPSON Image Authentication System (IAS)	PPC8-IAS

CompactFlash memory cards are available from the various manufacturers like:

- ▶ Lexar Media, (800) 789-9418
- ▶ SanDisk, (408) 542-0595

Make sure you purchase the correct size card. The PhotoPC 850Z will accept ATA-compatible Type I and Type II CompactFlash cards up to 96MB.

Using the Optional AC Adapter

The universal AC adapter allows you to connect your PhotoPC 850Z to any standard (110/230 V) outlet. You should use the AC adapter when you are previewing images, transferring images and operating the camera from your computer, or using Direct Print and Print Mark. It is also convenient if you are taking indoor portrait photos.

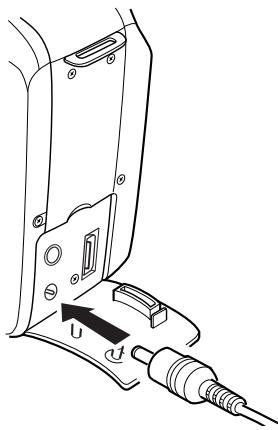
The adapter powers the camera but does not charge the batteries.

WARNING

- ▶ *Use only the AC adapter designed for the PhotoPC 850Z. Using any other adapter could cause fire, electrical shock, or injury.*
- ▶ *Do not use the AC power cable and the adapter for any purpose other than powering your PhotoPC 850Z.*
- ▶ *If the AC plug doesn't fit your outlet, have a proper outlet installed by a qualified electrician.*
- ▶ *To avoid radiation danger, do not expose or remove the ferrite core.*

To avoid losing any images or settings, make sure the camera has finished processing and is turned off before you connect or disconnect the AC adapter. Then follow these steps:

- 1 Open the connector cover on the side of the camera.
- 2 Plug the adapter cable into the DC port on the camera.

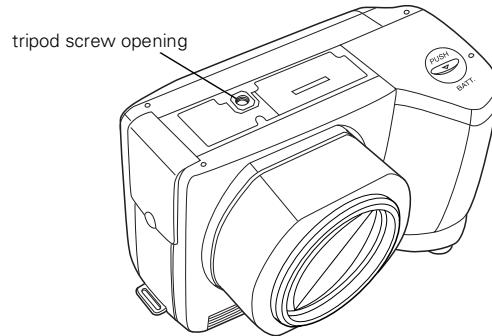


- 3 Plug the AC adapter into an electrical outlet.

Using a Tripod

Follow these steps to use the camera with any standard tripod:

- 1 Assemble and set up the tripod according to the manufacturer's instructions. Make sure the tripod is well-balanced on a flat surface.
- 2 Find the opening for the tripod screw on the bottom of your camera.



Carefully place the camera on the tripod. Screw the camera on until it is firmly in place.

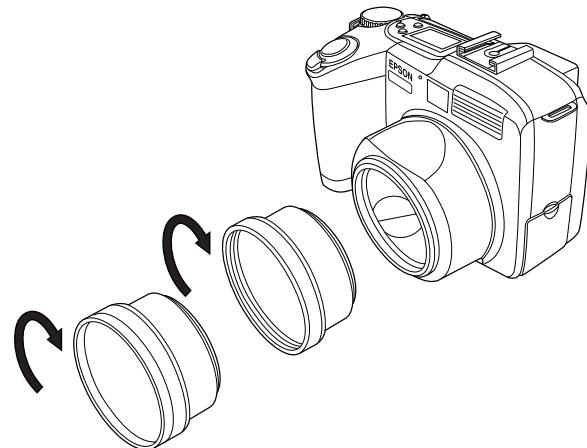
- 3 Adjust the tripod to view your subject as desired.

Attaching an Optional Converter Lens

You can attach a 49 mm telephoto or wide-angle converter lens to the camera using the lens adapter that came with your camera. You can also use 49 mm close up lenses and filters.

You can order accessory Tiffen® lenses and filters from DC Pro Digital Camera Accessories at (800) 522-7835 or (516) 434-8800. For more information, see the brochure that came in your box.

