



Polaroid Digital Camera PDC-3000

User's Guide for PowerMac/PowerPC or
Windows applications

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The embedded PDC-3000 compression software is based in part on the work of the Independent JPEG Group. The embedded PDC-3000 file management software is based in part on SanDisk Host Developer's Tool Kit Ver. 1.1 © Copyright 1996 SanDisk Corp.



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Quick startup

For more information, see the page indicated.

Setting up

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19	19	1 Unpack the PDC-3000 camera.
24	24	2 Set the camera's SCSI ID.
27	27	3 Install and charge the camera batteries.
32	43	4 Connect the camera to your computer.
38	48	5 Install the PDC software on your computer.
150	198	6 Set the camera internal settings (date, time, user name, etc.).



Taking pictures

<i>Page (PowerMac or PowerPC)</i>	<i>Page (PC/Windows)</i>	<i>Steps</i>
53	53	1 Disconnect the PDC-3000 camera from the computer.
72	72	2 Insert a CompactFlash card.
74	74	3 Turn on the camera.
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82	82	5 Frame and take a picture.
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Viewing and transferring the pictures in the camera

<i>Page (PowerMac or PowerPC)</i>	<i>Page (PC/Windows)</i>	<i>Steps</i>
32	43	1 Connect the camera to the computer.
120	166	2 View thumbnails (small representations) of the pictures stored in the camera.
127	173	3 Select and transfer the pictures to the computer.
141	188	4 Delete the pictures from the camera.



1 Introduction

The Polaroid PDC-3000 Digital Camera captures high-quality color pictures electronically, using a unique, million-pixel CCD (charge coupled device). PDC-3000 pictures contain up to 16.7 million colors and can be saved as high resolution (600x800 pixels) or super-high resolution (1200x1600 pixels) pictures.

The PDC-3000 has all the features of an automatic compact 35mm camera, including automatic exposure, electronic flash and automatic focus. These features produce correct exposure, accurate colors and sharp focus under a great variety of picture-taking conditions. Manual overrides are also provided for unusual conditions.

In its highest quality picture-taking mode, the PDC-3000 camera stores up to 30 pictures on a removeable, matchbook-size, 15-megabyte CompactFlash card. Using the camera's 10:1 image compression mode, you can store up to 150 pictures on a 15-megabyte card. Additional CompactFlash cards are available in various capacities, and can be purchased separately to provide more storage.



Using the PowerMac/PowerPC or Microsoft Windows software provided with the camera, you can view the pictures taken with the PDC-3000 camera, optimize them for a selected monitor or printer, and transfer them to the computer. You can then use an image-processing application to edit, save and print the pictures.

When the camera is connected to your computer, you can control the camera and take pictures via the computer keyboard and mouse. This is useful when the camera is used in a stationary setup.

Typical PDC-3000 workflow

To help you understand the full capabilities of the PDC-3000 camera, a typical workflow sequence is presented below. After you become familiar with PDC-3000 features, you can use the camera in other ways to best suit your imaging needs.

- 1** Take pictures with the camera (Chapter 3).
- 2** Connect the camera to your computer (Chapter 2).
- 3** Use your computer to view the pictures stored on the camera CompactFlash card (Chapter 4 for PowerMac or PowerPC, Chapter 5 for PCs).



- 4** Select the pictures you want to keep and transfer them to the computer (Chapter 4 or 5).
- 5** Edit or enhance any of the pictures using an image-processing application such as Adobe Photoshop. (See instructions with the application.)
- 6** Print the picture or use it in another application, such as a desktop publishing application. (See instructions with the application.)

As an alternative sequence for studio or other stationary setups, you can leave the PDC-3000 camera permanently attached to the computer. With the camera connected to the computer, you can operate the camera controls and take pictures using the computer's display, keyboard or mouse.

System requirements

Using the PDC software to view and manipulate pictures taken with the PDC-3000 camera requires the following hardware and software. If you do not have the required configuration, contact your Polaroid dealer.



PowerMac or PowerPC systems

A PowerMac or PowerPC family computer or compatible with a PowerPC processor and 24 megabytes (MB) of RAM. (32 MB is recommended.)

- Apple system software version 7.5 or later.
- An image-processing application, such as Adobe Photoshop, compatible with Adobe Photoshop plug-in modules, is recommended for working with PDC-3000 pictures. If you do not have such an application, you can use PDC Direct (provided and installed as part of the PDC software) to optimize and transfer pictures from the camera and to control the camera from the computer.

PC systems

- An IBM PC or compatible, with at least a 66 MHz Pentium-class processor and 24 megabytes (MB) of RAM (32 MB recommended).
- Microsoft Windows 95 or Windows NT.
- An ASPI-compliant SCSI adapter and the appropriate Windows 95 or Windows NT drivers.
- A video adapter and monitor capable of displaying 24-bit color (16.7 million colors) is recommended for optimal display of PDC-3000 pictures. (PDC software can be used with adapters and monitors capable of displaying fewer



colors, but the quality of pictures displayed on the monitor may not be satisfactory.)

- A TWAIN-compliant image-processing application, such as Adobe Photoshop, is recommended for working with PDC-3000 pictures. If you do not have such an application, you can use PDC Direct (provided and installed as part of the PDC software) to optimize and transfer pictures from the camera and to control the camera from the computer.

Technical assistance

From within the U.S.A., call Polaroid toll-free at **1-800-432-5355**, Monday through Friday, 8 a.m. to 8 p.m. (Eastern time). Polaroid offers a variety of Customer Support Services; call for details and applicable fees. You can also write to Polaroid Electronic Imaging Technical Support, 565 Technology Square 3B, Cambridge, MA 02139.

In Canada, call toll-free at **1-800-268-6970**. Outside the U.S.A. and Canada, please contact the Polaroid office nearest you. See *Polaroid Offices and Service Centers* on page 251.

Technical support is also available over the Internet. Connect to the Polaroid World Wide Web site at <http://www.polaroid.com>.



Using this manual

This book explains how to set up and use your Polaroid PDC-3000 camera. It also includes the procedures for installing the PDC software on your PowerMac or PowerPC computer or PC, and for taking, viewing and saving pictures taken with the PDC-3000 camera. To use these instructions, you should be familiar with the operation of your PowerMac/PowerPC computer or PC with the Microsoft Windows 95 operating system.

Here's what you'll find inside:

Quick startup: Summarizes instructions for setting up the PDC-3000 camera and software, and for taking pictures and transferring them to the computer.

1 Introduction: Briefly describes the PDC-3000 camera, lists system requirements and explains how to obtain technical assistance.

2 Setting up: Explains how to install the camera batteries, install the PDC software on your PowerMac/PowerPC computer or PC, and connect the PDC-3000 camera to your computer.



3 Using the PDC-3000 camera: Explains the PDC-3000 camera controls, and provides instructions for taking and labeling pictures.

4 Using the PDC-3000 with your PowerMac/PowerPC: Tells you how to use your PowerMac or PowerPC computer to view pictures taken with the PDC-3000 camera, how to optimize and transfer them from the camera to your PowerMac or PowerPC, and how to operate the camera from your computer.

5 Using the PDC-3000 with your PC: Tells you how to use your IBM-compatible computer and Windows to view pictures taken with the PDC-3000 camera, how to optimize and transfer them from the camera to your PC, and how to operate the camera from your PC.

6 Maintenance and troubleshooting: Contains battery and CompactFlash card information, solutions to problems that might occur, and warranty and service information.

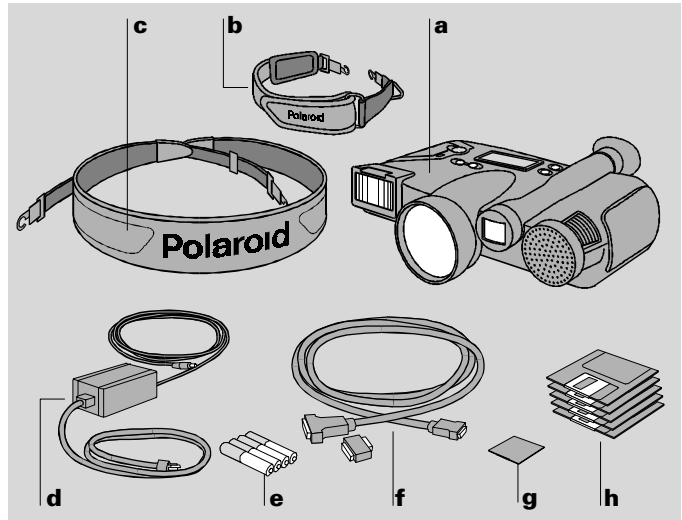
Appendixes: Contain camera specifications, required printer settings for using the IQA image enhancement features, software license agreements and Polaroid locations worldwide.



2 Setting up

Unpacking

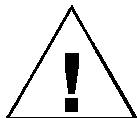
Listed below are the components in the PDC-3000 camera package. If any is missing, contact your dealer immediately.





- a** PDC-3000 camera with 38mm-equivalent lens
- b** Hand strap
- c** Shoulder strap
- d** **Power adapter/trickle charger:** Recharges the NiCad batteries in the camera and provides power for the camera while the batteries are charging.
- e** **Camera batteries:** Four “AA” NiCad rechargeable batteries.
- f** **SCSI cable (2 meter) and DB25/50 pin Centronics adapter:** Connect the PDC-3000 camera to a PowerMac/PowerPC computer or PC SCSI port.
- g** **Removeable CompactFlash card:** Stores the pictures taken by the camera. Additional cards can be purchased for increasing storage capacity.
- h** **Software diskettes (or CD-ROM):** PDC Plug-in software for PowerMac/PowerPC and Windows, TWAIN driver (for Windows 95 and Windows NT only) and Polaroid PDC Direct camera utility software for PowerMac/PowerPC and Windows.

Note: Please be sure to fill out and return the registration card packed with the PDC-3000 camera. As a registered owner, you will be among the first to receive information about PDC software updates and the availability of new PDC-3000 products.



WARNING: NOTHING INSIDE THE PDC-3000 CAMERA EXCEPT THE BATTERIES IS USER-SERVICEABLE. TO AVOID THE POSSIBILITY OF DAMAGING THE CAMERA OR VOIDING THE WARRANTY, DO NOT DISASSEMBLE THE CAMERA.

Optional accessories

You may have also purchased one or more of the following optional accessories for the PDC-3000 camera. (Any necessary instructions are packaged with each accessory.)

60mm-equivalent lens: Interchangeable lens for enlarging more distant subjects.

SCSI host adapter: Adapter board for adding a SCSI port to IBM-compatible computers (PCs) for communicating with the PDC-3000 camera and other SCSI devices.

SlimSCSI adapter kit: Adapter, 1-meter cable and software for connecting the PDC-3000 camera to the PCMCIA slot of a PC notebook computer.

CompactFlash card reader kit: Hardware and software for transferring pictures from a CompactFlash card directly to a computer without using the PDC-3000 camera.



110-volt 5-hour battery charger: Fully charges the PDC-3000 NiCad batteries in 5 hours from AC power.

3-amp power supply: Allows operation of the PDC-3000 camera from AC power with the NiCad batteries removed.

12-volt auto adapter and recharger: Recharges the batteries in the camera and provides power for the camera from an automotive lighter socket.

Studio kit: Camera accessories and software for using the PDC-3000 in a studio setting and manually controlling effective film speed, aperture, shutter speed and focus.

1-meter SCSI cable: Maximum recommended length cable for connecting the PDC-3000 camera to Apple PowerBook computers. (The 2-meter cable provided with the PDC-3000 is **not** recommended for use with PowerBook computers.)

Carrying case: Soft case with shoulder strap for the PDC-3000 camera and accessories.

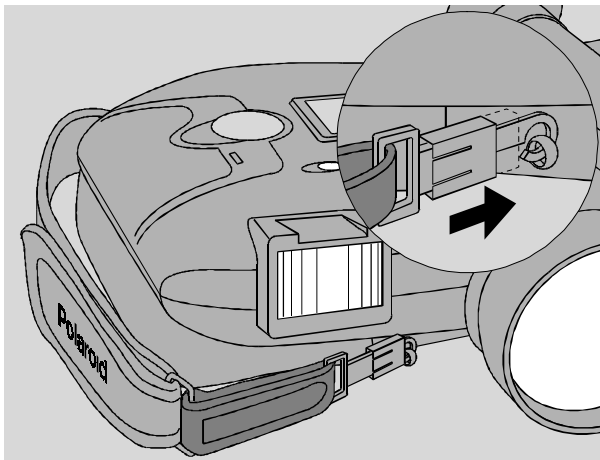


Setting up the PDC-3000 camera

Attaching the camera straps

A hand strap and a shoulder strap are provided with the PDC-3000 camera. To help prevent damage to the camera and to make camera handling easier, attach one or the other. (You cannot attach both at the same time.)

To attach a strap, connect the ends of the strap to the eyelets on the front and the back of the camera. Slide the plastic sleeve on each hook toward the eyelet until it snaps to lock the strap securely.



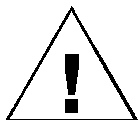


Setting the SCSI ID

The PDC-3000 camera is a Small Computer Systems Interface (SCSI) device. You can connect up to seven SCSI devices to your computer, one to another in a SCSI chain.

Note: If you are connecting the PDC-3000 camera to an IBM PC or compatible computer, the computer must have an ASPI-compliant SCSI adapter. (See *System requirements* on page 14.)

The PDC-3000 camera's SCSI ID is preset to 4 at the factory. You do not need to change this number unless another SCSI device in the chain is already using it. To determine whether 4 is already being used, check the user guides of the other devices or run a SCSI utility program.

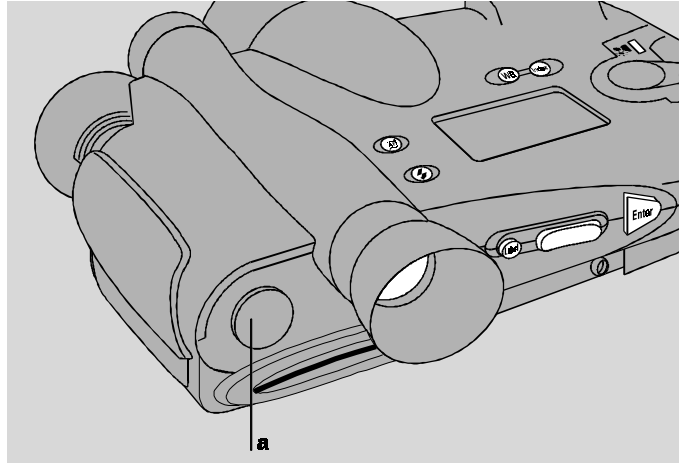


WARNING: EACH SCSI DEVICE CONNECTED TO YOUR COMPUTER MUST HAVE ITS OWN UNIQUE ID NUMBER SO YOUR COMPUTER CAN DISTINGUISH IT FROM OTHER ATTACHED SCSI DEVICES. USING TWO OR MORE DEVICES WITH THE SAME ID NUMBER CAN CAUSE THEM TO MALFUNCTION. YOU CAN LOSE DATA AS A RESULT.

If the PDC-3000 is your only external SCSI device or no other device in the chain is using ID 4, skip the rest of this section and go on to *Installing and charging the batteries* on page 27. If you must change the camera's SCSI ID, use the following steps:

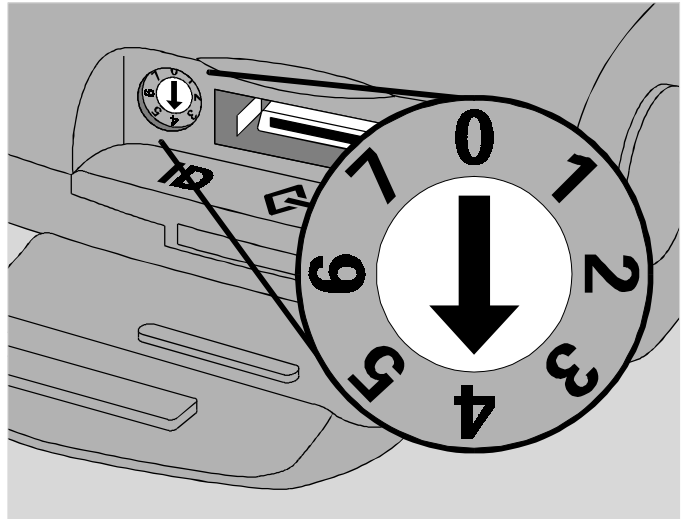


- 1 Make sure the camera power is off and the camera is disconnected from the computer. If the camera is on, turn it off by pressing the power button (a).





- 2 Open the connector cover and locate the SCSI ID selector.



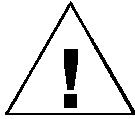
- 3 Insert a small screwdriver into the slot and rotate the selector until the arrow points to the desired SCSI ID.

Note: Do not use 7 or 0, which are customarily reserved for the computer and for PowerMac/PowerPC hard drives. If possible, you should also avoid SCSI ID 3, which is often used for internal CD-ROM drives.

- 4 Close the connector cover.

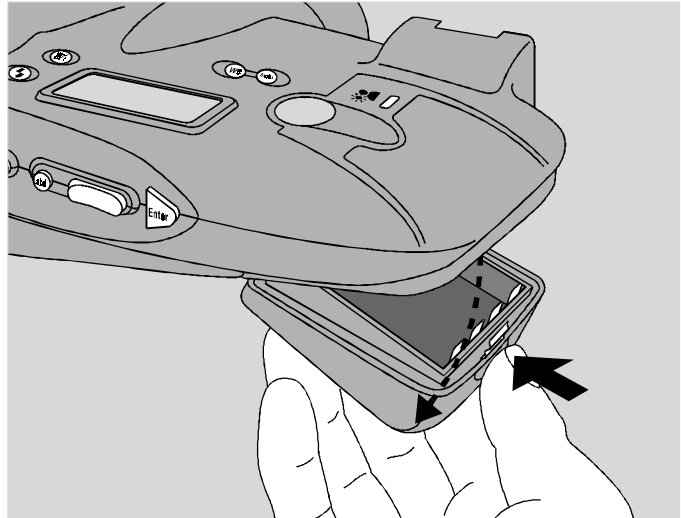


Installing and charging the batteries



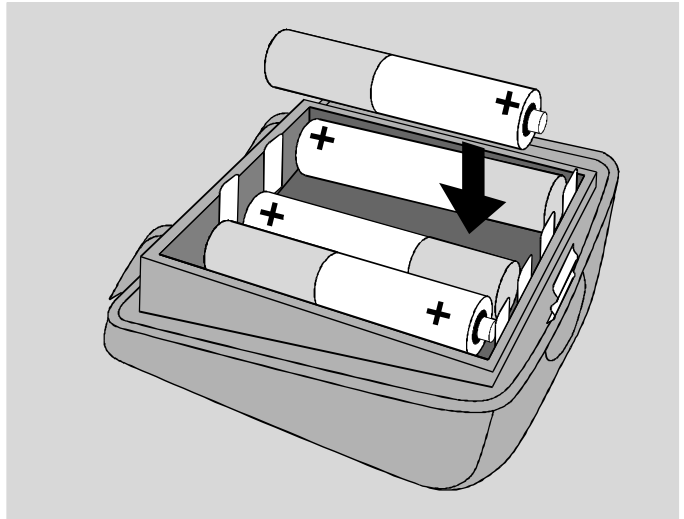
The four NiCad “AA” rechargeable batteries packaged with the PDC-3000 camera are **shipped uncharged**. To use the camera, you must install the batteries and charge them as described below.

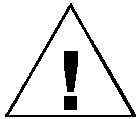
- 1 Press the latch on the side of the battery holder, unlatch the holder and remove it from the camera.





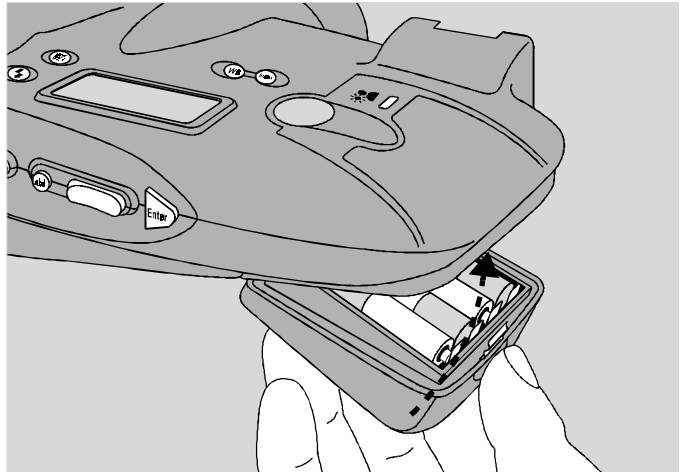
- 2 Unwrap and install the four “AA” NiCad batteries provided, observing the battery orientation label in the battery holder. (Install the two outside batteries first, then install the two inside batteries.)





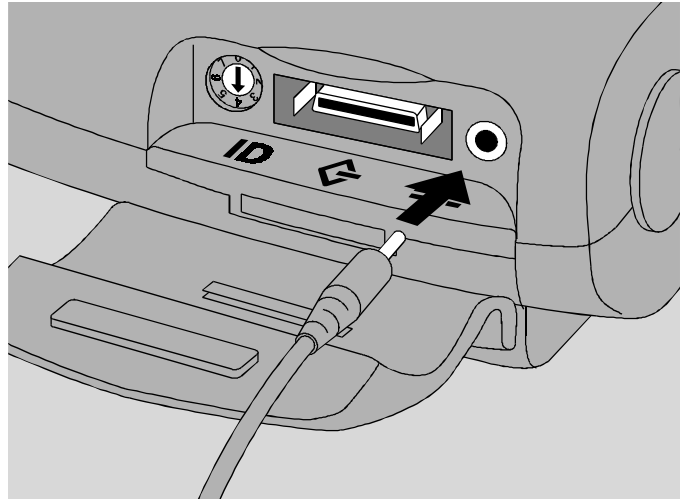
WARNING: USE ONLY THE BATTERIES PROVIDED OR THE “AA” NICAD RECHARGEABLE BATTERY TYPES RECOMMENDED ON PAGE 210. OTHER TYPES, SUCH AS ALKALINE OR LITHIUM “AA” BATTERIES, WILL NOT OPERATE THE CAMERA, AND MAY CAUSE INJURY OR DAMAGE THE CAMERA IF YOU ATTEMPT TO CHARGE THEM AS DESCRIBED BELOW.