Screw the lens adapter onto the camera's lens, and then screw the converter lens on it.



Attaching an Optional Flash

You can attach an optional flash unit to the camera to significantly increase the brightness of your images in dark environments. It also works well for portrait photography.

EPSON recommends the following external flash (available through photo specialty shops and mail order catalogs):

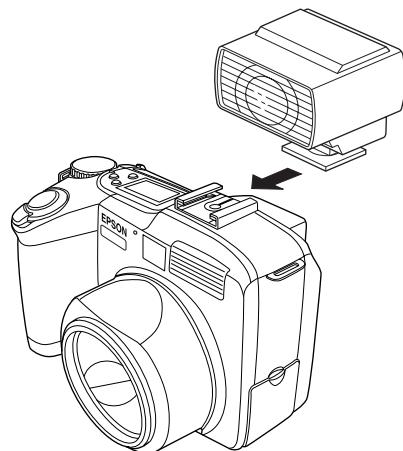
Brand: Metz

Model: 32Z-2

Follow these steps to attach the flash and set up your camera to use it:

- 1 Make sure the camera and flash are both turned off.
- 2 If necessary, insert batteries into the flash unit as described in the manufacturer's instructions.

- 3 Slide the flash onto the top of the camera's hot shoe as shown below. (See the manual for the flash if you need more detailed instructions.)

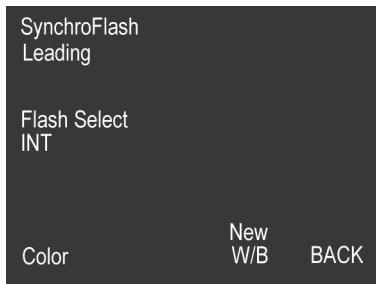


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4 Turn your camera dial to **i**. You see the SETUP menu.



5 Press the bottom left button (next to Shot Setup). You see the Shot Setup menu.



6 Press the + button (next to the Flash Select setting) to change the setting to EXT (external).

7 Turn the camera dial to the setting you want to take a picture.

8 Turn on the flash.

Now you are ready to start using your camera with the flash.

NOTE

The camera's flash modes are disabled when using the external flash. See the flash documentation for information on any available settings.

Using a PCMCIA Adapter

If your desktop or notebook computer has a Type II PCMCIA card slot, you can use a PCMCIA adapter to access images stored on CompactFlash cards.

NOTE

- ▶ If you don't have an adapter, you can use Image Expert to transfer photos to your computer. See Chapter 8.
- ▶ If you can't access a card in your notebook computer, contact the computer manufacturer. See page 16-8 for more information.

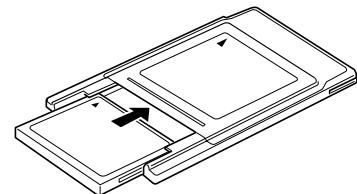
If you're using a Macintosh, you must enable PC Exchange extension software to access files on CompactFlash cards. See your Macintosh documentation for information.

For information on installing, formatting, and removing memory cards from your camera, see Chapter 1.

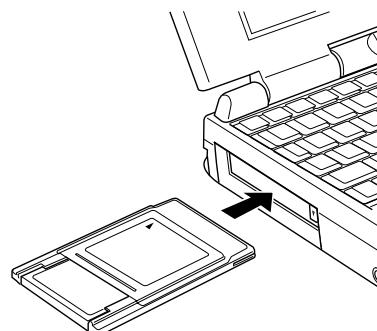
Installing the PCMCIA Adapter

Follow these steps to install the adapter:

- 1 Insert the memory card all the way into the adapter.



- 2 Insert the adapter into your computer's Type II PCMCIA slot.



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Transferring Photos With the Adapter

Once the adapter and card are installed in your computer's PCMCIA slot, you can transfer photos by simply copying them to your hard drive. This is the fastest way to get pictures into your computer. The image files are stored in the DCIM/100epson folder on the card.