- 3 Engage the battery holder and close it, making sure it latches.





- 4 Open the connector cover and connect the power adapter/trickle charger to the camera and to AC power.



Important: Do not operate the camera until the batteries have charged for about 6 hours. After this 6-hour period, you can use the camera while the batteries continue to charge.

Note: The camera is **not** operable without the batteries, even if the power adapter/trickle charger is connected.



Charge the new batteries completely by leaving the charger connected to the camera for about 12 hours. (After this initial charging, the batteries will recharge completely in about 6 hours.)

WARNING: USE ONLY THE POWER ADAPTER/TRICKLE CHARGER PROVIDED FOR CHARGING THE BATTERIES WHILE THEY ARE IN THE CAMERA. OTHER ADAPTERS AND CHARGERS SIMILAR IN APPEARANCE ARE AVAILABLE, BUT THEY CAN OVERHEAT THE BATTERIES AND CAUSE INJURY OR CAMERA DAMAGE.

BE SURE TO REMOVE THE BATTERIES FROM THE CAMERA WHEN USING THE OPTIONAL 3-AMP POWER SUPPLY INSTEAD OF THE POWER ADAPTER/TRICKLE CHARGER DESCRIBED ABOVE.

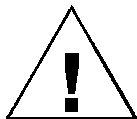
You can also charge the batteries outside the camera with optional 110-volt 5-hour battery charger (see *Optional accessories* on page 21) or another charger compatible with your local AC voltage and designed for NiCad “AA” batteries. Carefully follow the instructions provided with the charger you are using.



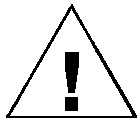
Connecting the camera to your PowerMac or PowerPC

The PDC-3000 camera is an internally terminated SCSI device designed to connect to the SCSI port of your PowerMac or PowerPC computer. How you connect the PDC-3000 depends on whether you have other SCSI devices connected to your computer.

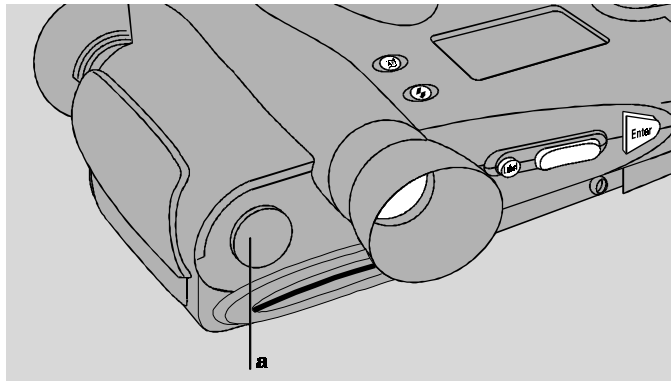
Be sure to set the camera's SCSI ID as described on page 24 before connecting the camera.



WARNING: IF YOU ARE CONNECTING THE PDC-3000 TO AN APPLE POWERBOOK COMPUTER, READ "CONNECTING TO AN APPLE POWERBOOK" ON PAGE 36 BEFORE CONTINUING.



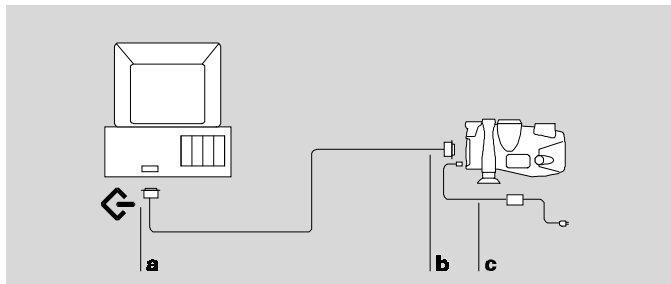
WARNING: DO NOT CONNECT OR DISCONNECT THE PDC-3000 CAMERA OR ANY OTHER SCSI DEVICE WHILE THE DEVICE OR YOUR COMPUTER IS TURNED ON. DOING SO COULD DAMAGE THE DEVICE, YOUR COMPUTER, OR BOTH. (TURN OFF THE CAMERA BY PRESSING POWER BUTTON a.)





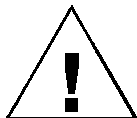
If the PDC-3000 is the only SCSI device

If the PDC-3000 camera is the only external SCSI device being used with your computer, turn off the computer and the camera. Then connect the SCSI cable provided to the computer's SCSI port (a). The port is marked with a SCSI symbol for easy identification. Connect the other end of the system cable (b) to the camera's SCSI connector.



Use only the SCSI cable provided with the camera. Other cables may appear similar, but could damage the camera or your computer. If you are using an Apple PowerBook computer, read the special instructions on page 36 before continuing.

After connecting the SCSI cable, connect the camera to AC power using the power adapter/trickle charger (c).

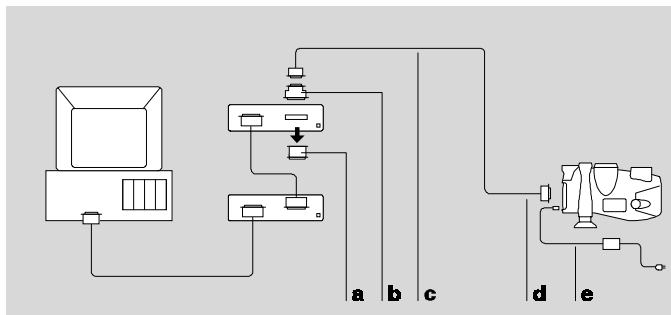


If your PowerMac or PowerPC has other SCSI devices

IMPORTANT: ALWAYS CONNECT THE CAMERA TO AC POWER WHEN IT IS CONNECTED TO THE COMPUTER. IF THE CAMERA OR ANY OTHER SCSI DEVICE TURNS OFF WHILE CONNECTED, IT COULD CORRUPT DATA ON YOUR HARD DISK.

Because the PDC-3000 camera is internally terminated, you must install it as the last device in your SCSI chain as follows:

- 1 Turn off the computer, all SCSI devices, and the camera.
- 2 Remove the terminator (a) from the last SCSI device in your SCSI chain.



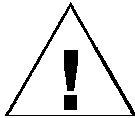
Note: Keep the terminator. You must reconnect it if you use the computer while the camera is not attached.



- 3 Attach the DB25/50 pin Centronics adapter (b) to the end of the SCSI cable (c).

Use only the SCSI cable provided with the camera. Other cables may appear similar, but could damage the camera or your computer. If you are using an Apple PowerBook computer, read the special instructions on page 36 before continuing.

- 4 Connect the DB25/50 pin Centronics adapter (b) to the connector from which you removed the terminator.
- 5 Connect the other end of the SCSI cable (d) to the SCSI connector on the PDC-3000 camera.
- 6 Connect the camera to AC power with the power adapter/trickle charger (e).



Connecting to an Apple PowerBook

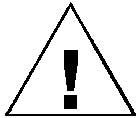
IMPORTANT: ALWAYS CONNECT THE CAMERA TO AC POWER WHEN IT IS CONNECTED TO THE COMPUTER. IF THE CAMERA OR ANY OTHER SCSI DEVICE TURNS OFF WHILE CONNECTED, IT COULD CORRUPT DATA ON YOUR HARD DISK.

In addition to the cables and adapters described in the previous sections, Apple PowerBook computers require a 1-meter SCSI cable and an HDI-30/DB25 adapter (available



from PowerMac/PowerPC dealers) to connect the PDC-3000 to the PowerBook SCSI port.

If you are using an Apple PowerBook, do **not** use the 2-meter SCSI cable provided with the PDC-3000, and do **not** use a SCSI dock adapter or a cable-type adapter. (These cables and adapters may not work and could corrupt data on your PowerBook hard disk.)



WARNING: WITH POWERBOOK COMPUTERS, USE A SCSI CABLE NO LONGER THAN 1 METER TO CONNECT THE CAMERA TO THE COMPUTER OR TO THE LAST DEVICE IN THE SCSI CHAIN. LONGER CABLES MAY CORRUPT DATA OR DAMAGE THE COMPUTER'S HARD DRIVE.

Other than the exceptions above, follow the instructions for connecting to PowerMac/PowerPC computers (starting on page 32) when connecting the PDC-3000 camera to an Apple PowerBook computer.



Installing PDC software on your PowerMac/PowerPC

To view PDC-3000 pictures stored in the camera, optimize and transfer pictures from the camera to your computer, operate the camera through the computer, or change camera setup options, you must use one of the following programs on your PowerMac or PowerPC. Both are provided with the PDC-3000 camera and are installed during the procedure described below.

- **PDC Plug-in software** Using the Plug-in after it is installed requires an image-processing application (not provided) compatible with Adobe Photoshop plug-in modules.
- **PDC Direct software** If you do not have an image-processing application compatible with Photoshop plug-in modules, you can use PDC Direct to transfer pictures from the PDC-3000 to your computer.

To install the PDC software on your PowerMac or PowerPC:

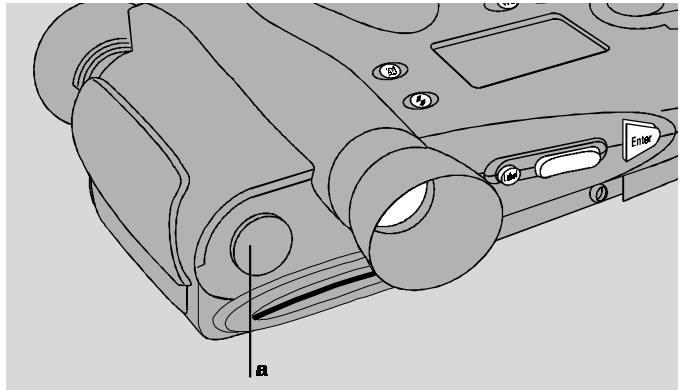
- 1 Insert the PDC for PowerMac/PowerPC disk or CD-ROM into an internal or external drive.
- 2 If the disk contents are not already visible, open the disk.



- 3** Be sure to read any Read Me file included on the disk. The Read Me file contains important late-breaking product information that may affect installation or use.
- 4** Double-click the Installer icon to open the Installer program.
- 5** Click the Install button and follow instructions on the screen.
- 6** If you are installing the Plug-in software, choose an Acquire/Export folder. (This step may not be necessary if you are using the Plug-in with Adobe Photoshop version 4.0.)
- 7** When an on-screen message indicates that installation has been completed, click OK.
- 8** If you have not already connected the PDC-3000 to the computer, turn off the computer and connect the camera as described on page 32.



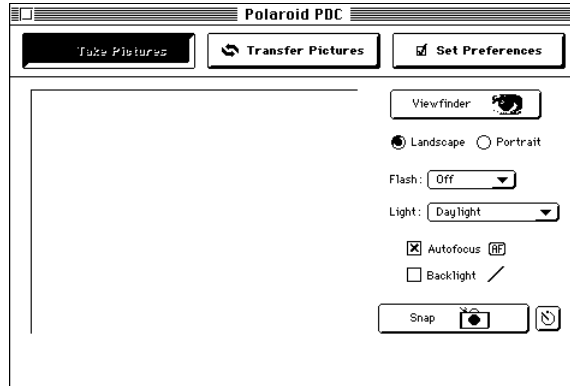
9 Turn on the camera by pressing the power button (a).



10 Restart your computer.



- 11 Start PDC Direct and wait for the Take Pictures window to appear, verifying that the camera and computer are communicating.



Note: If an error message appears instead of the Take Pictures window, refer to *Troubleshooting SCSI connection problems* on page 228 to correct the problem.



Verifying camera internal settings from your PowerMac/PowerPC

The PDC-3000 camera stores the following settings in its internal memory:

- User name
- Default picture label
- Current date
- Current time
- Automatic shutoff timeout values
- Image compression mode
- Camera sound indicator status

Before using the PDC-3000 camera for the first time, verify (and change, if necessary) these settings by following instructions in *Changing operating preferences* on page 150.

After verifying the camera's internal settings, proceed as follows:

If you intend to take pictures with the camera disconnected from the computer, close your image-processing application or PDC Direct by choosing Quit from the File menu. Then



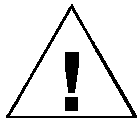
turn off the computer and the camera, and disconnect the camera as described on page 53. Refer to *Using the PDC-3000 camera* on page 56 for picture-taking instructions.

If you will take pictures while using the computer to control the camera, leave the camera connected to the computer. Refer to *Using the PDC-3000 with your PowerMac/PowerPC* on page 113.

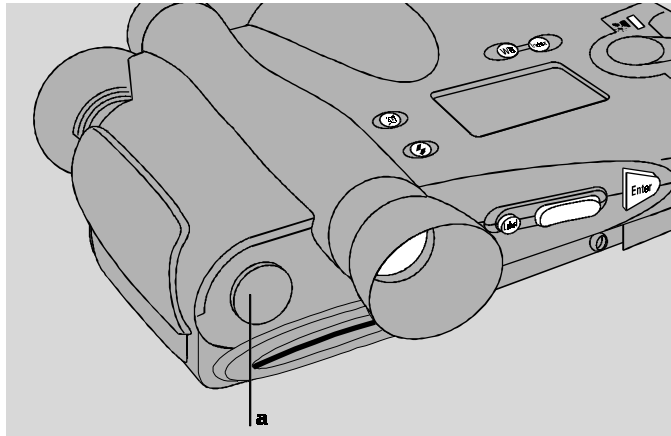
Connecting the camera to your PC

The PDC-3000 camera is an internally terminated SCSI device designed to connect to a SCSI adapter on your IBM-compatible computer. How you connect the PDC-3000 depends on whether you have other SCSI devices connected to your computer.

Note: Be sure to set the camera's SCSI ID as described on page 24 before connecting the camera. Also, your IBM-compatible computer must have an ASPI-compliant SCSI adapter for attaching the camera. See *System requirements* on page 14 for more information.



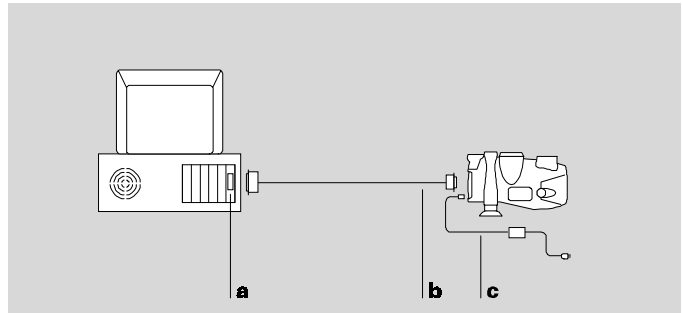
WARNING: DO NOT CONNECT OR DISCONNECT THE PDC-3000 CAMERA OR ANY OTHER SCSI DEVICE WHILE THE DEVICE OR YOUR COMPUTER IS TURNED ON. DOING SO COULD DAMAGE THE DEVICE, YOUR COMPUTER, OR BOTH. (TURN OFF THE CAMERA BY PRESSING POWER BUTTON a.)





If the PDC-3000 is the only SCSI device

If the PDC-3000 camera is the only external SCSI device being used with your computer, turn off the computer and the camera. Then connect the SCSI cable provided to the computer's SCSI port (a). Connect the other end of the system cable (b) to the camera's SCSI connector.



Use only the SCSI cable provided with the camera. Other cables may appear similar, but could damage the camera or your computer.

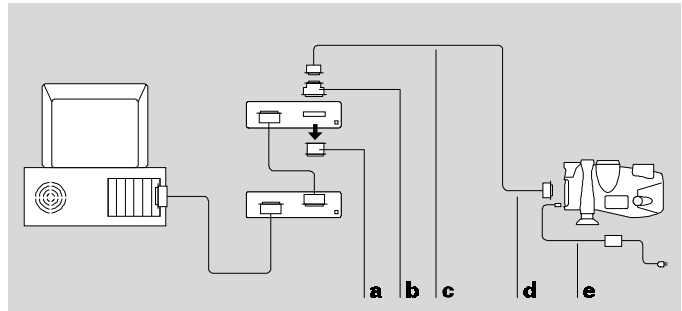
After connecting the SCSI cable, connect the camera to AC power using the power adapter/trickle charger (c).



If your PC has other SCSI devices

Follow the steps below if your computer has other external SCSI devices in addition to the PDC-3000 camera. Because the PDC-3000 camera is internally terminated, **you must install it as the last device in your SCSI chain** as follows:

- 1 Turn off the computer, all SCSI devices, and the camera.
- 2 Remove the terminator (a) from the last device in your SCSI chain.



Note: Keep the terminator. You will need to reconnect it if you wish to use the computer while the camera is disconnected from it.

- 3 If necessary for your installation, attach the DB25/50 pin Centronics adapter (b) to the end of the SCSI cable (c).



Use only the cable provided with the camera. Other cables may appear similar, but could damage the camera or your computer.

- 4 Connect the DB25/50 pin Centronics adapter (b) to the connector from which you removed the terminator.
- 5 Connect the other end of the SCSI cable (d) to the SCSI connector on the PDC-3000 camera.
- 6 Connect the camera to AC power using the power adapter/trickle charger (e).



IMPORTANT: Always connect the camera to AC power when it is connected to the computer. If the camera or any other SCSI device turns off while connected, it could corrupt data on your hard disk.



Installing the PDC software on your PC

To view PDC-3000 pictures stored in the camera, optimize and transfer pictures from the camera to your computer, operate the camera through the computer, or change camera setup options, you must use one of the following programs on your PC. Both are provided with the PDC-3000 camera and are installed during the procedure given below.

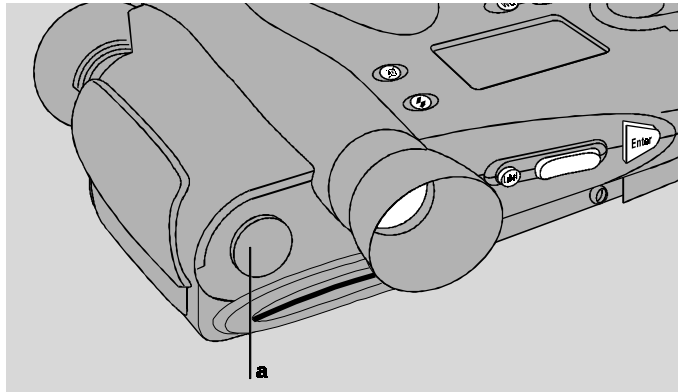
- **PDC TWAIN driver** Using the TWAIN driver requires an image-processing application (not provided) compatible with the TWAIN specification.
- **PDC Direct software** If you do not have an image-processing application compatible with TWAIN, you can use PDC Direct to transfer pictures from the PDC-3000 to your computer.
- To install the PDC software:
 - 1 Turn on the computer and start Windows.
 - 2 Insert the PDC for Windows diskette or CD-ROM into the drive.
 - 3 Click the Windows 95 Start button and choose Run.



- 4** Type **a:\setup** (or **b:\setup** if the diskette is in drive B) and click OK.
- 5** Follow instructions on the screen to complete the installation.
- 6** When an on-screen message indicates that installation has been completed, click OK.
- 7** Remove the diskette or CD-ROM from the drive.
- 8** If you have not already connected the PDC-3000 to the computer, turn off the computer and connect the camera as described on page 43.

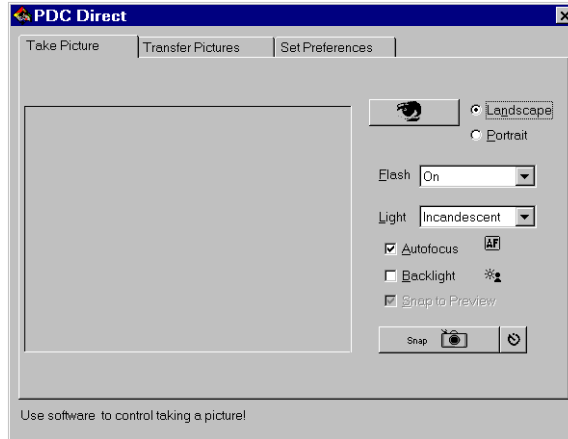


9 Turn on the camera by pressing the power button (a).





- 10 Restart your computer.
- 11 Start PDC Direct and wait for the Take Pictures tab to appear, verifying that the camera and computer are communicating.



Note: If an error message appears instead of the Take Pictures window, refer to *Troubleshooting SCSI connection problems* on page 228 to correct the problem.



Verifying camera internal settings from your PC

The PDC-3000 camera stores the following settings in its internal memory:

- User name
- Default picture label
- Camera sound indicator status
- Current date and time
- Image compression mode
- Automatic shutoff timeout values

Before using the PDC-3000 camera for the first time, verify (and change, if necessary) these settings by following instructions in *Changing operating preferences* on page 198.

After verifying the camera's internal settings, proceed as follows:

If you intend to take pictures with the camera disconnected from the computer, close your image-processing application by choosing Exit from the File menu. Then turn off the computer and the camera, and disconnect the camera as described below. Refer to *Using the PDC-3000 camera* on page 56 for picture-taking instructions.



If you wish to take pictures while using the computer to control the camera, leave the camera connected to the computer. Refer to *Using the PDC-3000 with your PC* on page 159.

Disconnecting the camera from your computer

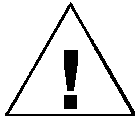
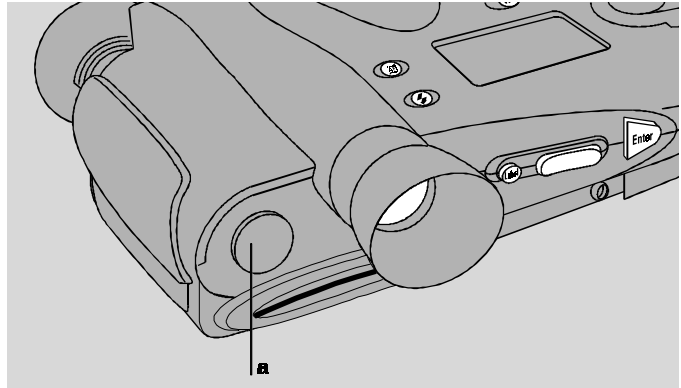
If you want to take pictures with the PDC-3000 camera away from the computer, use the following steps to disconnect it.

Note: The procedure below disconnects the camera cable from the computer. To use the camera controls for taking pictures without disconnecting the camera from the computer, see *Releasing the camera from computer control* on page 157 (PowerMac/PowerPC) or page 205 (PC) instead.

- 1 Turn off the computer.



- 2 Turn off the camera by pressing the Power button (a).

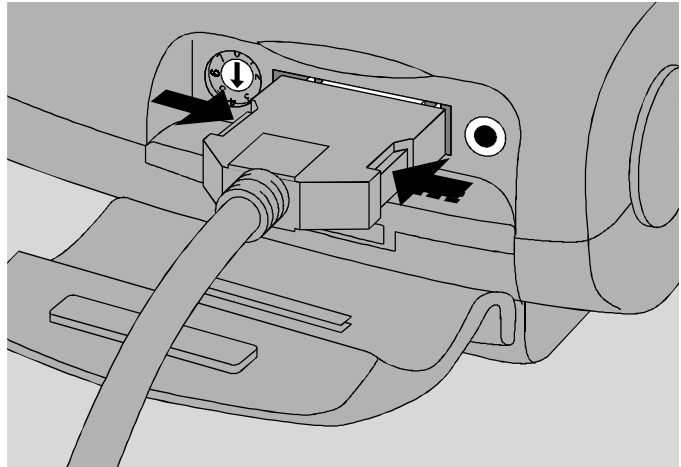


WARNING: DO NOT CONNECT OR DISCONNECT THE PDC-3000 CAMERA OR ANY OTHER SCSI DEVICE WHILE THE DEVICE OR YOUR COMPUTER IS TURNED ON. DOING SO COULD DAMAGE THE DEVICE, YOUR COMPUTER, OR BOTH.

- 3 Disconnect the camera cable from the computer or from the SCSI device to which it is connected.



- 4 Disconnect the camera cable from the camera by pressing the latching levers and pulling straight out.



- 5 If other SCSI devices are connected to your computer and you wish to use the computer while the camera is disconnected, install a terminator on the SCSI device connector to which the camera was attached.



3 Using the PDC-3000 camera

Using the Polaroid PDC-3000 camera is similar to using a conventional 35mm point-and-shoot camera. But instead of storing pictures on photographic film, the PDC-3000 camera stores electronic images internally on the camera's removeable CompactFlash card or on a computer connected to the camera.

In its highest quality picture-taking mode, the PDC-3000 camera stores up to 30 pictures on a removeable, 15-megabyte CompactFlash card. Using the camera's 10:1 image compression mode, you can store 150 pictures on a 15-megabyte card. Additional CompactFlash cards are available in various capacities, and can be purchased separately to provide more storage.


The camera controls allow you to control the use of flash, automatic focus, white balance and other features just as you would operate any other camera. You can also attach a label to each picture and erase pictures you don't want to keep.

When connected by a cable (tethered mode) to a computer running PDC software, the camera can be controlled with the computer keyboard and mouse, and its viewfinder image

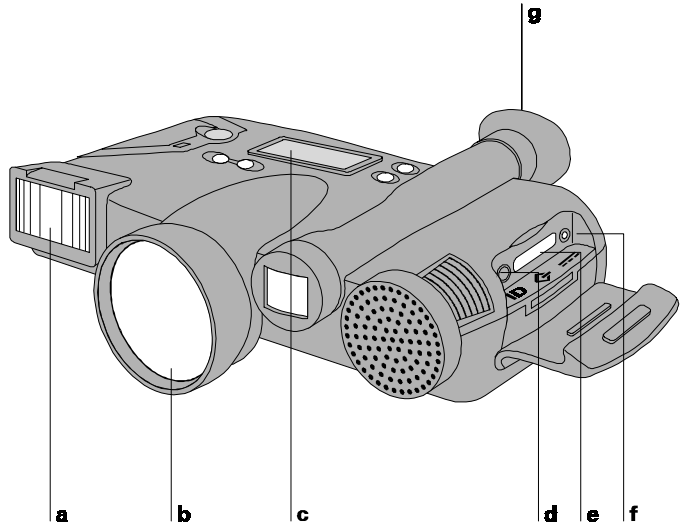


appears on the computer screen. In this mode, it transfers each picture as it is taken directly to the computer for viewing, printing, editing or storing. In the tethered mode, the camera can also send all its stored pictures to the computer at once.

This chapter explains how to use the camera in the stand-alone mode. To use your computer for controlling the camera during picture-taking and to transfer pictures from the camera to your computer, see *Using the PDC-3000 with your PowerMac/PowerPC* (page 113) or *Using the PDC-3000 with your PC* (page 159).



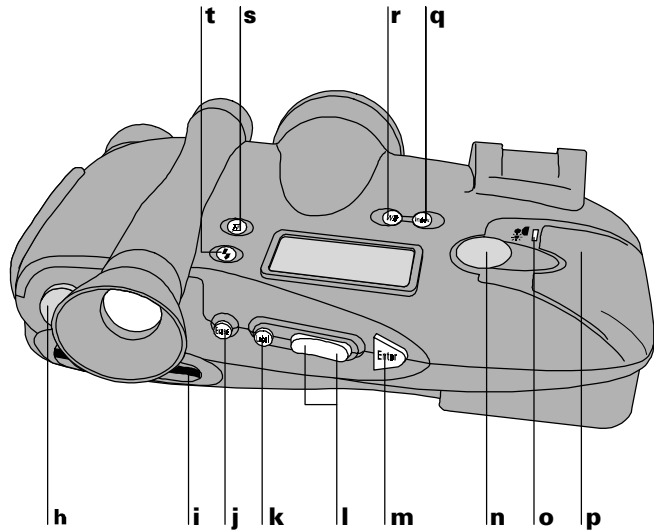
Getting acquainted



- a Flash:** Provides controlled subject lighting for correctly exposed and color-balanced pictures.
- b Lens:** Directs and focuses light into camera for capturing pictures.



- c LCD panel:** Displays picture numbers and labels, along with symbols (icons) indicating camera conditions and errors. See *LCD panel* on page 63.
- d SCSI address selector:** Sets the camera's SCSI address (required for communication with your computer).
- e SCSI cable connector:** Provides a connection to your computer via the SCSI cable provided.
- f Power adapter connector:** Connection for the power adapter/trickle charger.
- g Viewfinder:** Used for framing pictures. Also displays signals informing the operator about camera conditions. See *Viewfinder indicators* on page 67.



h **Power button:** Turns the camera power on and off.

i **CompactFlash card slot:** Accepts a CompactFlash card for storing images.

j **Erase button:** Used in the Index mode to erase pictures from the CompactFlash card. (See *Erasing pictures* on page 99.) Also used in the Index or Capture mode to erase or edit picture labels. (See *Labeling pictures* on page 92.)



- k Label button:** Activates or deactivates the Label field in the LCD panel for creating or editing picture labels. See *Labeling pictures* on page 92.
- l Scroll buttons:** When the camera is in the Menu mode, scrolls through the camera menus and menu choices. When the camera is in the Index mode, scrolls through the numbers and labels of the pictures stored on the camera CompactFlash card. If the Label field is active, scrolls through the list of alphanumeric characters for insertion in a label. (See *Labeling pictures* on page 92.)
- m Enter button:** When the camera is in the Menu mode, selects the currently displayed menu item. If the Label field is active, enters the currently displayed character in the space above the cursor and moves the cursor to the right. (See *Labeling pictures* on page 92.)
- n Shutter button:** Pressing half-way down focuses the camera and measures available light for automatically setting exposure. Pressing fully takes a picture. Also used with other buttons to delete pictures from the camera.
- o Backlight Compensation button:** Increases exposure for correct subject lighting in backlighted scenes. See *Compensating for back lighting* on page 90.

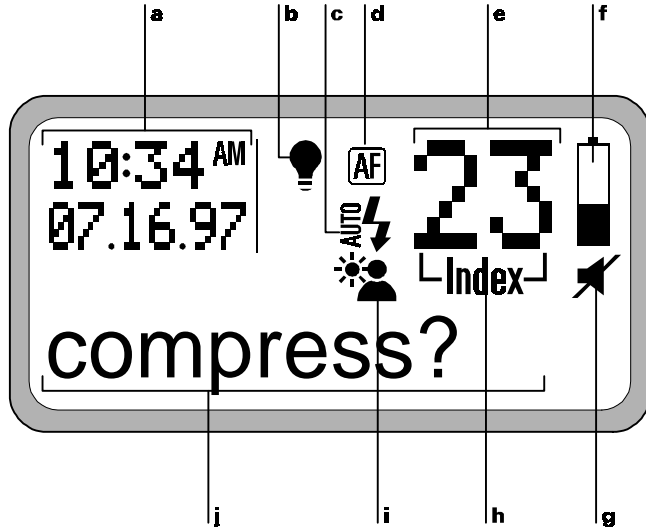


- p Battery compartment:** Holds the four rechargeable NiCad “AA” batteries powering the camera.
- q Mode button:** Changes the camera to Menu mode for selecting Index, Compression, Sound or Distance mode. Pressing a second time returns the camera to Capture mode for taking pictures. (See *Camera modes* on page 70 for more information.)
- r White Balance button:** Sets the camera for accurate color rendition in daylight, incandescent light or fluorescent light. See *Setting the camera for current lighting conditions* on page 81.
- s Auto Focus button:** Disables automatic focus and sets focus distance at infinity. See *Using Auto Focus* on page 88.
- t Flash button:** Sets flash for automatic, on or off. See *Using flash* on page 85.



LCD panel

The LCD panel on the PDC-3000 camera displays text and symbols indicating various camera settings and error conditions.



- a** **Time and date.** When the camera is in Capture mode, displays the current time and date. To set, see *Changing the preferences* on page 150 (PowerMac/PowerPC) or page 198 (PC). When the camera is in Index mode, displays the time and date the currently displayed picture was taken.



- b White balance indicator.** Displays current lighting conditions setting: (blank) daylight, (☉) incandescent light, (💡) fluorescent light.

To change the white balance setting, see *Setting camera for current lighting conditions* on page 81.

- c Flash setting indicator.** Displays current flash setting: (🔦) automatic flash, (🔦) flash on, (blank) flash off.

To change the setting, see *Using flash* on page 86.

- d Auto Focus indicator.** Displays current auto focus setting: (AF) Auto Focus on, (AF) Auto Focus off.

To change the setting, see *Using Auto Focus* on page 88.

- e Picture counter.** When the camera is in the Capture mode, displays the number of pictures stored on the camera CompactFlash card. In the Index mode, displays the number of the picture being labeled or erased.

- f Battery level indicator.** Displays current battery level: fully charged (■), low (□), and other levels.

Discharged batteries should be recharged (see *Caring for the camera batteries* on page 208) or replaced with charged batteries.



- g Sound indicator.** Displays status of camera sound: (blank) sound on, (🔊) sound off.

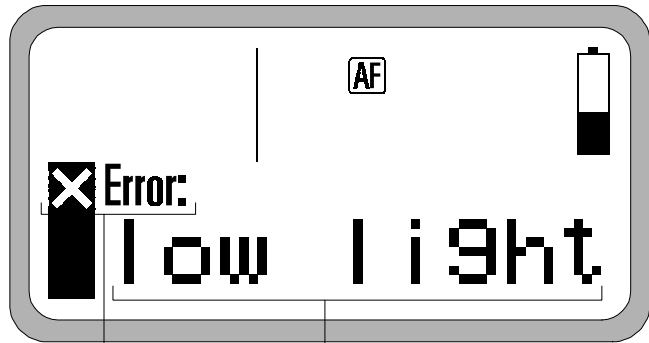
To change the setting, see *Turning sound indicators on and off* on page 106.

- h Index mode indicator.** Appears when the camera is in the Index mode.

- i Backlight compensation indicator.** Displays backlight compensation setting: (*👤) on, (blank) off.

To change the setting, see *Compensating for back lighting* on page 90.

- j Menu and label area.** Displays camera menus and a 10-character label for the current picture. (Also used for displaying messages, as described in item l.)



- k Error indicator.** Displays “Error” when an error condition exists (low light, low battery, flash not ready, CompactFlash card full or internal hardware error). See page 223 for error message troubleshooting information.
- l Message area.** Displays error messages , distance to subject as measured by the camera's rangefinder, and confirmation messages for erasing pictures and connecting the camera to the computer. (Also used for displaying menus and labels, as described in item j.)



Viewfinder indicators

For convenience while taking pictures, the PDC-3000 provides a yellow LED and a red LED at the bottom of the viewfinder. If an error condition occurs, these indicators light to alert you.

<i>Indicator</i>	<i>Meaning</i>
Yellow	Flash has not completely charged or picture being stored
Blinking red when Shutter button partially depressed	Insufficient light, storage CompactFlash card full, low battery or internal hardware error

When a blinking red LED appears in the viewfinder, the LCD panel also displays an explanatory error message. (See *LCD panel* on page 63.)



Sound indicators

The PDC-3000 provides audible tones to help alert you to the following operating or error conditions:

<i>Sound</i>	<i>Meaning</i>
One high-pitched tone when camera power turned on	Camera is ready to take pictures
Two high-pitched tones followed by a low-pitched tone when Shutter button pressed half way	Low battery
Two high-pitched tones followed by a low-pitched tone when CompactFlash card removed from camera	CompactFlash card removed while image data being transferred
Two high-pitched tones when Shutter button pressed half way	Insufficient light, flash not ready, CompactFlash card full or internal hardware error



Sound

One or two low-pitched tones when camera turned on

One or more low-pitched tones followed by camera powering off

Meaning

Internal hardware error or special condition

Battery power insufficient for camera operation

When two high-pitched tones or a low-pitched tone indicate an error condition, the LCD panel also displays an explanatory message. (See *LCD panel* on page 63.)

If you wish, you can turn camera sound off for the error condition signals. To use the computer to turn camera sound off and on, see *Changing the preferences* on page 153 (PowerMac/PowerPC) or page 198 (PC). To turn sound off and on with the camera's controls, see *Turning the sound indicators on and off* on page 106.



Camera modes

The PDC-3000 has several operating modes:

<i>Mode</i>	<i>Purpose</i>
Capture	Used for picture-taking. You can also edit the default picture label while you are in the Capture mode. (See <i>Labeling pictures</i> on page 92 for more information.)
Menu	Provides access to the Index mode and the Compression, Sound, CompactFlash card, Distance, Storage and Display menus.
Index	Allows you to use the Scroll buttons to scroll through the numbers, times, dates and labels of the pictures stored in the camera. In this mode, you can also delete pictures and edit individual labels.

Choose these modes by pressing the Mode button to toggle between the Capture and Menu modes. In the menu mode, you can select the Index, Compression, Sound, CompactFlash card, Distance, Storage or Display menu by pressing one of the Scroll buttons and pressing the Enter button when the desired menu name appears on the LCD panel.



Automatic shutoff

To help conserve battery power, the PDC-3000 has an automatic shutoff feature that turns off the camera after a preset period of inactivity (2 minutes, unless you change it as described below). The camera also turns off the viewfinder image, which can be displayed on the computer screen when taking pictures with the camera connected to the computer, if the camera remains inactive for a preset period.

The automatic shutoff timeout periods can be adjusted through the camera's internal settings. See *Changing the preferences* on page 153 (PowerMac/PowerPC) or page 198 (PC).

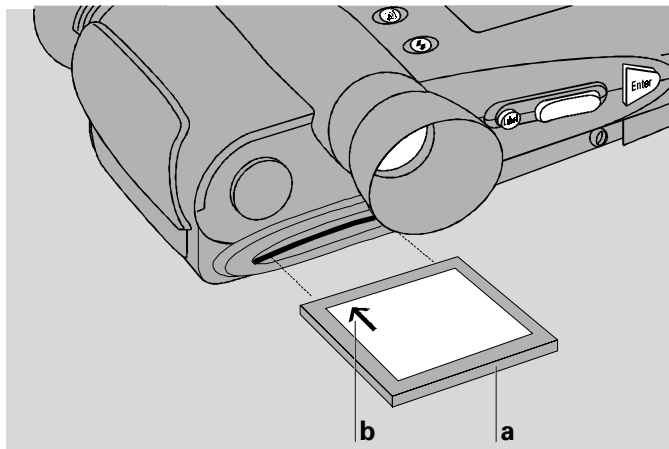
Note: Automatic shutoff is disabled while the camera is connected to AC power and is under computer control (displaying "connected" on the LCD panel).



Taking pictures

Inserting a CompactFlash card

Insert a CompactFlash card (a) into the camera by sliding it into the CompactFlash card slot. Be sure to orient the card with the insertion arrow (b) facing upward and pointing into the slot.



Slide the card into the slot until it stops, then press it firmly to engage the connector on the forward edge.



Removing the CompactFlash card

To remove the CompactFlash card, pull it out of the CompactFlash card slot.

You can safely remove the CompactFlash card with camera power on or off, but do **not** remove the card when any of these messages is visible on the camera LCD panel:

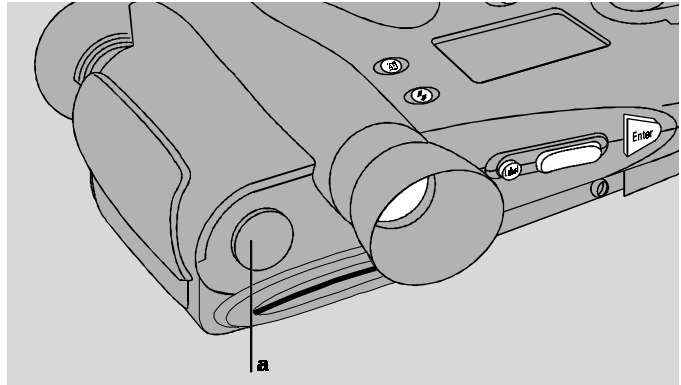
- busy
- erasing
- connected
- opening cf
- formatting

If you do remove the card during one of these operations, the message “retry cf” appears on the LCD panel. To resume and complete the operation, reinsert the CompactFlash card and press the Enter button. To abort the operation instead, turn the camera off and back on.



Turning on the camera

To turn on the PDC-3000 camera, press the Power button (a).



When you press the Power button, the camera performs a brief self-test, accesses the CompactFlash card (if one is in the camera), then displays a normal LCD panel. If the sound indicators are enabled, the camera also emits a short, high-pitched tone to indicate that it passed the self-test and is ready to take pictures.

If the camera detects any problems or errors during its self-test, it displays an error message on the LCD and emits one or two short, low-pitched tones. (For more information about error messages, see *Troubleshooting error messages* on page 223.)

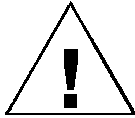


Setting to stand-alone mode

If your PDC-3000 camera is connected to a computer, you must release it from computer control to operate in the stand-alone mode.

Use either of these two methods to release it:

- Use the computer to release the camera. (See *Releasing the camera from computer control*, page 157 for PowerMac/PowerPC or page 201 for PC.)
- Disconnect the camera from the computer. (See *Disconnecting the camera from your computer* on page 53.)



WARNING: DO NOT DISCONNECT OR CONNECT ANY DEVICE WHILE THE DEVICE OR YOUR COMPUTER IS TURNED ON. DOING SO COULD DAMAGE THE DEVICE, YOUR COMPUTER, OR BOTH.



Selecting a picture compression level

Available compression levels

The PDC-3000 offers three picture compression levels and a no-compression setting. Each level uses a different method to process the image data, providing several choices of image quality and storage requirements:

<i>Compression level</i>	<i>Resulting image quality</i>	<i>Typical image capacity, 15MB card</i>	<i>Typical image capacity, 30MB card</i>
Comp off	Best	15	30
No loss 2:1	Best	30	60
Lossy 5:1	Good	75	150
Lossy 10:1	Fair	150	300

Storage space requirements for all compression levels except "Comp off" (no compression) vary according to picture scene. For this reason, storage space requirements and images per CompactFlash card presented above are typical.

For the highest quality images and efficient use of storage capacity, the No loss 2:1 setting is recommended. This compression mode reduces the storage requirements for each image while reproducing the original digital values with 100-percent accuracy. The Lossy 5:1 and Lossy 10:1 compression modes dramatically reduce storage requirements, but they



lose some picture information and slightly degrade picture quality.

Note: Comp off and No loss 2:1 result in the same image quality (best). In the Comp off mode, however, the camera requires slightly less time for completing the picture-taking sequence to be ready for the next picture.

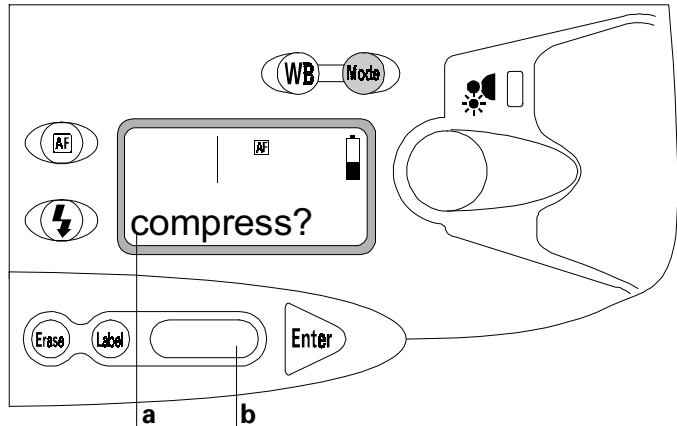


Changing the compression level

Use the steps below to change the compression level.

Note: You can also use your computer to set the compression level. See *Changing the preferences* on page 150 (PowerMac/PowerPC) or page 198 (PC).

- 1 Press the Mode button to display "compress?" on the LCD panel (a).





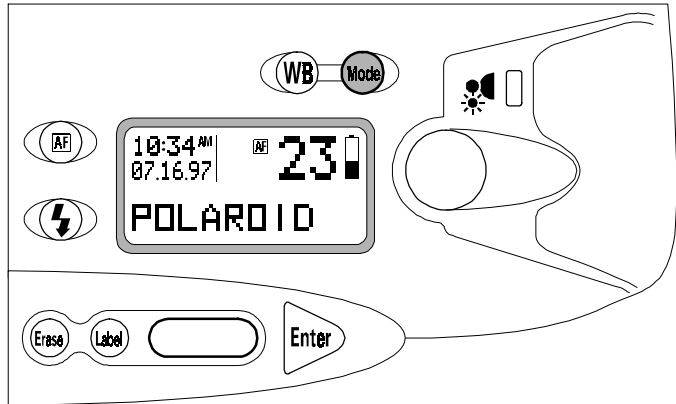
- 2** Press the Enter button to display the current compression level (“comp off,” “no loss 2:1,” “lossy 5:1,” or “lossy 10:1”).
- 3** Press a scroll button (**b**) until the desired compression level appears.
- 4** Press the Mode button to return to the Capture mode.