- ▶ In Windows, use My Computer or the Windows Explorer to drag and drop image files to your hard drive.
- ▶ On a Macintosh, use the Finder to drag and drop image files to your desktop or hard drive.

Image Authentication System

If you want to verify the authenticity of photos taken with your camera, you can purchase the EPSON Image Authentication System (IAS). This software detects when even a single bit of digital data in a picture has been altered. Because IAS doesn't change the file format, it has no effect on your ability to store and display pictures, or to use them in other applications.

For ordering information, see page A-2.



Specifications

Camera

Physical Dimensions

Width	4.9 in (125 mm)
Height	3.1 in (80 mm)
Depth	2.8 in (70 mm)
Weight	14.1 oz (400 g) without batteries, strap, and CompactFlash card

Power

Sources

Includes 4 AA rechargeable NiMH batteries and charger. Also accepts 4 AA batteries (single-use lithium or rechargeable NiCad)

Optional Universal AC adapter (B867081)

Battery life

Over 2000 minutes using the viewfinder
Over 1000 minutes using the LCD screen
Approximately 2 hours playback



Technical

Product type	2.11 megapixel CCD (charged coupled device) still frame auto focus camera	Serial interface	14-pin dual line terminal to camera, RS-232C-compatible connector to computer (9-pin DSUB connector to PC, 8-pin mini-DIN male connector to Macintosh or printer)
CCD	0.5 inch color area CCD (2.1 million pixels)	USB cable	14-pin connector (camera) USB connector (computer)
Image resolution	1600 × 1200 pixels (fine and super fine) 640 × 480 pixels (standard) 1600 × 600 pixels (panoramic fine) 1600 × 600 pixels (panoramic super fine) 1984 × 1488 pixels* (HyPict) 1984 × 744 pixels* (HyPict panorama)	USB communication speed	Up to 12 Mbps
	* Interpolated	Video out	NTSC and PAL standards
File format	JPEG	Internal ROM	4MB flash program memory
Bit depth	16 million colors, 24-bit	Expansion memory	8MB CompactFlash storage card; also accepts optional 4MB to 96MB Type I and Type II storage cards
Serial communication speed	Up to 230.4 Kbps with high-speed serial port (19.2 Kbps or higher), 1.8 Mbps when connected to EPSON printers	Self-timer	10 seconds
		Tripod mount	Built-in

Environmental

Temperature	Operating: 41 to 95 °F (5 to 35 °C) Non-operating: -4 to 140 °F (-20 to 60 °C)
Humidity	Operating: 30 to 90% (non-condensing) Non-operating: 10 to 90% (non-condensing)

Safety

United States	FCC Part 15 Subpart B Class B
Canada	CSA C108.8 Class B

Photographic

Lens	$f = 6.5$ to 19.5 mm (equivalent to a 35 to 105 mm lens on a 35 mm camera) F2.0 to 2.8
Auto-focus range	20 inches (50 cm) to infinity (normal) 8 inches to 20 inches (20 cm to 50 cm) (macro mode)
Manual-focus range	Three settings (approx. 3 ft., 10 ft., and infinity) for normal mode and two settings for macro mode
LCD screen	2.0-inch low temperature, poly-silicon TFT color LCD (110 thousand pixels) dual lighting: electric lighting and Solar Assist panel
Sensitivity	Equivalent to ISO 100/200/400

Exposure control	Programmed auto exposure Exposure value adjustment: -2 to +2 EV, in 9 or 21 steps Manual shutter speed and aperture settings, and shutter-priority and aperture-priority settings Spot metering and matrix metering	Aperture	f2 to f11, 1/3 EV steps (zoomed out) f2.8 to f11, 1/3 EV steps (zoomed in)
White balance	TTL automatic white balance Fixed white balance (5200 °Kelvin) User-defined white balance	Flash	Automatic luminance control flash mode
Zoom	3× optical zoom 2× digital zoom	Flash modes	Forced flash, automatic, flash off, red-eye reduction, leading or trailing slow synchronized flash modes (leading or trailing can be set through the LCD menus), external flash mode for optional external flash (can be enabled through the LCD menus)
Shutter	Electric iris with mechanical shutter, 4 seconds to 1/800 second		
Viewfinder	Real-image optical, with centering crosshair and edge border (view range approximately 90%)		
Focus	Automatic focus from 20 inches (50 cm) to infinity Automatic focus from 8 inches to 20 inches (20 to 50 cm) in macro mode		