Selecting Capture mode

Before taking pictures, make sure the camera is in the Capture mode. In the Capture mode, the current time and date appears on the LCD panel, and the word “index” is not visible.

If the camera is in another mode instead, set the mode to Capture by pressing the Mode button.



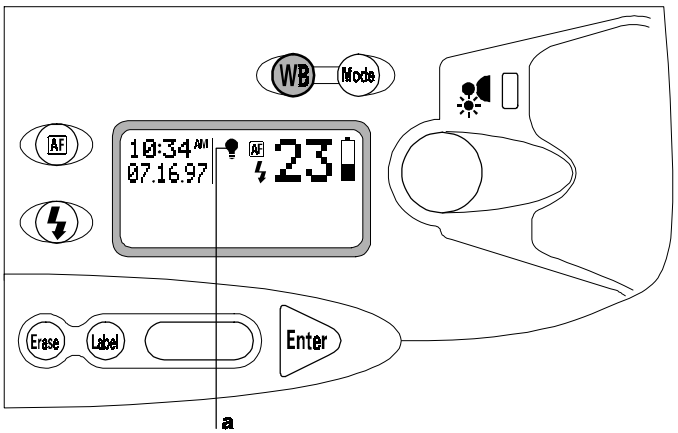


Setting the camera for current lighting conditions

To achieve accurate colors, you must choose the white balance setting that matches lighting conditions in the scene. Using an incorrect setting can give your pictures an unnatural yellow, blue or green tint.

Use the daylight setting for taking pictures outdoors. When taking pictures indoors under incandescent or fluorescent lighting, change the camera to the appropriate setting by pressing the White Balance button (WB).

When either incandescent (☀) or fluorescent (⚡) lighting is selected, the appropriate symbol appears on the LCD panel (a). When daylight is selected, no symbol is visible.

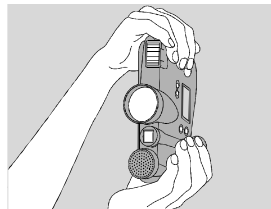
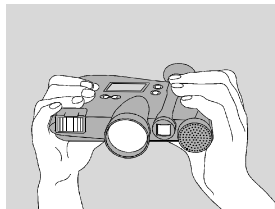




Holding the camera

The PDC-3000 camera is designed so you can easily hold it steady during picture-taking. When you hold the camera as shown, you can comfortably reach the shutter button while viewing the scene through the viewfinder. Make sure your hands do not block the flash or sonar rangefinder on the front of the camera.

If you hold the camera vertically (for portraits, for example), be sure the flash is at the top as shown.



Framing and taking the picture

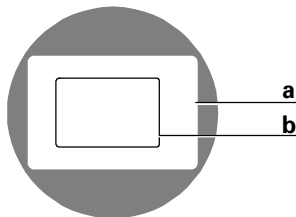
After setting the mode and lighting setting, hold the camera correctly and view the scene to be captured through the viewfinder. If necessary, move closer or farther away from the subject while looking through the viewfinder to get the framing you want. (If you wear eyeglasses, fold back the rubber eyecup on the viewfinder for easier viewing.)

With the normal 38mm-equivalent lens, the PDC-3000 camera can focus on subjects as close as 10 inches (26cm) from the lens. When framing subjects less than 2 feet (61cm) from the lens, leave some extra space between your subject



and the left and right edges of the viewfinder. At close distances, some of the area near the edges of the viewfinder may not be captured in the picture.

Note: When the normal 38mm-equivalent lens is installed on the camera, use the full viewfinder (a) for framing your picture. The frame visible in the viewfinder (b) is for framing with the optional 60mm-equivalent lens.



When the subject is framed, press the shutter button slightly while watching for a yellow or red warning indicator at the bottom of the viewfinder.

If no warning indicator is visible, take the picture by pressing the shutter button completely. (If a red or yellow warning indicator is visible in the viewfinder, release the button and refer to *If you see a viewfinder warning* below before taking the picture.)

Before or after taking the picture, you can label it as described on page 92 for easy identification.



If you see a viewfinder warning

If a yellow or red warning indicator is visible in the viewfinder when you are about to take a picture, release the shutter button and take the steps indicated below before continuing:

Indicator

Meaning and corrective action

Yellow

Flash has not completely charged or previous picture still being stored; wait until the LED goes out before taking the picture



Indicator *Meaning and corrective action*

Blinking red Insufficient light; use flash
(below)
or
Camera CompactFlash card is
full; insert another card or erase
one or more pictures (page 92)
after transferring the stored
pictures to the computer (page
127 for PowerMac/PowerPC,
page 173 for PC).
or
Low battery power; recharge
batteries (page 208)
or
Hardware error; see *Trouble-
shooting error messages* (page
223)

Note: When you see the blinking red LED in the viewfinder,
look at the LCD panel for more information about the
problem.



Using flash

The PDC-3000 camera provides three flash modes for optimum picture quality under a great variety of lighting conditions:



- Automatic (⚡) Camera automatically determines whether or not to use flash
- On (⚡) Flash fires with every picture
- Off (blank) Flash never fires

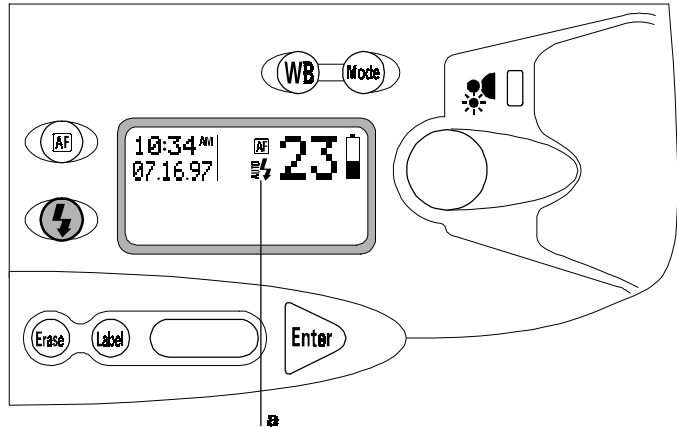
Automatic (⚡) is the recommended setting, and should produce correctly lighted pictures under most conditions. The flash is effective up to 15 feet (4.6m) from the subject.

Use the flash On (⚡) setting when conditions might cause the automatic flash system to mistakenly determine that flash is not needed. Outdoors, for example, overall scene lighting may be adequate but the main subject may be in shadow. In this case, the automatic flash would not fire and the subject would be too dark. In this case, using the flash On setting would expose the subject correctly.

Use the flash Off (no symbol) setting when sufficient light is available and you do not wish to fire the flash.



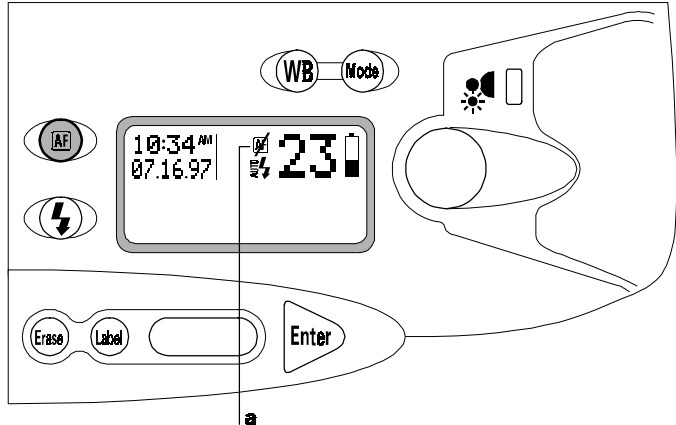
To change the flash setting, press the Flash button (⚡) until , , or no symbol, as appropriate, appears in the LCD panel (a).





Using Auto Focus

The PDC-3000 camera features automatic focus that produces sharp pictures under most conditions. To disable automatic focus and set focus to infinity (for taking pictures through a window, for example), press the Auto Focus button (AF) to display the Auto Focus Off symbol (AF) on the LCD panel (a).



You can reset to Auto Focus On (AF) by pressing the Auto Focus button again. The camera automatically resets to Auto Focus On when the camera is turned on.



Using Focus Lock

The Focus Lock feature lets you achieve sharp focus when the main subject is not centered in the picture.

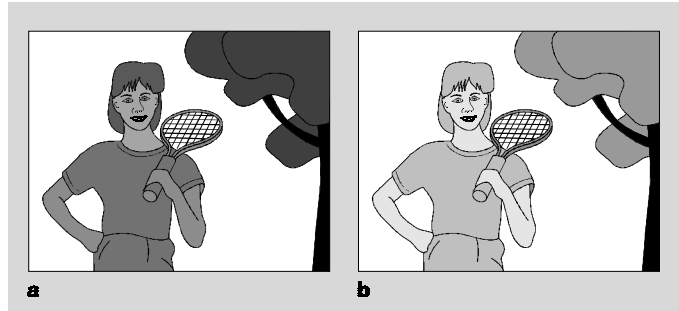
To use Focus Lock, center the subject in the viewfinder and press the Shutter button half-way down to lock the focus distance. While continuing to hold the Shutter button, reframe the picture as desired. Then press the Shutter button all the way to take the picture.

If necessary, turn on the distance display (see page 108) to verify the camera-to subject distance measured by the camera.



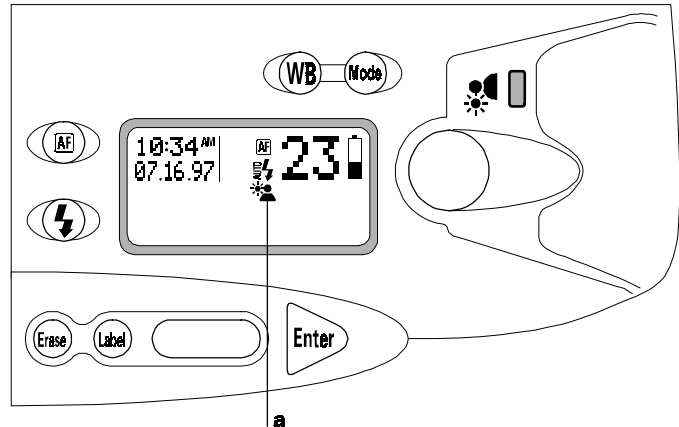
Compensating for back lighting

The PDC-3000 camera's exposure system automatically adjusts to most lighting conditions. But when the background is much brighter than your subject or "back-lighted," the subject may turn out too dark (a). Using the Backlight Compensation feature increases the brightness of the entire picture to produce a correctly exposed subject (b).





Turn on Backlight Compensation by pressing the Backlight Compensation button (☀️).

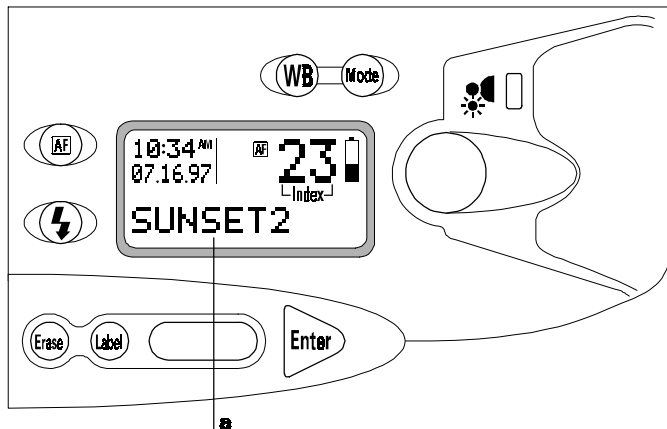


A symbol (☀️) in the LCD panel (a) indicates that Backlight Compensation is on. The camera automatically turns Backlight Compensation off after you take a picture or when the camera is turned on.



Labeling pictures

To help identify your pictures, you can use the camera controls to assign a 10-character label to each one. This label (a) appears on the camera LCD panel whenever the picture number is displayed in the Index mode, and it remains with the picture when it is transferred to the computer.



With the procedures in this section, you can edit the default picture label applied to all pictures taken after the default label is entered. (Your PDC-3000 camera was shipped with "POLAROID" as the default picture label.) You can also edit this default label to create unique labels for individual pictures any time after the pictures are taken.



Editing the default picture label

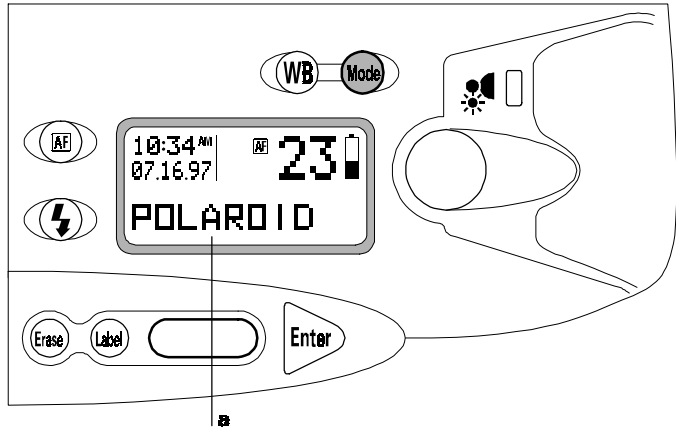
Note: You can also use your computer to edit the default picture label or change individual picture labels for pictures being transferred to the computer. For more information, see Chapter 4 (PowerMac/PowerPC) or Chapter 5 (PC).

Use the following steps to edit the default picture label stored in the camera. This label will appear on all pictures taken after the label is edited.

- 1 Make sure the camera is in the Capture mode (the current time and date are visible on the LCD panel, and the word “index” is **not** visible). If the camera is in another mode, set the mode to Capture by pressing the Mode button.

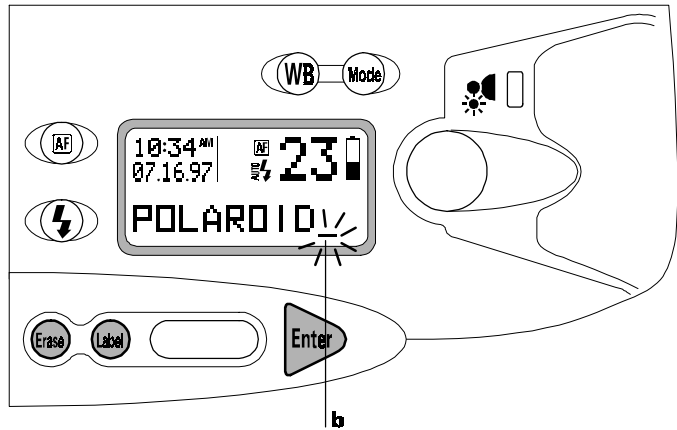


The current default picture label (a) is visible if you have chosen Label as the Capture mode display. (See *Choosing the Capture mode display* on page 109 for more information.)





- 2 Press the Label button to display a blinking cursor (**b**) under the first empty character space in the LCD panel label field.



If no default label exists, the cursor appears in the first character space of the label field.

- 3 Press the Erase button once to erase the last character of the label, twice to erase the last two characters, etc. To erase the entire label, hold the Erase button for 3 seconds or longer.

If no picture label exists, it is not necessary to press the Erase button.



- 4 To insert a new character at the cursor location, press the Scroll button until the desired character appears in the space. Press the Enter button to store the character and move the cursor to the next space.

Note: Only upper case (capital) letters, numerals, hyphen (-) and space are available for labels.

To leave a blank space, press the Enter button without entering a character.

- 5 Repeat step 4 until you have completed the label (up to 10 characters and spaces).
- 6 Exit from the Label mode by pressing the Label button.

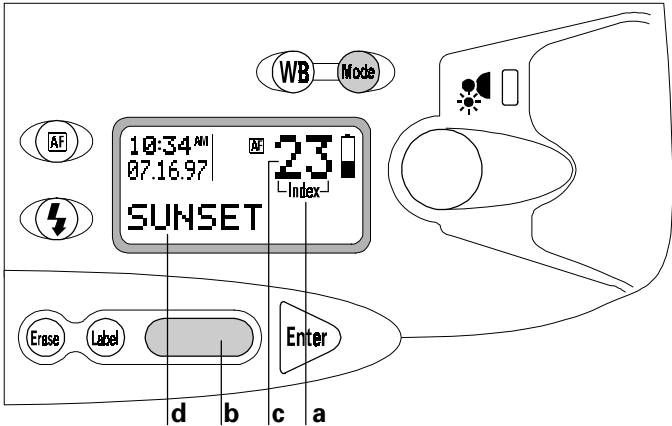
To individualize the default label for a single picture, use the procedure in the following section.



Editing a single picture label

Use the following steps to edit an individual picture label:

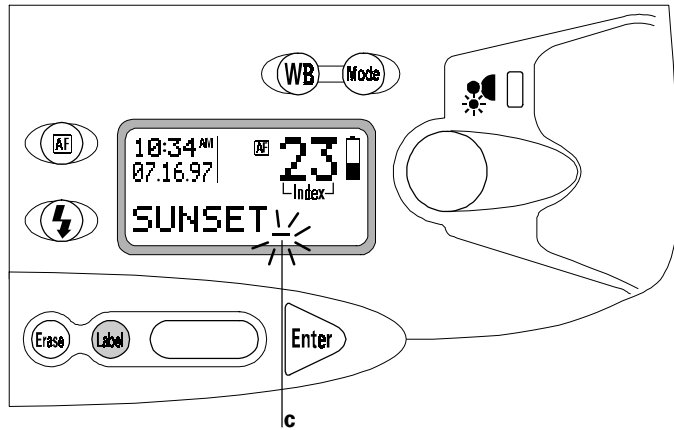
- 1 Place the camera in the Index mode (a) by pressing the Mode button to display “compress?”, pressing the scroll button (b) to display “index?”, and then pressing the Enter button.



- 2 If the number (c) of the picture receiving the new label is not displayed in the LCD panel, press the Scroll button (b) until the desired picture number and label (d) appear.



- 3 Press the Label button to display a blinking cursor (c) under the first empty space in the LCD panel label field.



- 4 Press the Erase button once to erase the last character of the label, twice to erase the last two characters, etc. To erase the entire label, hold the Erase button for 3 seconds or longer.

If no picture label exists, it is not necessary to press the Erase button.
- 5 To insert a new character at the cursor location, press the Scroll button until the desired character appears in the label space. Press the Enter button to store the character and move the cursor to the next space.



To leave a blank space, press the Enter button without entering a character.

- 6** Repeat step 5 until you have completed the new label (up to 10 characters and spaces).
- 7** Exit from the Label mode by pressing the Label button.

Erasing pictures

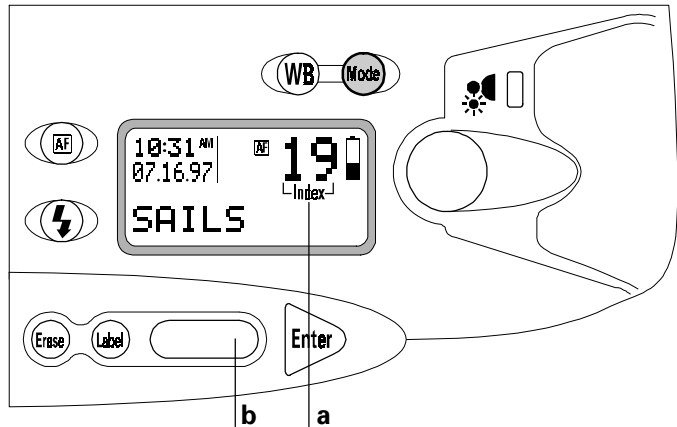
When you reach the CompactFlash card storage limit or you want to retake pictures for any reason, you can easily erase one or more pictures from the card. (If you have an additional CompactFlash card, you can use it to replace the full card instead of erasing pictures.)

If you are using the camera in the stand-alone mode, use the following procedure to erase pictures. (If the camera is connected to the computer, use the computer to erase pictures from the camera. For that procedure, see *Deleting pictures from the camera* on page 141 for PowerMac/PowerPC or page 188 for PC.)



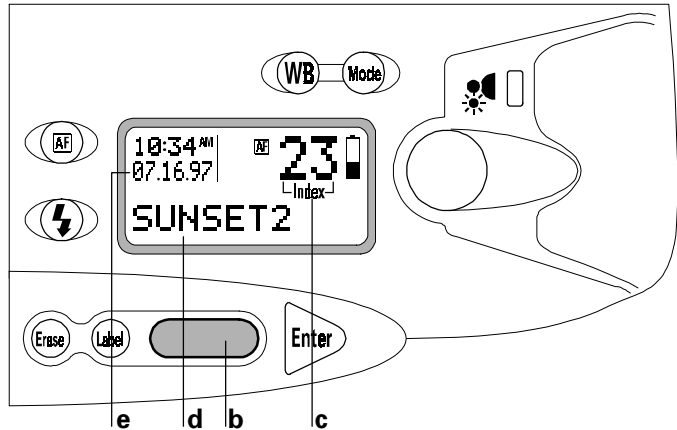
Erasing a single picture

- 1 Place the camera in the Index mode (a) by pressing the Mode button to display “compress?”, pressing the scroll button (b) to display “index?”, and then pressing the Enter button.



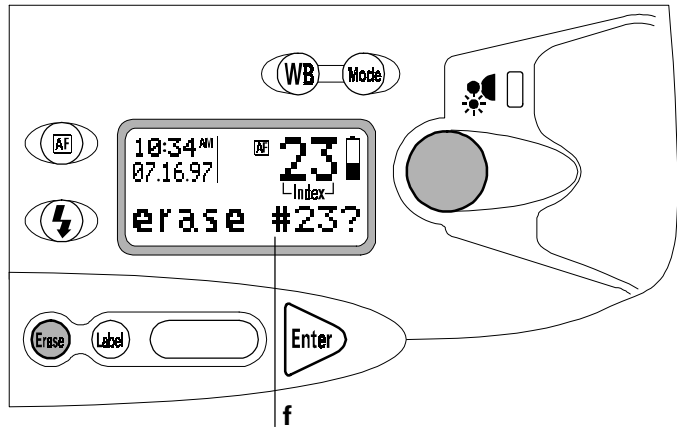


- 2 Press the Scroll button (b) until the number (c), label (d), if used, and date and time (e) of the desired picture appears in the LCD panel.

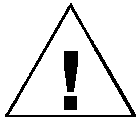




- 3 Simultaneously press and release the Erase button and the Shutter button to display a confirmation message (f) on the LCD panel. (Be sure to press the Shutter button all the way.)



- 4 To erase the picture, press the Erase button a second time. (If you decide not to erase the picture, do **not** press the Erase button. Instead, wait for the confirmation message to disappear or press the Enter button.)
- 5 Repeat steps 2, 3 and 4 as needed to erase additional pictures.

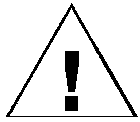


Important: When you erase a picture, the picture numbers change to produce a continuous sequence starting at 1 for all remaining pictures. When erasing multiple pictures, you should erase the highest-numbered picture first to avoid accidentally erasing pictures you want to keep.

- 6** To change to Capture mode for taking more pictures, press the Mode button.

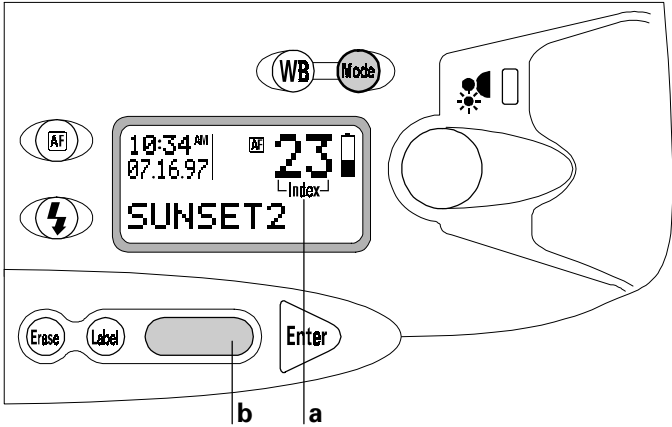


Erasing all pictures



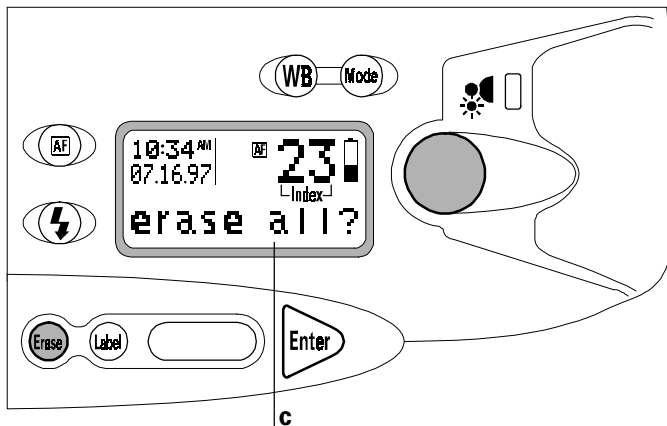
WARNING: THIS PROCEDURE ERASES ALL PICTURES STORED ON THE CARD. IF YOU WANT TO KEEP ANY PICTURES, BE SURE TO TRANSFER THEM TO THE COMPUTER (SEE PAGE 128 FOR POWERMAC/POWERPC OR PAGE 174 FOR PC) BEFORE USING THE STEPS BELOW.

- 1 Place the camera in the Index mode (a) by pressing the Mode button to display “compress?”, pressing the scroll button (b) to display “index?”, and then pressing the Enter button.





- 2 Simultaneously press and hold the Erase button and the Shutter button for 5 seconds to display “erase all?” (c) on the LCD panel. (Be sure to press the Shutter button completely.) Release the buttons when the message appears.



- 3 To erase all the pictures, press the Erase button a second time. (If you decide not to erase the pictures, do **not** press the Erase button. Instead, wait for the confirmation message to disappear or press the Enter button.)
- 4 To change to Capture mode for taking more pictures, press the Mode button.

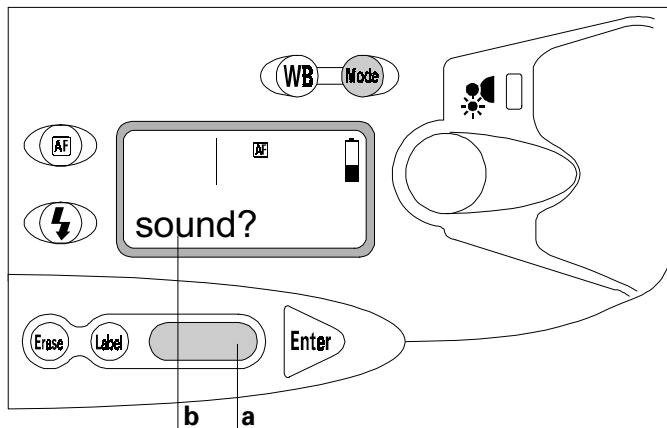


Turning sound indicators on and off

You can use the procedure below to turn the camera sound indicators on and off. (See page 68 for a description of the sound indicators.)

Note: You can also use your computer to turn the sound indicators on and off. See *Changing the preferences* on page 150 (PowerMac/PowerPC) or page 198 (PC).

- 1 Press the Mode button to display "compress?" on the LCD panel, then press the scroll button (a) until "sound?" (b) appears.





- 2** Press the Enter button to display the current setting ("sound off" or "sound on").
- 3** Press a scroll button until the desired setting appears.
- 4** Press the Mode button to return to the Capture mode.

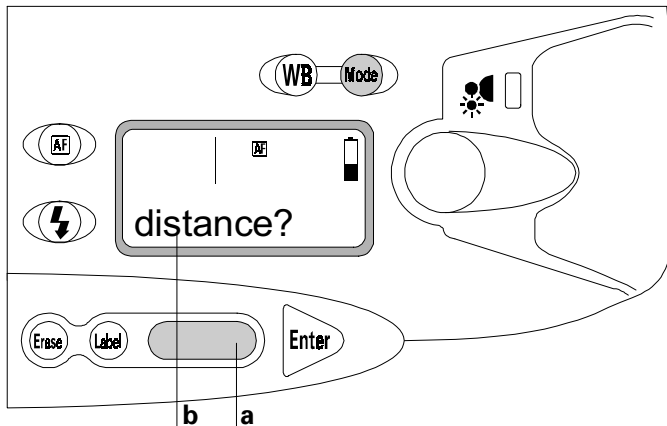


Choosing LCD panel display options

Choosing a distance display mode

The camera-to-subject distance as measured by the camera rangefinder appears on the LCD display when you aim the camera at the subject and depress the shutter button half-way. You can use the procedure below to set this display to either feet or meters.

- 1 Press the Mode button to display "compress?" on the LCD panel, then press the scroll button (a) until "distance?" (b) appears.





- 2 Press the Enter button to display the current setting ("dist feet" or "dist meter").
- 3 Press a scroll button until the desired setting appears.
- 4 Press the Mode button to return to the Capture mode.

Choosing the Capture mode display

Display choices

When the camera is in the Capture mode, any of the following information can be displayed on the bottom line of the camera LCD panel:

- Default picture label
- Current picture compression level
- Available CompactFlash card storage space, megabytes
- Available CompactFlash card storage space, pictures (at the current compression level)
- Graphical storage gauge

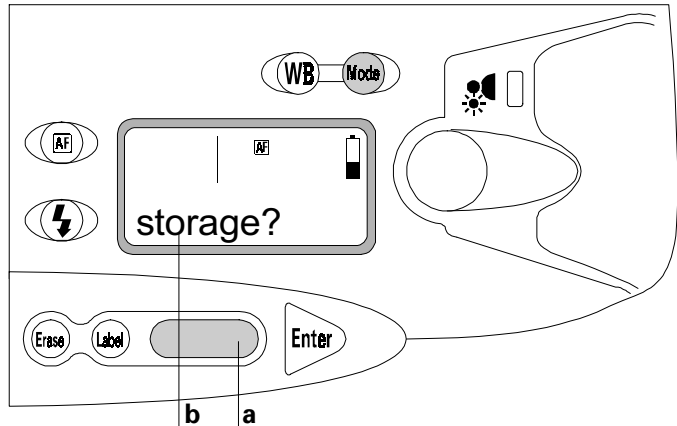


Changing the display

Use the following steps to choose the capture mode display:

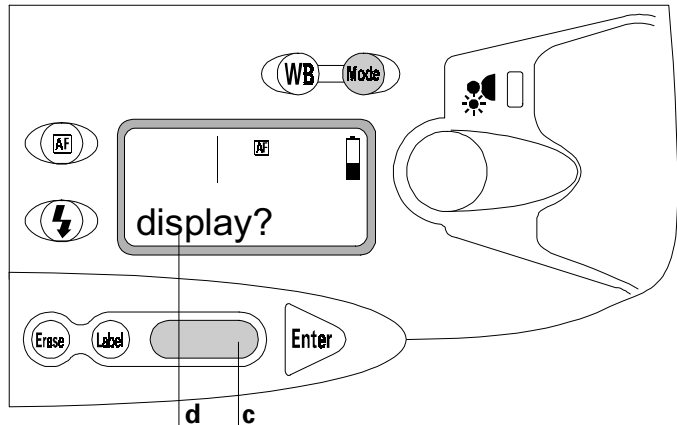
- 1 Press the Mode button to display "compress?" on the LCD panel.
- 2 If you want to display the default picture label or the current compression level during Capture mode, skip to step 5.

If you want to display available CompactFlash card space or the graphical storage gauge, press the scroll button (a) until "storage?" (b) appears.





- 2 Press the Enter button, then press the scroll button until the setting you want (available space in megabytes or pictures, or a graphical storage gauge) appears.
- 3 Press the Mode button to choose the setting and return to the Capture mode.
- 4 Press the Mode button to display "compress?" on the LCD panel.
- 5 Press the scroll button (c) until "display?" (d) appears.





- 6** Press the Enter button, then press the scroll button until the desired display setting (“compress,” “storage” or “label”) appears.
- 7** Press the Mode button to choose the setting and return to the Capture mode.



4 Using the PDC-3000 with your PowerMac/PowerPC

To optimize, transfer and work with pictures from the PDC-3000 camera on your PowerMac or PowerPC, you use the PDC Plug-in module with an image-processing application, such as Adobe Photoshop. If you do not have an application compatible with plug-in modules, you can use PDC Direct. (PDC Direct was installed on your computer during PDC software installation described in Chapter 2.)

With the PDC-3000 camera connected to your computer and with the PDC Plug-in or PDC Direct software, you can perform the following operations:

View the pictures stored in the camera You can quickly view all the pictures in the camera by displaying miniature representations of them (called thumbnails) in a single window. You can also view larger versions (called previews) of individual pictures.

Transfer multiple pictures You can use the thumbnail view to choose and transfer pictures from the camera to your computer. You can select image resolution and enhancement settings before transfer and save your pictures as TIFF files on



your computer. If you save the images as PDN files, you can enhance them, choose their resolution and save them as TIFF files at a later time for viewing or printing.

Operate the camera through the computer You can take pictures by using your computer keyboard or mouse, while using the computer screen as a viewfinder. This is particularly convenient for studios and other stationary setups.

Change camera setup You must use the PDC software to change the PDC-3000 camera's internal date, time, user name and other settings.

If you have transferred pictures from the PDC-3000 camera to your computer and stored them in the PDN image format, you can also use the PDC Plug-in or PDC Direct without the camera to enhance the pictures and save them in the TIFF image format.

The PDC windows

When you use the PDC Plug-in software from within an image-processing application or when you launch PDC Direct, three different windows are available:

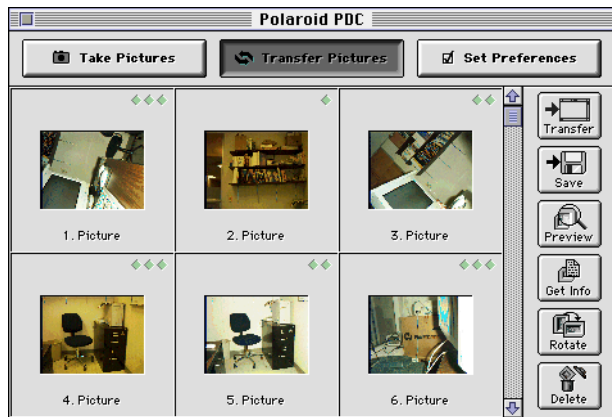
- Transfer Pictures window



Transfer Pictures window

- Take Pictures window
- Set Preferences window

The Transfer Pictures window displays thumbnail representations of pictures in the camera.



From the Transfer Pictures window, you can:

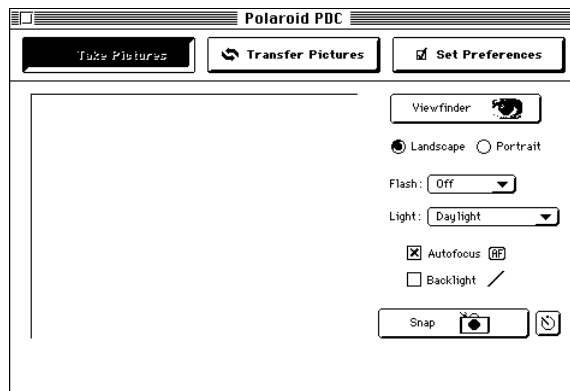
- Transfer selected pictures from the camera to an image-processing application (if you are using the PDC Plug-in).
- Save selected pictures in a TIFF or PDN (Polaroid Digital Negative) format on your computer hard disk.



- Display a preview image (larger than a thumbnail) and choose enhancement and resolution settings for transferring the picture to your computer.
- Rotate selected pictures in 90-degree increments.
- Edit picture labels.
- View picture information, including date, time, user name, and camera settings in effect when the picture was taken.
- Delete selected pictures from the camera.

Take Pictures window

The Take Pictures window lets you control the camera through the computer while you take pictures.





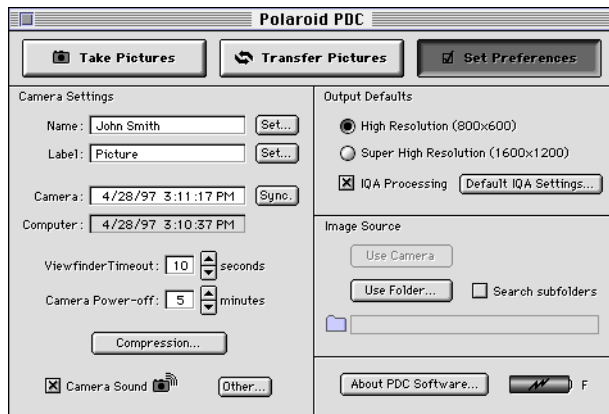
With the Take Pictures window you can:

- Display a viewfinder image on your computer screen for framing pictures.
- Change the viewfinder orientation from landscape to portrait or vice versa.
- Change the camera settings for flash, lighting conditions, automatic focus and backlight compensation just as you would with the controls on the camera.
- Take a picture and immediately transfer it to the computer or to a preview window where you can choose enhancement and resolution options before saving the picture to your computer.



Set Preferences window

The Set Preferences window lets you change the internally stored camera settings and the way pictures are processed and transferred from the camera to the computer.



From the Set Preferences window you can:

- Change the user name recorded with each picture.
- Change the default picture label.
- Change the camera's internal clock settings to match the computer's time and date settings.
- Change the camera's automatic shutoff settings.



- Change the picture compression mode of the camera.
- Turn the camera sound indicators off and on.
- Choose feet or meters as the units of measure for focus distance.
- Select the default resolution of pictures transferred from the camera to the computer.
- Choose the default IQA image enhancement settings applied to pictures being transferred to your host application or to your computer hard disk.
- Switch between working with pictures stored on the camera CompactFlash card and pictures stored as PDN files on your computer.



Working with pictures in the camera

Using either the PDC Plug-in software with your image-processing application or PDC Direct, you can look at thumbnails (small representations) of pictures stored in the camera without transferring them to the computer. While viewing the thumbnails on your computer screen, you can rotate pictures, transfer pictures to the computer, or delete pictures from the camera.

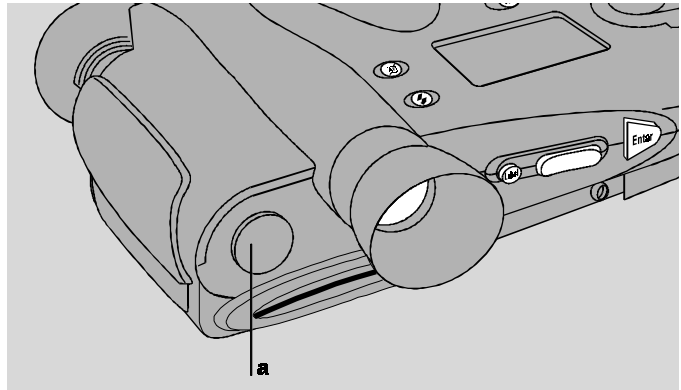
Viewing pictures in the camera

To display thumbnails of the pictures stored in the camera:

- 1** Connect the camera to your computer. If necessary, see *Connecting the camera to your PowerMac/PowerPC* on page 32.



- 2 Turn on the camera by pressing the Power button (a).



- 3 Turn on your computer.
- 4 Start an image-processing application compatible with Photoshop plug-ins, or start PDC Direct.
- 5 If you are using PDC Direct, skip to step 6.

If you are using a plug-in compatible image-processing application, choose Acquire from the File menu, then choose Polaroid PDC.



- 6 If the Transfer Pictures window is not visible, click on the Transfer Pictures button to display it.



If all the thumbnails cannot fit in the window, click on the vertical scroll bar to view additional thumbnails.



Selecting thumbnails

Before you can perform operations (rotate, delete, etc.) on the pictures represented by the thumbnails in the Transfer Pictures window, you must select one or more of the thumbnails.

To select a single thumbnail, click it once or press the arrow keys to move to the thumbnail you want to select. A red border appears around the thumbnail. If all the thumbnails do not fit in the window, the rows of thumbnails automatically scroll as you use the arrow keys.

To select several thumbnails, press and hold the Shift key and then click the thumbnails or use the arrow keys. To select all the thumbnails, hold down the ⌘ (Command) key and press the A key.

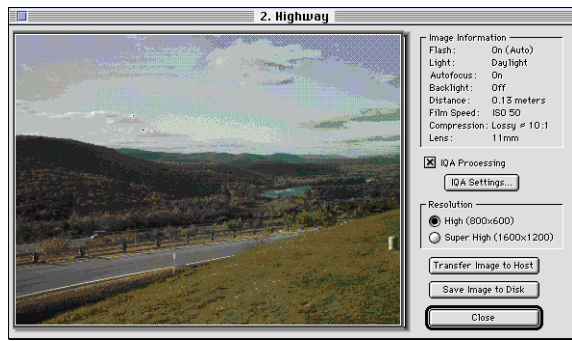
To deselect one thumbnail, press and hold the Shift key and click the selected thumbnail. To deselect all thumbnails, hold down the ⌘ key and press the A key.



Previewing pictures

The preview feature of the PDC Plug-in and PDC Direct provides a way to display a 400x300-pixel representation of any picture in the Transfer Pictures window for closer viewing.

To display the preview window, click on the desired thumbnail to select it. Then click the Preview button.



The preview window also displays the following information about the selected picture:

- Flash setting
- Light source
- Auto focus setting
- Backlight compensation setting



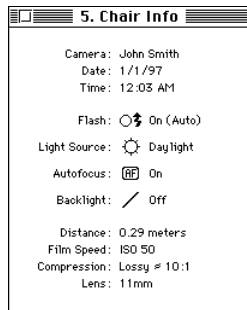
- Focus distance
- Film speed equivalent
- Compression level
- Lens

From the preview window, you can also choose IQA processing and resolution options for the displayed picture and then transfer it to your computer. See *Transferring pictures to your computer one at a time* on page 128 for instructions.



Viewing picture information

When the Transfer Pictures window is open, you can display the same information described in Previewing pictures above. Select the desired thumbnail as described on page 123. Then choose the Get Info button or hold down the **⌘** (Command) key and press the I key to display the image information window.



Rotating pictures

You can rotate a picture in 90-degree increments to change its orientation from landscape to portrait or vice versa.

To rotate one or more pictures:

- 1 View the pictures in the camera as described on page 120.



- 2 Select one or more pictures to be rotated. (See *Selecting thumbnails* on page 123.)
- 3 Rotate the selected pictures 90 degrees by clicking the Rotate button or hold down the ⌘ (Command) key and press the R key.
- 4 To rotate the pictures further, continue to click the Rotate button again or hold down ⌘ and press R.

Note: To rotate the selected thumbnails back to their original orientation, hold down ⌘ and Shift, and press R.

Editing a picture label

If necessary, you can edit individual picture labels in the Transfer Pictures window. To edit the label text, click on the label and use the keyboard. You can move among labels by either clicking with the mouse or pressing the Tab key.

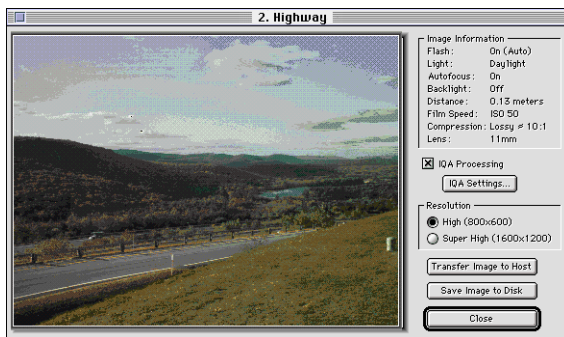
Note: Unlike individual labels created with the camera controls as described in *Editing a single picture's label* on page 97, labels edited with the computer are not saved in the camera. They remain visible only while you are viewing the Transfer Pictures window. This feature can be useful for pre-naming the images you wish to save or transfer.