Photo Processing Time (approximate)

	Photo processing time	Photo processing time for quick shots	Photo processing time for replay
Standard	2.0	1.3	0.5
Fine	2.6	1.5	1.0
Super fine	3.2	1.5	1.5
HyPict	12	-	2.0

Memory Card Picture Capacity

Image Mode	8MB Card
Standard	120
Fine/Monochrome Fine	24
SuperFine/Monochrome SuperFine	12
HyPict/Monochrome HyPict	10

NiMH Battery Charger

Physical Dimensions

Width	3.0 inches (76 mm)
Height	4.5 inches (115 mm)
Depth	1.1 inch (28 mm)
Weight	Approximately 4.6 oz (130 g)

Technical

Input	100 to 240 V, 50 to 60 Hz
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Output	DC 1.2 V/490 mA × 4
Charging time	4 batteries: approximately 210 minutes
Power consumption	Approximately 8W
Charging temperature	41 to 95 °F (5 to 35 °C)
Storage temperature	-4 to 86 °F (-20 to 30 °C)

Optional Universal AC Adapter

Physical Dimensions

Width	1.7 inches (43 mm)
Height	1.22 inches (31 mm)
Depth	4.1 inches (104 mm)

Technical

Output	DC 7 V/2.0 A
Input	100 to 240 V AC, 50 to 60 Hz

CompactFlash Card

Storage Capacity

8MB

Physical Dimensions

Width	1.7 inches (42.8 mm)
Height	1.5 inches (36.8 mm)
Depth	0.13 inch (3.3 mm)

Minimum System Requirements

To transfer images to your computer and edit them, make sure your system meets these minimum requirements:

Windows Systems

- ▶ IBM-compatible PC with 486 or higher processor
- ▶ At least 32MB RAM
- ▶ Double-speed CD-ROM drive
- ▶ At least 40MB free hard disk space

- ▶ VGA or SVGA monitor with at least 256-color display (16-bit color or greater recommended)
- ▶ Mouse or other pointing device
- ▶ 16-bit sound card and speakers (for audio annotation only)

Serial Connection

- ▶ Microsoft Windows 98, Windows 95, or Windows NT 4.0 (Service Pack 3 or later recommended)
- ▶ Serial port with standard RS-232C interface (19200 bps or higher)

USB Connection

- ▶ Windows 98 PC with built-in USB port

Macintosh Systems

- ▶ At least 32MB RAM
- ▶ At least 30MB free hard disk space
- ▶ CD-ROM drive
- ▶ VGA monitor with minimum resolution of 640 × 480

- ▶ 16-bit sound card and speakers (for audio annotation only)

Serial Connection

- ▶ Macintosh PowerPC with System Software Version 7.5 or later
- ▶ Power Macintosh G3 with System Software Version 8.51 or later
- ▶ Macintosh modem/printer serial port (19200 bps or higher)

USB Connection

- ▶ iMac with System Software Version 8.1 and iMac Update 1.0, or iMac with Mac® OS Version 8.51, or later
- ▶ Power Macintosh G3 with System Software Version 8.51 or later
- ▶ Built-in USB port

NOTE

*If your iMac is running OS 8.1, you'll need to update your operating system before installing your camera software. Download and install the iMac Update 1.0 or later from Apple at <http://swupdates.info.apple.com>. Contact Apple if you have problems installing the update. If your iMac is running OS 8.5 or 8.5.1, Apple recommends that you download and install iMac Update 1.1. To find out which operating system your iMac is running, select **About This Computer** in the Apple menu.*



Regulatory Information and Warranty

This appendix includes the following important information:

- ▶ Safety instructions
- ▶ Declaration of Conformity
- ▶ FCC Compliance Statement
- ▶ Warranty

Safety Instructions

Read all of these instructions before using your camera and battery charger. Also follow all warnings and instructions marked on the camera, battery charger, and batteries.