Transferring pictures to your computer one at a time

Use the following procedure if you want to transfer a single picture from the PDC-3000 camera and choose enhancement and resolution options at the time of transfer. You can also repeat this procedure as needed for transferring multiple pictures if you want to set the IQA-processing, resolution and file-format options individually for each picture.

- 1 View the pictures in the camera as described on page 120.
- 2 Select the picture to be transferred by clicking on its thumbnail.
- 3 Click the Preview button to display the preview window.





- 4 Enable or disable IQA processing for this picture by clicking the IQA Processing box. If you enable IQA processing and want to change individual IQA options, click the IQA Settings button and choose the options you want applied to this picture. (See *Choosing IQA processing options* on page 135 for more information about this feature.)

As you make choices about IQA settings, you can see the result of the settings (except Match Sharpness and Noise Reduction) in the preview image.

Note: IQA processing has no effect on pictures being saved in the PDN format. It affects only pictures being saved to your computer as TIFF files or being transferred to an application.

- 5 Choose a resolution (High or Super High) for the picture being transferred.

Note: The resolution setting has no effect on pictures being saved in the PDN format. It affects only pictures being saved to your computer as TIFF files or being transferred to a your application.

- 6 To save the image on your computer as a TIFF or PDN file, click the Save Image to Disk button and choose a folder, file format (TIFF or PDN) and a filename. (See *Choosing a file format* on page 139 for more information.)



To transfer the image to your application, click the Transfer to Application button. (This button is not available if you are running PDC Direct.)

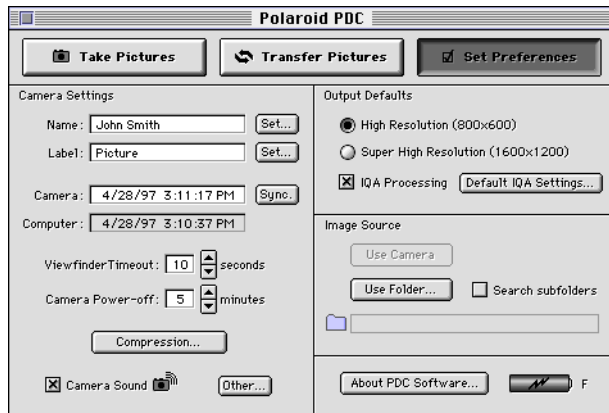
Note: After transferring the picture to an application, you must save it to disk using the Save As command in the application. Most image-processing applications allow you to choose a file format for the pictures you are saving. See instructions with your image-processing application for a description of formats available to you.



Transferring multiple pictures to your computer

Use the following procedure if you want to transfer multiple pictures from the PDC-3000 camera to your computer, and if you want to use the same IQA-processing, resolution and file-format options for all the pictures being transferred.

- 1 View the pictures in the camera as described on page 120.
- 2 Click Set Preferences to display the Set Preferences window.



- 3 Choose a resolution (High or Super High) for the pictures being transferred.



Note: The resolution setting has no effect on pictures being saved in the PDN format. It affects only pictures being saved to your computer as TIFF files or being transferred to an application.

- 4 Enable or disable IQA processing for the pictures being transferred by clicking the Use IQA Processing box. If you enable IQA processing and want to change the IQA options, click the Default IQA Settings button and choose the options you want applied to this picture. (See *Choosing IQA processing options* on page 135 for more information about this feature.)

Note: IQA processing has no effect on pictures being saved in the PDN format. It affects only pictures being saved to your computer as TIFF files or being transferred to an application.



- 5 Click Transfer Pictures to display the Transfer Pictures window.



- 6 Select the pictures to be transferred. (See *Selecting thumbnails* on page 123.)



- 7 To save the images on your computer as a TIFF or PDN files, click the Save button and choose a folder, file format (TIFF or PDN) and a base name for the saved files. (For more information about file formats, see *Choosing a file format* on page 139. The base name is the first 10 characters of the file names given to the stored pictures. If you do not change the base name, the file names will contain the first 10 characters of the label on the first picture being transferred. A two-digit numeral will be appended to the six characters, producing a unique, 12-character name for each file.)

To transfer the pictures to your application, click the Transfer button. (This button is not available if you are running PDC Direct.)

Note: After transferring the pictures to an application, you must save each one to disk using the Save As command in the application. Most image-processing applications allow you to choose a file format for the pictures you are saving. See instructions with your image-processing application for a description of formats available to you.

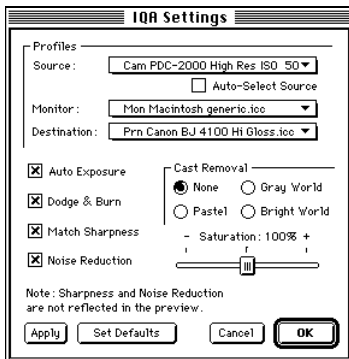


Choosing IQA processing options

IQA processing automatically evaluates images and applies correction factors for several image quality parameters when the picture is transferred to an application on your computer or saved as a TIFF file on your computer hard disk. The correction factors applied to each image depend on the camera settings when the picture was taken, the printer or monitor that will be used to print or display the picture, and the scene content.

Enabling IQA and choosing IQA options

To enable or disable individual IQA corrections or specify destinations for pictures being transferred individually as described in *Transferring pictures to your computer one at a time* on page 128, click the IQA Settings button in the preview window. The IQA Settings box appears.





To display a similar box for choosing default IQA settings (used when transferring pictures without using the preview window or when transferring multiple pictures as described on page 131), click the Default IQA Settings button in the Set Preferences window.

Specifying a source profile

IQA processing optimizes your pictures to suit the specific imaging characteristics of the source (the PDC-3000 camera). You indicate this source in the IQA Setup or Default IQA Settings box.

For most pictures, leave the Auto-Select Source box checked. (The PDC software automatically makes this choice based on the PDC-3000 camera settings recorded with the picture when it was taken.)

Specifying a monitor profile

In the Monitor drop-down list, select the monitor (usually your current monitor) you will use to view the preview pictures on your system. This allows IQA to optimize the way it displays preview pictures on your system.



Specifying a destination profile

In the Destination box, choose the ultimate destination of the picture (a monitor for on-screen presentations, for example, or a printer with a particular resolution setting for reports or memos). This choice allows IQA to optimize the picture for the imaging characteristics of the monitor or printer.

Note: When you print the picture, be sure to choose the same printer and settings you selected. Also be sure all the other printer options are set according to *Required printer settings for IQA* on page 237.

If your printer is not listed in the Destination box, choose the generic monitor setting (“Mon Macintosh generic.icc”). If this choice produces unsatisfactory results when you print, experiment with printer choices in the same family as your printer. You can also check the Polaroid site on the World Wide Web (<http://www.polaroid.com>) for additional printer profiles to download. If none of these options produces satisfactory results, you may need to disable IQA processing in the preview window or the Set Preferences window.



IQA correction choices

IQA provides the following types of image quality correction, and you can choose them in any combination to suit the pictures you are transferring to your computer:

- **Auto Exposure** (brightness) Automatically corrects for over-exposure or under-exposure.
- **Dodge and Burn** (highlight and shadow detail) Enhances highlights by slightly darkening washed-out highlights and slightly lightening dark shadow areas that lack detail.
- **Match Sharpness** Optimizes image sharpness for the selected source and destination devices. Match Sharpness does not affect the preview image.
- **Noise Reduction** (removing specks and other small image imperfections) Reduces image noise to the optimum level for the selected source and destination devices. Noise Reduction does not affect the preview image.
- **Cast Removal** Provides the following selections for correcting the color bias (the overall tint) of the current picture:

None Disables Cast Removal (no change in cast).

Pastel Uses mostly light-colored pixels to determine and correct the color bias.



Gray World Uses all the pixels in the picture to determine and correct the color bias.

Bright World Uses the brighter pixels to determine and correct the color bias.

- **Saturation** Reduces or increases color saturation. Moving the slider left decreases saturation, and moving it right increases saturation. Placing the slider in the center position leaves saturation unaffected.

Choosing a file format

When transferring pictures from the PDC-3000 camera directly to disk as described in the previous section, you have a choice of two file formats for the transferred pictures: TIFF and PDN.

TIFF is a standard image file format compatible with most image-processing, presentation, word-processing and page-layout applications. When you transfer pictures in this format, you can later import them to other applications for displaying or printing.



When the PDC software is used to save pictures in the TIFF format, it saves the pictures in one of two available resolutions: High (800x600 pixels) or Super High (1600x1200 pixels). It also applies Polaroid's IQA image enhancement to the saved images if you have selected IQA processing through the Set Preferences window or the preview window accessible from the Transfer Pictures window.

PDN ("Polaroid Digital Negative") is a proprietary Polaroid format that generally cannot be used with other applications. The PDN format, however, provides you with more options than the TIFF format after you have transferred the pictures to your computer. PDN files also require considerably less storage space than their equivalent TIFF files.

Pictures saved on your computer's hard drive in the PDN format can be converted to TIFF images later via the PDC Plug-in or PDC Direct. At the time of conversion, you can choose the resolution (High or Super High) and the IQA image enhancement options. (See *Working with PDN pictures saved on your computer* on 142 for more information.)



Deleting pictures from the camera

Use the following procedure to delete pictures from the PDC-3000 camera.

If you want to keep any of the pictures you are about to delete, be sure to transfer them to the computer as described in the previous sections **before** deleting them from the camera.

To delete pictures from the camera:

- 1 View the pictures in the camera as described on page 120.
- 2 Select one or more pictures to be deleted. (See *Selecting thumbnails* on page 123.)
- 3 Use one of these methods to display a confirmation dialog box:
 - Click the Delete button.
 - Press the Delete key.
 - Hold down the ⌘ (Command) key and press the D key.
- 4 To delete the selected pictures from the camera, click OK in the confirmation dialog box.



Note: If you are not deleting all the pictures from the camera, those remaining will be renumbered. For example, you may decide to delete all pictures except 4 and 23. In this case, picture 4 becomes picture 1, and picture 23 becomes picture 2.

Working with PDN pictures saved on your computer

If you have transferred pictures from the camera in the PDN format to a folder on your computer, you can work with the PDN files in the folder as if they were still in the camera. This is useful for producing multiple variations of a picture from the same PDN file. For example, you may want to create one version of a picture in high resolution, and a second in super high resolution for another purpose.

You can also archive pictures in the PDN format so you can choose resolution, IQA processing options, and printer or monitor destinations at a later time.



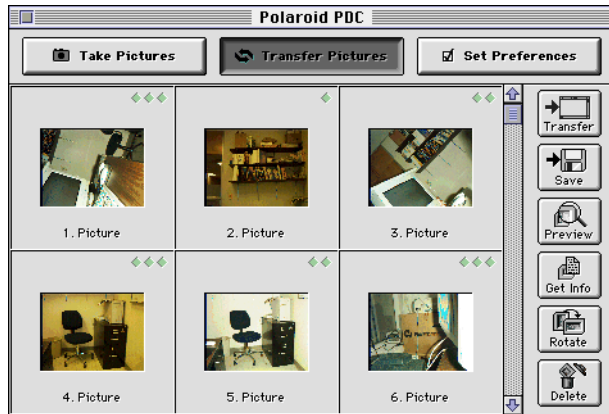
Opening a folder

To work with PDN files saved on your computer, click the Set Preferences button on the PDC Plug-in or in PDC Direct to display the Set Preferences window. Then click the Use Folder button in the Image Source box and choose a disk and folder containing PDN files.

If the PDC-3000 camera is not connected to the computer when you choose Acquire in your host application or when you start PDC Direct, a message may warn that the camera is not connected. If this happens, click the Use Folder button and choose a drive and folder containing PDN files.



The PDN files in the selected folder appear in the Transfer Pictures window. (If the Search Subfolders box in the Set Preferences window was checked, the Transfer Pictures window displays all PDN files in the folder and all its subfolders.)



You can then use the procedures in *Working with pictures in the camera* (page 120), to preview, enhance, rotate and transfer the pictures in the folder as if they were in the camera.



Working with pictures on a CompactFlash card

The optional CompactFlash card reader kit lets you work with a camera CompactFlash card as if it were an additional disk drive on your computer. This allows you to enhance, transfer and erase pictures on the card without connecting the camera to your computer.

To access a card after you have installed the CompactFlash card reader hardware and software, remove the card from the camera and insert it into the reader. Then follow instructions in *Opening a folder* above to display the pictures on the card in the Transfer Pictures window. You can then enhance, transfer and erase pictures on the card as described in *Working with pictures in the camera* (page 120).

If necessary, refer to the instructions with the CompactFlash card reader for more information.



Operating the camera from the PowerMac/PowerPC

If the camera is connected to the computer, you can control the camera with the mouse and the keyboard, and you can display a “live” viewfinder image on your computer screen. This is useful if you use the camera in a stationary setting.

To take pictures using the computer:

- 1** Connect the camera to your computer. If necessary, see the *PDC-3000 User's Guide*.
- 2** Turn on the camera.
- 3** Turn on the computer.
- 4** Start an image-processing application compatible with Photoshop plug-in modules or start Polaroid PDC Direct.

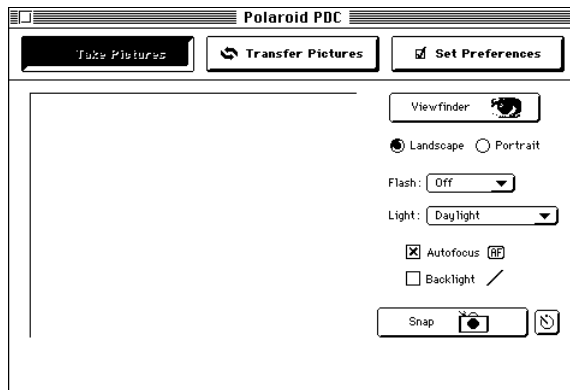


5 If you are using PDC Direct, skip to step 6.

If you are using an image-processing application, choose Acquire from the File menu, then choose PDC.

6 If necessary, change the Output Defaults (resolution at which the pictures will be transferred and the IQA image enhancement settings) through the Set Preferences window. (See *Changing the preferences* on page 153.)

7 If the Take Pictures window is not visible, display it by clicking on the Take Pictures button.





- 8** Click the View Finder button (or hold down the ⌘ key and press the V key) to display a viewfinder image in the Take Pictures window.
- 9** To change the orientation of the image in the viewfinder, choose Landscape or Portrait as appropriate. (You can also hold down the ⌘ key and press the R key to change between Landscape and Portrait.)
- 10** Select the Flash setting you want to use from the drop-down list. See *Using flash* on page 85 for more information.
- 11** Choose a Light setting that matches the lighting conditions in the current scene. See *Setting the camera for current lighting conditions* on page 81.
- 12** Select or deselect the Auto Focus option. See *Using Auto Focus* on page 88.
- 13** If necessary, select Backlight Compensation. See *Compensating for back lighting* on page 90.
- 14** When the picture is framed as desired, click the Snap button (or hold down the ⌘ key and press the S key) to capture the picture and transfer it to your image-processing application or to a Preview window in PDC Direct.



Note: To snap the picture after a preset delay, click on the timer button (next to the Snap button) instead of the Snap button. Enter the desired time delay, then click Start Timer to begin the specified interval.

15 If you are using an image-processing application, close the Take Pictures window (if it is still open) and follow instructions with your application to view, edit or save the picture.

If you are using PDC Direct, choose Save from the File menu.



Changing operating preferences

Available options

Using the PDC Plug-in, you can set the following preferences. These preferences remain unchanged until you set them again.

User name The user name stored in the camera is attached to each picture. After a picture is taken, you can view the user name to help identify the photographer or the camera by using the Get Info button in the Transfer Pictures window. (See *Viewing picture information* on page 124.) Changing the user name affects only pictures taken after the changes are made. Pictures taken earlier and stored in the camera retain the user name in effect when they were taken.



Default picture label The default picture label is attached to each picture when it is taken. This label appears below each thumbnail image in the Transfer Pictures window to help identification. It is also visible in the camera's LCD panel. After taking a picture, you can change its label from the default to an individualized description by using the camera controls (see the *PDC-3000 User's Guide*) or by using the PDC Plug-in software (see *Editing a picture label* on page 127). Changing the default picture label affects only pictures taken after the changes are made. Pictures taken earlier and stored in the camera retain the label in effect when they were taken. (The default picture label can also be changed with the camera controls as described in the *PDC-3000 User's Guide*.)

Current date and time The camera's internal clock settings are attached to each picture to indicate the date and time the picture was taken. You can view the camera's current date and time settings in the camera LCD panel. Changing the date or time affects only pictures taken after the changes are made. Pictures taken earlier and stored in the camera retain the settings in effect when they were taken.

Automatic shutoff timeouts The timeout settings determine how long the camera remains inactive before the main camera power automatically turns off to conserve battery power. The automatic shutoff for camera power does not operate when the camera is under computer control



(displaying "connected" in the LCD panel) and connected to AC power.

Picture compression level You can choose the amount of compression applied to pictures for saving space on the camera's CompactFlash card. See *Selecting a picture compression level* on page 76 for more detailed information about these choices. (You can also use the procedure on page 78 to change the compression level using the camera controls.)

Camera sound indicators You can disable the camera's audible error signals. (See the *PDC-3000 User's Guide* for a description of these indicators.)

Picture resolution The PDC-3000 can be set to transfer its internally stored pictures as either high resolution (800x600) or super-high resolution (1600x1200) images. The selected picture resolution option is applied to the pictures during transfer from the camera to the computer. It does not affect pictures transferred as PDN files to your computer, and does not affect the way the pictures are taken or stored in the camera.

IQA image enhancement settings IQA processing automatically enhances pictures to improve their brightness, highlight and shadow detail, sharpness, and other qualities. (See *Choosing IQA processing options* on page 135 for more



detailed information about this feature.) These settings do not affect the way pictures are taken and stored in the camera. They also have no effect on pictures saved in the PDN format.

Image source In the Set Preferences tab, you can choose to view and process PDN images on your computer's hard drive in the same way that you view and process pictures stored in the camera. This allows you to select resolution and IQA image enhancement settings, and then convert the PDN pictures to TIFF pictures for use in other applications.

Changing the preferences



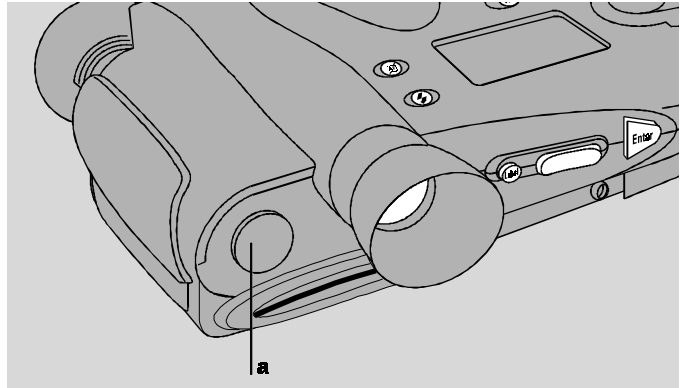
To change any of the preference settings described above:

- 1 Connect the PDC-3000 camera to the computer as described on page 32.

WARNING: DO NOT CONNECT OR DISCONNECT THE PDC-3000 CAMERA OR ANY OTHER SCSI DEVICE WHILE THE DEVICE OR YOUR COMPUTER IS TURNED ON. DOING SO COULD DAMAGE THE DEVICE, YOUR COMPUTER, OR BOTH.



- 2 Turn on the camera by pressing the Power button (a).

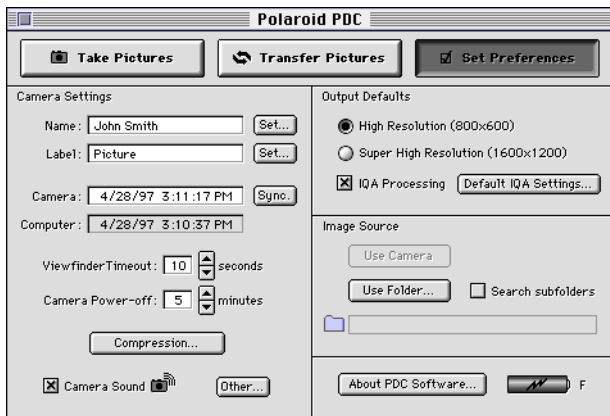


- 3 Turn on the computer.
- 4 Start an image-processing application compatible with Photoshop plug-in modules or start Polaroid PDC Direct.
- 5 If you are using PDC Direct, skip to step 6.

If you are using an image-processing application, choose Acquire from the File menu, then choose PDC.



- 6 If the Set Preferences window is not visible, click the Set Preferences button to display it.



- 7 Change one or more of the settings as needed:

Name or default picture label Click the appropriate Set button and type new entries. (Only upper case letters, numerals, hyphens and spaces can be used in the default picture label.)

Camera internal clock Click the Sync button to set the camera to the computer's date and time settings.



Automatic shutoff timeouts Click the appropriate scroll buttons to change the viewfinder timeout (range: 1-100 seconds) or the camera power-off timeout (range: 1-60 minutes).

Compression level See *Selecting a picture compression level* on page 76 for more information.

Camera sound indicators Turn on or off by clicking on the Sound check box.

Picture resolution Click on the desired resolution button (800x600 or 1600x1200).

IQA processing Turn IQA image enhancement on or off by clicking on the Use IQA Processing checkbox. Select individual IQA features by clicking the Default IQA Settings button. (See *Choosing IQA processing options* on page 135 for more information.)



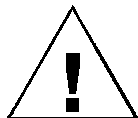
Releasing the camera from computer control

You may wish to release the PDC-3000 camera from computer control so you can operate it via the controls on the camera and store pictures in the camera without disconnecting the camera from the computer.

Releasing the camera

To release the camera from computer control, exit from the application (PDC Plug-in or PDC Direct) being used to control the camera.

After releasing the camera, refer to Chapter 3 for camera operating instructions.



WARNING: DO NOT TURN OFF THE CAMERA OR DISCONNECT IT FROM THE COMPUTER AFTER IT HAS BEEN RELEASED FROM COMPUTER CONTROL. DOING SO COULD DAMAGE YOUR COMPUTER OR CORRUPT DATA ON YOUR HARD DISK.

If you want to turn off the camera while its cable is connected to the computer, use the procedure recommended for any SCSI device: (1) turn off the computer, and (2) turn off the camera. To disconnect the camera from the computer, see the *PDC-3000 User's Guide*.



Restoring computer control

After releasing the camera from computer control as described above, you can place the camera back under computer control with these steps:

- 1** Start your image-processing application or PDC Direct.
- 2** If you are using PDC Direct, skip to step 3.

If you are using an image-processing application, choose Acquire from the File menu, then choose PDC.
- 3** If the Take Pictures window is not visible, click the Take Pictures button to display it and restore camera control to the computer.



5 Using the PDC-3000 with your PC

To optimize, transfer and work with pictures from the PDC-3000 camera on your PC, you use the PDC TWAIN driver with an image-processing application, such as Adobe Photoshop. If you do not have an application compatible with TWAIN, you can use PDC Direct. (PDC Direct was installed on your computer during the PDC software installation described in Chapter 2.)

With the PDC-3000 camera connected to your computer and with the PDC TWAIN driver or PDC Direct, you can perform the following:

View the pictures stored in the camera You can quickly view all the pictures in the camera by displaying miniature representations of them (called thumbnails) in a single window.

Transfer multiple pictures You can use the thumbnail views to choose and transfer pictures from the camera to your computer. You can select image resolution and enhancement settings before transfer and save your pictures as TIFF files on your computer. If you save the pictures on your computer in



PDN format, you can enhance them, choose their resolution and save them as TIFF files at a later time for printing or viewing.

Operate the camera through the computer You can take pictures by using your computer keyboard or mouse, while using the computer screen as a viewfinder. This is particularly convenient for studios and other stationary setups.

Change camera setup You must use the PDC software to change the PDC-3000 camera's internal date, time, user name and other settings.

If you have transferred pictures from the PDC-3000 camera to your computer and stored them in the PDN image format, you can also use the PDC TWAIN driver or PDC Direct without the camera to enhance the pictures and save them in the TIFF image format.

The PDC window

When you start the PDC software (TWAIN driver or PDC Direct), a window appears with three tabs:

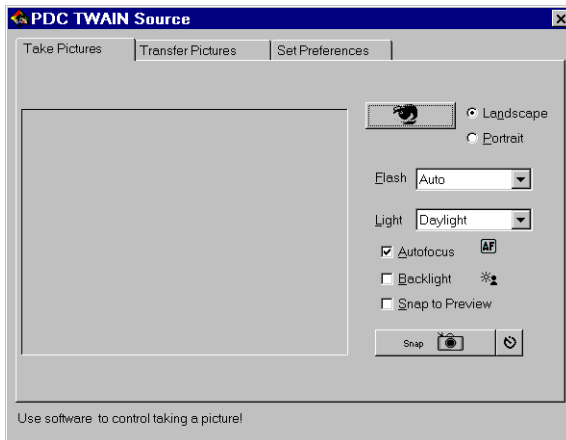
- Take Pictures tab



Take Pictures tab

- Transfer Pictures tab
- Set Preferences tab

The Take Pictures tab lets you control the camera through the computer while taking pictures.



With the Take Pictures tab you can:

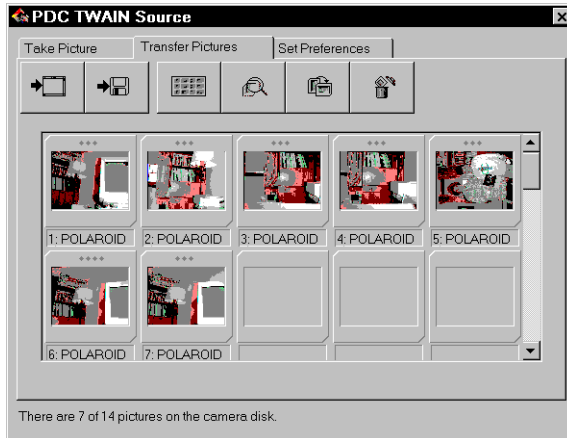
- Display a viewfinder image on your computer screen for framing pictures.
- Change the viewfinder orientation from landscape to portrait or vice versa.



- Change the camera settings for flash, lighting conditions, automatic focus and backlight compensation just as you would with the controls on the camera.
- Take a picture and immediately transfer it to the computer or to a preview window where you can choose enhancement and resolution options before saving the picture to your computer.

Transfer Pictures tab

The Transfer Pictures tab displays thumbnail representations of the pictures in the camera.





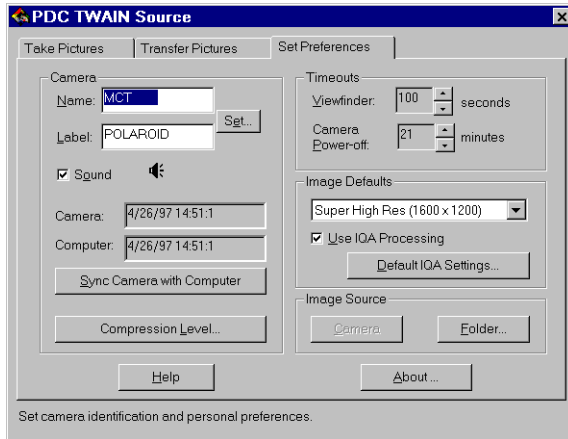
From the Transfer Pictures tab, you can:

- Transfer selected pictures from the camera to an image-processing application (if you are using the TWAIN driver).
- Save selected pictures in a TIFF or PDN (Polaroid Digital Negative) format on your computer hard disk.
- Display a preview image (larger than a thumbnail) and choose enhancement and resolution settings for transferring the picture to your computer.
- Rotate pictures in 90-degree increments.
- Edit picture labels.
- View picture information, including date, time, user name, and camera settings in effect when the picture was taken.
- Delete selected pictures from the camera.



Set Preferences tab

The Set Preferences tab lets you change the camera's internally stored settings and the way pictures are processed and transferred to the computer.



From the Set Preferences tab, you can:

- Change the default user name recorded with each picture.
- Change the default picture label.
- Turn the camera sound indicators off and on.
- Change the camera's internal clock settings to match the computer's time and date settings.



- Set the image compression mode of the camera.
- Change the camera's automatic shutoff settings.
- Select the default resolution of pictures transferred from the camera to the computer.
- Choose the default IQA image enhancement settings applied to pictures being saved on your computer or being transferred to a host application.
- Switch between working with pictures in the camera and working with pictures stored as PDN files on your computer



Working with pictures in the camera

Using the PDC software (TWAIN driver or PDC Direct), you can look at thumbnails (small representations) of pictures stored in the camera without transferring them to the computer. While viewing the thumbnails on your computer screen, you can rotate pictures, transfer pictures to the computer, or delete pictures from the camera.

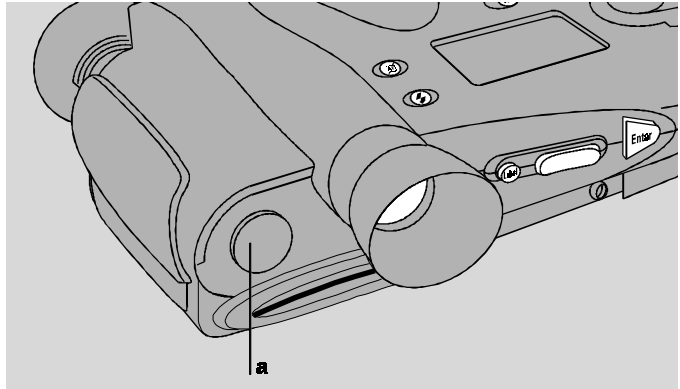
Viewing pictures in the camera

To display thumbnail images of the pictures stored in the camera:

- 1 Connect the camera to your computer. If necessary, see *Connecting the camera to your PC* on page 43.



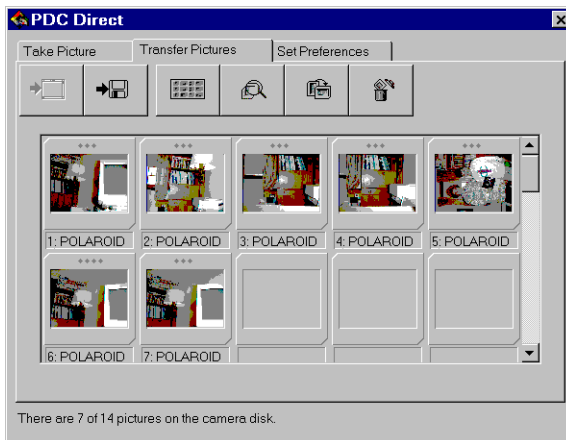
- 2 Turn on the camera by pressing the Power button (a).



- 3 Turn on your computer.
- 4 Start your TWAIN compliant application or PDC Direct.



- 5 If you are using PDC Direct, wait for the Transfer Pictures tab to appear.



If you are not using PDC Direct, use one of the methods below to display the Transfer Pictures tab:

- If you are using Adobe Photoshop and the TWAIN driver, pull down the File menu and choose Select TWAIN_32 and PDC Ver. 2.5. Click on OK. Pull down the File menu again and choose Acquire TWAIN_32.



- If you are using a TWAIN compliant application other than Adobe Photoshop, refer to the application's instructions for acquiring images.

Note: If no pictures are stored in the camera, the Take Pictures tab appears instead of the Transfer Pictures tab.

If all the thumbnails do not fit in the window, use the vertical scroll bar to view additional thumbnails.

Selecting thumbnails

Before you can perform operations (rotate, delete, etc.) on the pictures represented by the thumbnails in the Transfer Pictures tab, you must select one or more of the thumbnails.

To select a single thumbnail, click on it once. A color border appears around the selected thumbnail. (If all thumbnails are displayed in the window, click on the vertical scroll bar to see more.)

To select several thumbnails, press and hold the Control key and then click the thumbnails. To select all the thumbnails, click the Select All button.

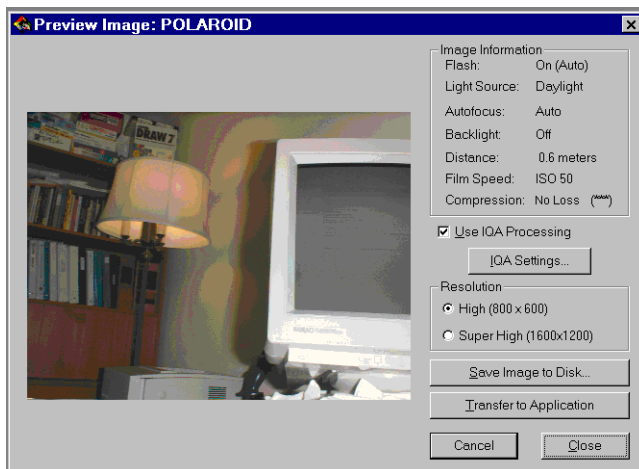
To deselect a thumbnail, press and hold the Control key and click the thumbnail. To deselect all thumbnails, hold the Control key and click the Select All button (⌘).



Previewing pictures

The preview feature of the PDC TWAIN driver and PDC Direct provides a way to display a 400x300-pixel representation of any picture on the Transfer Pictures tab for closer viewing.

To display the Preview Image window, click on the desired thumbnail with the **right** mouse button to display a pop-up menu. Then choose Preview from the menu.





The Preview Image window also displays the following information about the selected picture:

- Flash setting
- Light source
- Auto focus setting
- Backlight compensation setting
- Focus distance
- Film speed equivalent
- Compression setting

From the Preview Image window, you can also choose IQA-processing and resolution options for the displayed picture and then transfer it to your computer. See *Transferring pictures to your computer one at a time* on page 174 for instructions.



Viewing picture information

From the Transfer Pictures tab, you can display information similar to that shown in the preview window described above.



To view this information for any picture, click on the desired thumbnail with the **right** mouse button to display a pop-up menu. Then choose Get Info from the menu.



Rotating pictures

You can rotate pictures in 90-degree counter-clockwise increments to change their orientation from landscape to portrait or vice versa.

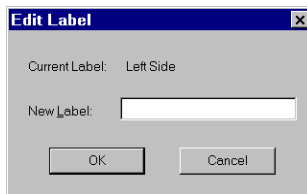
To rotate one or more pictures:

- 1 View the pictures in the camera as described on page 166.
- 2 Select one or more pictures to be rotated. (See *Selecting thumbnails* on page 169.)
- 3 Rotate the selected pictures 90 degrees by clicking the Rotate button. (To rotate the pictures further, continue to click the Rotate button.)

Editing a picture label

If you wish, you can edit a picture label in the Transfer Pictures tab.

To edit a label, click on the desired thumbnail with the **right** mouse button to display a pop-up menu. Then choose Edit Label to display an Edit Label dialog box.





Type a new label for the picture and choose OK.

Note: Unlike individual labels created with the camera controls as described in the *PDC-3000 User's Guide*, labels edited with the computer are not saved in the camera. They remain visible only while you are viewing the Transfer Pictures tab.

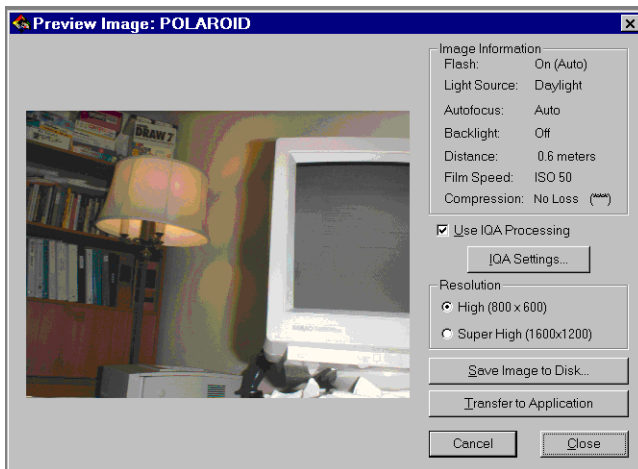
Transferring pictures to your computer one at a time

Use the following procedure if you want to transfer a single picture from the PDC-3000 camera. You can also repeat this procedure as needed for transferring multiple pictures if you want to set the IQA-processing, resolution and file-format options individually for each picture.

- 1** View the pictures in the camera as described on page 166.
- 2** Click on the picture to be transferred with the right mouse button to display a pop-up menu.



- 3 Choose Preview from the menu to display Preview Image window.



- 4 Enable or disable IQA processing for this picture by clicking the Use IQA Processing box. If you enable IQA processing and want to change individual IQA options, click the IQA Settings button and choose the options you want applied to this picture. (See *Choosing IQA processing options* on page 181 for more information about this feature.)



As you make choices about IQA settings, you can see the result of the settings (except Match Sharpness and Noise Reduction) in the preview image.

Note: IQA processing has no effect on pictures being saved in the PDN format. It affects only pictures being saved to your computer as TIFF files or being transferred to a TWAIN-compliant application.

- 5** Choose a resolution (High or Super High) for the picture being transferred.

Note: The resolution setting has no effect on pictures being saved in the PDN format. It affects only pictures being saved to your computer as TIFF files or being transferred to a TWAIN-compliant application.

- 6** To save the image on your computer as a TIFF or PDN file, click the Save Image to Disk button and choose a folder, file format (TIFF or PDN) and a filename. (See *Choosing a file format* on page 186 for more information.)

To transfer the image to your TWAIN application, click the Transfer to Application button. (This button is not available if you are running PDC Direct.)

Note: After transferring the picture to an application, you must save it to disk using the Save As command in the

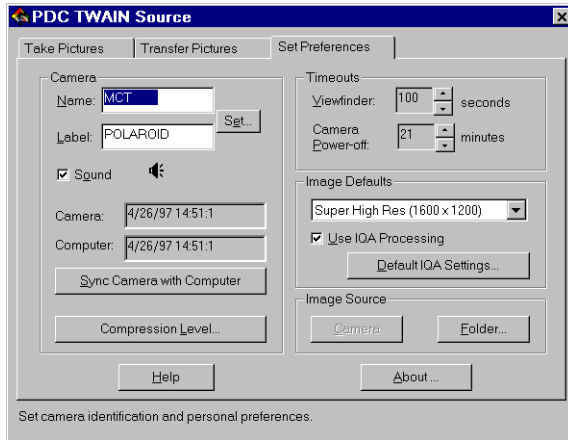


Transferring multiple pictures to your computer

application. Most image-processing applications allow you to choose a file format for the pictures you are saving. See instructions with your image-processing application for a description of formats available to you.

Use the following procedure if you want to transfer multiple pictures from the PDC-3000 camera to your computer, and if you want to use the same IQA-processing, resolution and file-format options for all the pictures being transferred.

- 1 View the pictures in the camera as described on page 166.
- 2 Click Set Preferences to display the Set Preferences tab.





- 3 Choose a resolution (High or Super High) for the pictures being transferred.

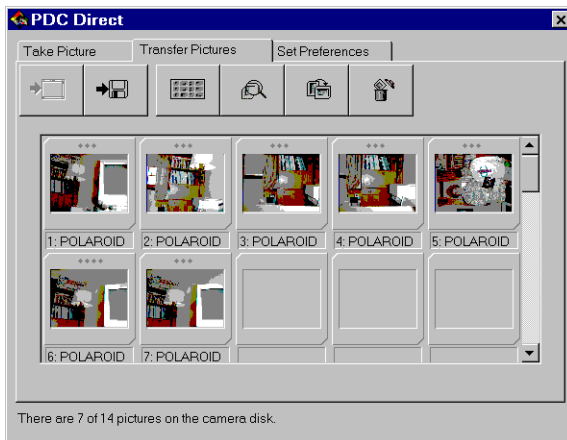
Note: The resolution setting has no effect on pictures being saved in the PDN format. It affects only pictures being saved to your computer as TIFF files or being transferred to a TWAIN-compliant application.

- 4 Enable or disable IQA processing for the pictures being transferred by clicking the Use IQA Processing box. If you enable IQA processing and want to change the IQA options, click the Default IQA Settings button and choose the options you want applied to this picture. (See *Choosing IQA processing options* on page 181 for more information about this feature.)

Note: IQA processing has no effect on pictures being saved in the PDN format. It affects only pictures being saved to your computer as TIFF files or being transferred to a TWAIN-compliant application.




- 5 Click Transfer Pictures to display the Transfer Pictures tab.



- 6 Select the thumbnails of the pictures you want to transfer. (See *Selecting thumbnails* on page 169.)
- 7 To save the images on your computer as a TIFF or PDN files, click the Save Image to Disk button (📁) and choose a folder, file format (TIFF or PDN) and a base name for the saved files. (For more information about file formats, see *Choosing a file format* on page 186. The base name is the first 10 characters of the file names given to the stored pictures. If you do not change the base name, the file names will contain the first 10 characters of the label on the first picture being



transferred. A two-digit numeral will be appended to the six characters, producing a unique, 12-character name for each file.)

To transfer the pictures to your TWAIN application, click the Transfer to Application button (➔). (This button is not available if you are running PDC Direct.)

Note: After transferring the pictures to an application, you must save each one to disk using the Save As command in the application. Most image-processing applications allow you to choose a file format for the pictures you are saving. See instructions with your image-processing application for a description of formats available to you.

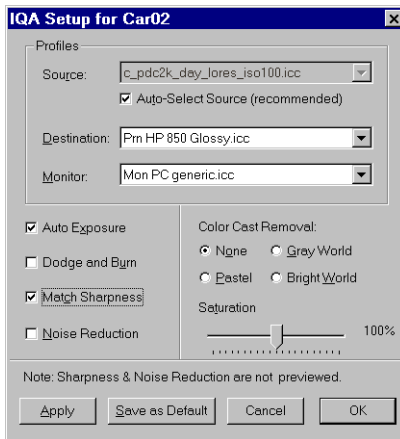


Choosing IQA processing options

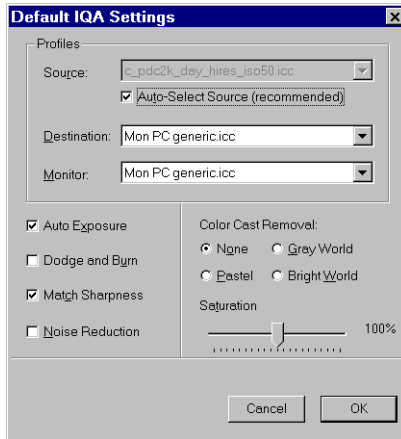
IQA processing automatically evaluates images and applies correction factors for several image quality parameters when the picture is transferred to an application on your computer or saved as a TIFF file on your hard disk. The correction factors applied to each picture depend on the camera settings at the time the picture was taken, the printer and monitor being used to print and display the picture, and the scene content.

Enabling IQA and choosing IQA options

To enable or disable individual IQA corrections or specify destinations for pictures being transferred individually as described in *Transferring pictures to your computer one at a time* on page 174, click the IQA Settings button in the Preview Image window. The IQA Setup box appears.



To display a similar box for choosing default IQA settings (used when transferring pictures without using the Preview window or when transferring multiple pictures as described on page 177), click Default IQA Settings on the Set Preferences tab.



Specifying a source profile

IQA processing optimizes your pictures to suit the specific imaging characteristics of the source (the PDC-3000 camera). You indicate this source in the IQA Setup or Default IQA Settings box.

For most pictures, you should leave the Auto-Select Source box checked. (The PDC software automatically makes this choice based on the PDC-3000 camera settings recorded with the picture when it was taken.)



Specifying a monitor profile

In the Monitor drop-down list, select the monitor (usually your current monitor) you will use to preview pictures on your system. This allows IQA to optimize the way it displays preview pictures on your system.

Specifying a destination profile

In the Destination box, choose the ultimate destination of the picture (a monitor for on-screen presentations, for example, or a printer with a particular resolution setting for reports or memos). This choice allows IQA to optimize the picture for the imaging characteristics of the monitor or printer.

Note: When you print the picture, be sure to use the same printer and settings you selected. Also be sure to all the other printer options are set according to Required printer settings for IQA on page 237.

If your printer is not listed in the Destination box, choose the generic monitor setting (“Mon PC generic.icc”). If this choice produces unsatisfactory results when you print, experiment with printer choices in the same family as your printer. You can also check the Polaroid site on the World Wide Web (<http://www.polaroid.com>) for additional printer profiles to download. If none of these options produces satisfactory results, you may need to disable IQA processing in the Preview window or the Set Preferences tab.