- ▶ To reduce the risk of electric shock, do not remove the camera's cover or open any of the compartments except as instructed in this *User's Guide*.

- ▶ To prevent fire or electric shock, do not insert objects through any openings in the camera or battery charger. Do not expose the camera or battery charger to rain or moisture.
- ▶ To prevent fire or explosion, do not use the camera or battery charger where inflammable or volatile gas is stored.
- ▶ If the camera shows unusual signs such as noise, odor, or smoke, turn it off immediately. Remove the batteries and/or disconnect the AC adapter, and unplug the AC adapter from the electrical outlet.
- ▶ If the battery charger shows unusual signs such as noise, odor, or smoke, unplug it immediately.



- ▶ To avoid damage to the optics of the camera, do not expose the lens to direct sunlight for extended periods of time.
- ▶ Do not use the charger near water. Never insert or remove the charger's power plug with wet hands.
- ▶ Keep the charger away from heat sources. Do not use outside the temperature range of 41 to 95°F (5 to 35°C).
- ▶ Do not use the charger within reach of children.
- ▶ Do not insert batteries backwards.
- ▶ Use only the types of power sources listed on the charger label and in this *User's Guide*. Always supply power to the charger directly from a standard domestic electrical outlet.
- ▶ Do not charge the batteries using an electrical outlet on an airplane.
- ▶ Do not use the camera outdoors during adverse weather conditions.
- ▶ Do not store the camera near sources of bright light, direct sunlight, high humidity, heat, excessive dirt or dust, or where it will be exposed to strong vibrations or magnetic fields.
- ▶ To prevent possible eye injury, do not take flash pictures of faces at close range.
- ▶ Avoid sudden temperature changes, which can cause moisture to condense on the camera. Keep the camera in a case or bag if you need to move it from a cold environment to a warm one. Allow time for the camera and its optional accessories to adjust to temperature changes before using them.
- ▶ Do not use a frayed or damaged power cord with the AC adapter.
- ▶ Remove batteries and/or unplug the camera and the AC adapter and refer servicing to qualified service personnel under the following conditions: if the power cord or plug is damaged; if liquid has entered the camera; if the camera has been dropped or its exterior has been

damaged; if the camera or its optional accessories do not operate normally or exhibit a distinct change in performance.

- ▶ Adjust only those controls that are covered by the operating instructions.
- ▶ Do not attempt to service the camera or battery charger yourself. Refer all servicing to qualified service personnel.

If the liquid crystal solution contained in the display panel or in the LCD screen leaks out and gets on your hands, wash them thoroughly with soap and water. If it gets in your eyes, flush them immediately with water.

Declaration of Conformity

We: EPSON AMERICA, INC.
Located at: 20770 Madrona Avenue
MS: B2-11
Torrance, CA 90503
Telephone : (310) 782-5254

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: G770A
Product: EPSON PhotoPC 850Z

FCC Compliance Statement

FCC COMPLIANCE STATEMENT FOR AMERICAN USERS

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 and 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 into an outlet on a circuit different from that to which the receiver is connected
- ▶ Consult 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 that 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.

FOR CANADIAN USERS

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

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Warranty

EPSON AMERICA, INC. LIMITED WARRANTY

What is Covered: Epson America, Inc. ("EPSON") warrants to the first end-user customer that the EPSON PhotoPC 850Z Digital Camera enclosed with this limited warranty statement, if purchased and used in the United States or Canada, conforms to the manufacturer's specifications and will be free from defects in workmanship and materials for a period of one year from the date of original purchase. EPSON further warrants to the first end-user customer that the Nickel Metal Hydride Battery Charger and four Nickel Metal Hydride Batteries enclosed with this limited warranty statement will be free from defects in workmanship and materials for a period of ninety days from the date of original purchase.

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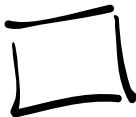
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