IQA correction choices

IQA provides the following types of image quality correction, and you can choose them in any combination to suit the pictures you are transferring to your computer:

- **Auto Exposure** (brightness) Automatically corrects for over-exposure or under-exposure.
- **Dodge and Burn** (highlight and shadow detail) Enhances highlights by slightly darkening washed-out highlights and slightly lightening dark shadow areas that lack detail.
- **Match Sharpness** Optimizes image sharpness for the selected source and destination devices. Match Sharpness does not affect the preview image.
- **Noise Reduction** (removing specks and other small image imperfections) Reduces image noise to the optimum level for the selected source and destination devices. Noise Reduction does not affect the preview image.
- **Color Cast Removal** Provides the following selections for correcting the color bias (overall tint) of the current picture:
None Disables Cast Removal (no change in cast).

Pastel Uses mostly light-colored pixels to determine and correct the color bias.



Gray World Uses all the pixels in the picture to determine and correct the color bias.

Bright World Uses the brighter pixels to determine and correct the color bias.

- **Saturation** Reduces or increases color saturation. Moving the slider left decreases saturation, and moving it right increases saturation. Placing the slider in the center position leaves saturation unaffected.

Choosing a file format

When transferring pictures from the PDC-3000 camera directly to disk as described in the previous sections, you have a choice of two file formats for the transferred pictures: TIFF and PDN.

TIFF is a standard image file format compatible with most image-processing, presentation, word-processing and page-layout applications. When you transfer pictures in this format, you can later import them to other applications for displaying or printing.



When the PDC software is used to save pictures in the TIFF format, it saves the pictures in one of two available resolutions: High (800x600 pixels) or Super High (1600x1200 pixels). It also applies Polaroid's IQA image enhancement to the saved images, if you have selected IQA processing through the Set Preferences tab or the Preview Image window accessible from the Transfer Pictures tab.

PDN ("Polaroid Digital Negative") is a proprietary Polaroid format that generally cannot be used with other applications. The PDN format, however, provides you with more options than the TIFF format after you have transferred the pictures to your computer. PDN files also require considerably less storage space than their equivalent TIFF files.

Pictures saved on your computer's hard drive in the PDN format can be converted to TIFF images later via the PDC TWAIN driver or PDC Direct. At the time of conversion, you can choose the resolution (High or Super High) and the IQA image enhancement options.


See *Working with PDN files saved on your computer* on page 189 for more information.



Deleting pictures from the camera

Use the following procedure to delete one or more pictures from the camera.

If you want to keep any of the pictures you are about to delete, be sure transfer them to the computer as described in the previous sections **before** you delete them from the camera.

- 1 View the pictures in the camera as described on page 166.
- 2 Select one or more pictures to be deleted. (See *Selecting thumbnails* on page 169.)
- 3 Click the Delete button () to display a confirmation message.
- 4 To delete the pictures from the camera, click OK.

Note: If you are not deleting all the pictures from the camera, those remaining will be renumbered. For example, you may decide to delete all pictures except 4 and 23. In this case, picture 4 becomes picture 1, and picture 23 becomes picture 2.



Working with PDN pictures saved on your computer

If you have transferred pictures from the camera in the PDN format to a folder on your computer, you can work with the PDN files in the folder as if they were still in the camera. This is useful for producing multiple variations of a picture from the same PDN file. For example, you may want to create one version of a picture in high resolution, and a second in super high resolution for another purpose.

You can also archive pictures in the PDN format so you can choose resolution, IQA processing options, and printer and monitor destinations at a later time.

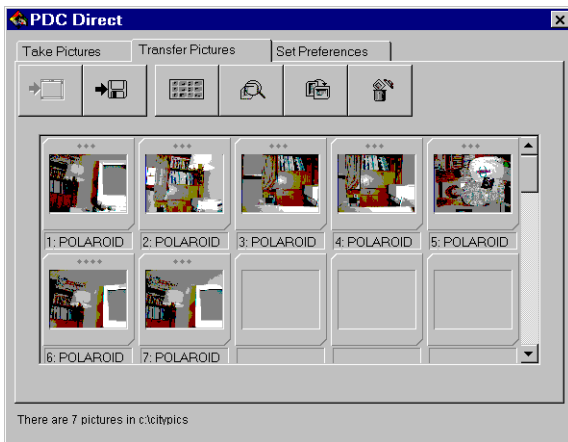
Opening a folder

To work with PDN files saved on your computer, click the Set Preferences tab on the PDC TWAIN interface or in PDC Direct to display the Set Preferences tab. Then click the Folder button in the Image Source box and choose a disk drive and folder containing PDN files.

If the PDC-3000 camera is not connected to the computer when you choose Acquire in your TWAIN application or when you start PDC Direct, a message may warn that the camera is not connected. If this happens, click OK to display the PDC startup box. Then click the Use Folder button and choose a disk drive and folder containing PDN files.



The PDN files in the selected folder appear in the Transfer Pictures tab.



You can then use the procedures in *Working with pictures in the camera* (page 166), to preview, enhance, rotate and transfer the pictures in the folder as if they were in the camera.



Working with pictures on a CompactFlash card

The optional CompactFlash card reader kit lets you work with a camera CompactFlash card as if it were an additional disk drive on your computer. This allows you to enhance, transfer and erase pictures on the card without connecting the camera to your computer.

To access a card after you have installed the CompactFlash card reader hardware and software, remove the card from the camera and insert it into the reader. Then follow instructions in *Opening a folder* above to display the pictures on the card in the Transfer Pictures window. You can then enhance, transfer and erase pictures on the card as described in *Working with pictures in the camera* (page 166).

If necessary, refer to the instructions with the CompactFlash card reader for more information.



Operating the camera from the PC

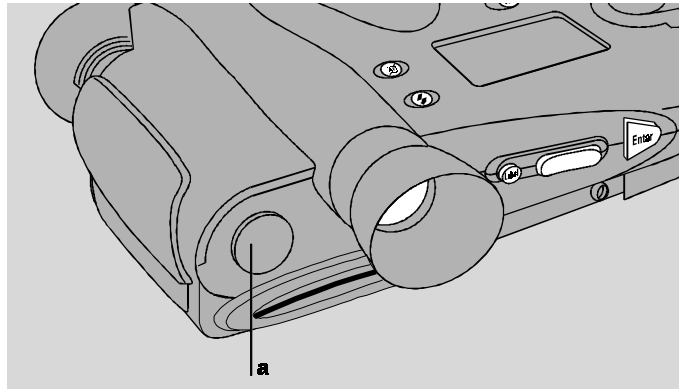
If the PDC-3000 camera is connected to the computer, you can use the PDC software to control the camera with the mouse and the keyboard, and you can display a “live” viewfinder image on your computer screen. This is useful if you use the camera in a studio or other stationary setting.

To take pictures using the computer:

- 1** Connect the camera to your computer. If necessary, see *Connecting the camera to your PC* on page 43.



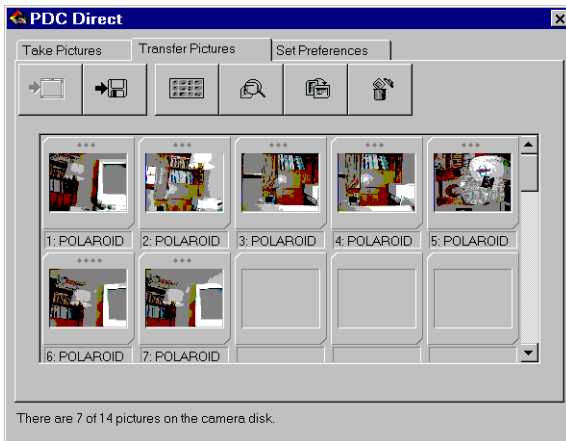
- 2 Turn on the camera by pressing the Power button (a).



- 3 Turn on your computer.
- 4 Start your TWAIN compliant application or PDC Direct.



- 5 If you are using PDC Direct, wait for the Transfer Pictures tab to appear.



If you are not using PDC Direct, use one of the methods below to display the Transfer Pictures tab:

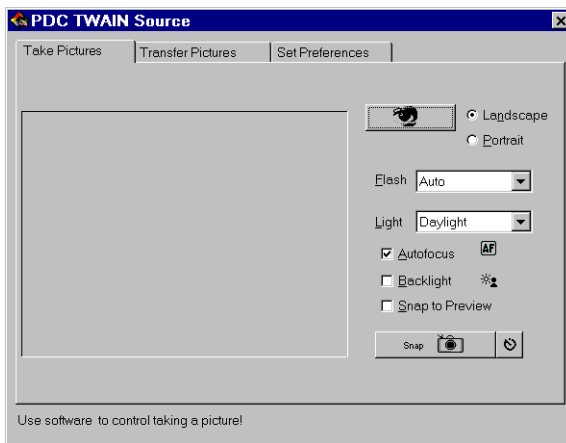
- If you are using Adobe Photoshop and the TWAIN driver, pull down the File menu and choose Select TWAIN_32 and Polaroid PDC Ver 2.5. Click on OK. Pull down the File menu again and choose Acquire TWAIN_32.




- If you are using a TWAIN compliant application other than Adobe Photoshop, refer to the application's instructions for acquiring images.

Note: If no pictures are stored in the camera, the Take Pictures tab appears instead of the Transfer Pictures tab.

- 6 If necessary, change the Image Defaults (resolution at which the pictures will be transferred and IQA image enhancement settings) through the Set Preferences tab. (See *Changing the preferences* on page 201.)
- 7 Click Take Pictures to display the Take Pictures tab.





- 8** Click the viewfinder button () to display a viewfinder image in the Take Pictures tab.
- 9** To change the orientation of the image in the viewfinder, choose Landscape or Portrait as appropriate.
- 10** Select the Flash setting you want to use from the drop-down list. See *Using flash* on page 85 for more information.
- 11** Choose a Light setting that matches the lighting conditions in the current scene. See *Setting the camera for current lighting conditions* on page 81.
- 12** Select or deselect the Auto Focus option. See *Using Auto Focus* on page 88.
- 13** If necessary, select Backlight Compensation. See *Compensating for back lighting* on page 90.
- 14** If you are using a TWAIN-compliant application and you want the picture to appear in a preview window immediately after you take it, select Snap to Preview. (See *Previewing pictures* on page 170 for a detailed description of the preview window.)



15 When the picture is framed as desired, click the Snap button to capture the picture and transfer it to your image-processing application or to a Preview window in PDC Direct.

Note: To snap the picture after a preset delay, click on the timer button (next to the Snap button) instead of the Snap button. Enter the desired time delay, then click Start Timer to begin the specified interval.

16 If you are using an image-processing application, follow instructions with your application to view, edit or save the picture.

If you are using PDC Direct, choose Save As from the File menu.



Changing operating preferences

Available options

Using the PDC software (TWAIN driver or PDC Direct) on your computer, you can set the following PDC-3000 camera and PDC software operating preferences. These preferences remain unchanged until you set them again.

User name The user name stored in the camera is attached to each picture. After a picture is taken, you can view the user name to help identify the camera or photographer by using the Get Info selection on the pop-up menu. (See *Viewing picture information* on page 170.) Changing the user name affects only pictures taken after the changes are made. Pictures taken earlier and stored in the camera retain the user name in effect when they were taken.

Default picture label The default picture label is attached to each picture when it is taken. This label appears below each thumbnail image in the Transfer Pictures tab to help identification. It is also visible in the camera's LCD panel. After taking a picture, you can change its label from the default to an individualized description by using the camera controls (see the *PDC-3000 User's Guide*) or by using the PDC software (see *Editing a picture label* on page 173). Changing the default picture label affects only pictures taken after the changes are made. Pictures taken earlier and stored



in the camera retain the label in effect when they were taken. (The default picture label can also be changed with the camera controls as described in the *PDC-3000 User's Guide*.)

Camera sound indicators You can disable the camera's audible error signals. (See the *PDC-3000 User's Guide* for a description of these indicators.)

Picture compression level You can choose the amount of compression applied to pictures for saving space on the camera's CompactFlash card. See *Selecting a picture compression level* on page 76 for more detailed information about these choices. (You can also use the procedure on page 78 to change the compression level using the camera controls.)

Current date and time The camera's internal clock settings are attached to each picture to indicate the date and time the picture was taken. You can view the camera's date and time setting on the camera LCD panel. Changing the date or time affects only pictures taken after the changes are made. Pictures taken earlier and stored in the camera retain the settings in effect when they were taken.

Automatic shutoff timeouts The timeout settings determine how long the camera remains inactive before the viewfinder image on the computer and the main camera power automatically turn off to conserve battery power. The



automatic shutoff for camera power does not operate when the camera is under computer control (displaying "connected" in the LCD panel) and connected to AC power.

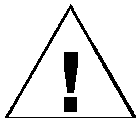
Picture resolution The PDC-3000 pictures can be transferred as either high resolution (800x600) or super-high resolution (1600x1200) by default. This setting does not affect the way the pictures are taken or stored in the camera. It also has no effect on pictures stored in the PDN format.

IQA image enhancement settings IQA processing automatically enhances pictures to improve their brightness, highlight and shadow detail, sharpness, and other qualities. See *Choosing IQA processing options* on page 181 for more detailed information about this feature. These settings do not affect the way the pictures are taken or stored in the camera. They also have no effect on pictures stored in the PDN format.

Current image source From the Set Preferences tab, you can choose to view and process PDN images on your computer's hard drive in the same way that you view and process pictures stored in the camera. This allows you to select resolution and IQA image enhancement settings, and then convert the PDN pictures to TIFF pictures for use in other applications.



Changing the preferences

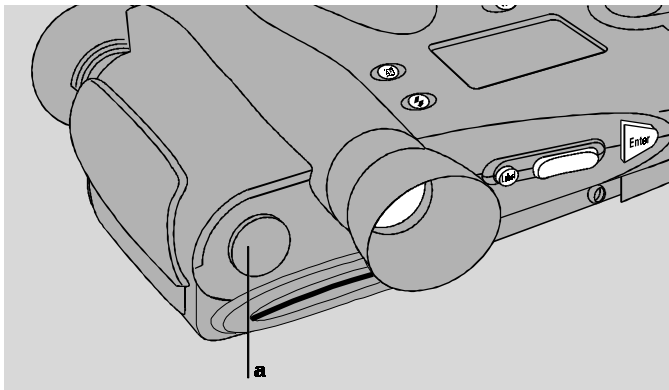


To change any of the preference settings described above:

- 1 Connect the camera to your computer. If necessary, see *Connecting the camera to your PC* on page 43.

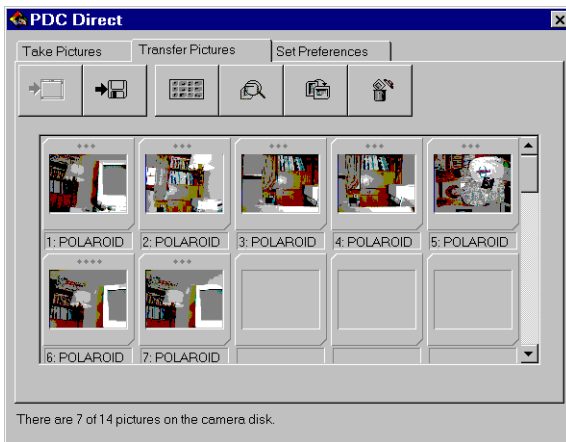
WARNING: DO NOT CONNECT OR DISCONNECT THE PDC-3000 CAMERA OR ANY OTHER SCSI DEVICE WHILE THE DEVICE OR YOUR COMPUTER IS TURNED ON. DOING SO COULD DAMAGE THE DEVICE, YOUR COMPUTER, OR BOTH.

- 2 Turn on the camera by pressing the Power button (a).





- 3 Turn on your computer.
- 4 Start your TWAIN compliant application or PDC Direct.
- 5 If you are using PDC Direct, wait for the Transfer Pictures tab to appear.



If you are not using PDC Direct, use one of the methods below to display the Transfer Pictures tab:

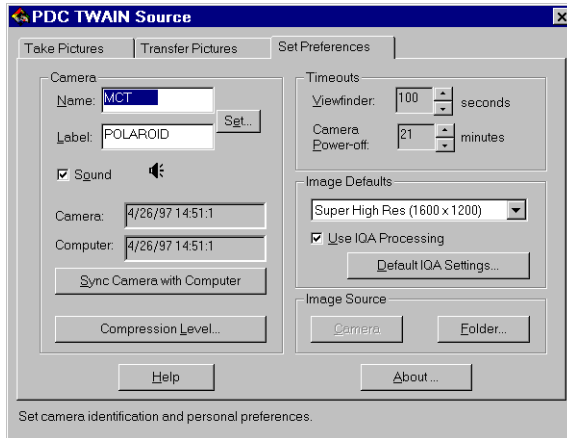
- If you are using Adobe Photoshop and the TWAIN driver, pull down the File menu and choose Select TWAIN_32 Source and PDC Ver 2.5. Click on OK. Pull down the File menu again and choose Acquire TWAIN_32.



- If you are using a TWAIN compliant application other than Adobe Photoshop, refer to the application's instructions for acquiring images.

Note: If no pictures are stored in the camera, the Take Pictures tab appears instead of the Transfer Pictures tab.

6 Click Set Preferences to display the Set Preferences tab.





7 Change one or more of the settings as needed:

Default name and picture label Click the Set button and type new entries. (Only upper case letters, numerals, hyphens and spaces can be used in the default picture label.)

Camera sound indicators Turn on or off by clicking on the Sound check box.

Camera internal clock Click the Sync Camera with Computer button to set the camera to the computer's date and time settings.

Compression level See *Selecting a picture compression level* on page 76 for more information.

Automatic shutoff timeouts Click the appropriate scroll button to change the viewfinder timeout (1-100 seconds) or the camera power-off timeout (1-60 minutes).

Picture resolution Click on the desired resolution button (800x600 or 1600x1200).

IQA processing Turn IQA image enhancement on or off by clicking on the Use IQA Processing checkbox. Select individual IQA features by clicking the Default IQA Settings button. (See *Choosing IQA processing options* on page 181 for more information.)



Image source If you are currently working with pictures in the PDC-3000 camera in the Transfer Pictures tab, you can change the image source to a folder on your computer hard drive containing .PDN files that you had transferred from the camera earlier. To do this, click the Folder button and choose a folder. If you are working with .PDN files in a folder, you can change the image source to the camera by clicking the Camera button.

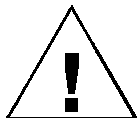
Releasing the camera from computer control

You may wish to release the PDC-3000 camera from computer control so you can operate it via the controls on the camera and store pictures in the camera without disconnecting the camera from the computer.

Releasing the camera

You can release the camera from computer control by closing (exiting from) the application controlling the PDC-3000 camera (your TWAIN compliant application or PDC Direct).

After releasing the camera, refer to Chapter 3 for camera operating instructions.



WARNING: DO NOT TURN OFF THE CAMERA OR DISCONNECT IT FROM THE COMPUTER AFTER IT HAS BEEN RELEASED FROM COMPUTER CONTROL. DOING SO COULD DAMAGE YOUR COMPUTER OR CORRUPT DATA ON YOUR HARD DISK.

If you want to turn off the camera while its cable is connected to the computer, use the procedure recommended for any SCSI device: (1) turn off the computer, and (2) turn off the camera. To disconnect the camera from the computer, see the *PDC-3000 User's Guide*.

Restoring computer control

After releasing the camera from computer control as described above, you can place the camera back under computer control at any time with these steps:

- 1** Start your TWAIN compliant application or PDC Direct.
- 2** If you are using PDC Direct, wait for the Transfer Pictures tab to appear.

If you are not using PDC Direct, use one of the methods below to display the Transfer Pictures tab:

- If you are using Adobe Photoshop and the TWAIN driver, pull down the File menu and choose Select TWAIN_32 Source and PDC Ver 2.5. Click on OK. Pull down the File menu again and choose Acquire TWAIN_32.



- If you are using a TWAIN compliant application other than Adobe Photoshop, refer to the application's instructions for acquiring images.

Note: If no pictures are stored in the camera, the Take Pictures window tab instead of the Transfer Pictures tab.

- 3 Click Take Pictures to display the Take Pictures tab.



6 Maintenance and troubleshooting

Caring for the PDC-3000 camera

Be sure to keep the PDC-3000 camera protected from dirt, dust, rain and moisture. Damaged caused by these conditions may not be covered by the warranty.

If the PDC-3000 camera body requires cleaning, use a clean, soft cloth dampened with water. Do not use cleaners of any kind, and do not spray water or other liquids directly onto the camera.

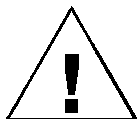
When cleaning the camera lenses, use only lens-cleaning fluid and lens-cleaning tissue (available at photography shops).



Caring for the camera batteries

The four NiCad “AA” rechargeable batteries provided with the PDC-3000 camera have enough power for taking 40 pictures under normal conditions. The battery level indicator on the PDC-3000 camera’s LCD panel indicates full (■), low (□) and other levels between them. Recharge the batteries whenever the indicator shows low battery level.

Note: Conserve battery power by turning the camera off when it is not in use.



WARNING: DO NOT TURN OFF THE CAMERA OR ANY OTHER SCSI DEVICE WHILE IT IS CONNECTED TO YOUR COMPUTER IF THE COMPUTER IS ON. DOING SO COULD DAMAGE THE COMPUTER OR CORRUPT DATA ON YOUR HARD DISK.

The batteries can be recharged at any time, but NiCad batteries perform best when you allow them to discharge almost completely before recharging. Repeatedly recharging partially charged batteries causes them to lose their capacity.

(Use of a battery conditioner/charger, available at many electronics and video equipment stores, is recommended because it discharges the batteries completely before starting the charge cycle. The power adapter/trickle charger provided



with the PDC-3000 does **not** discharge the batteries before charging them.)

You may wish to purchase additional “AA” NiCad batteries for use with the PDC-3000 camera. With extra batteries, you can use one set while charging another. (See *Charging the batteries outside the camera* on page 213.) NiCad “AA” batteries of the types recommended in the following section are usually available at electronics and department stores.

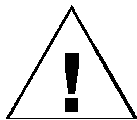
Recommended battery types

Polaroid recommends the following battery types for use with the PDC-3000:

Eveready type CH15 AA 1.2v, 650mAh

Panasonic type KR-15/51 AA 1.2v 500mAh

Sanyo type N-600AA 1.2v 600mAh

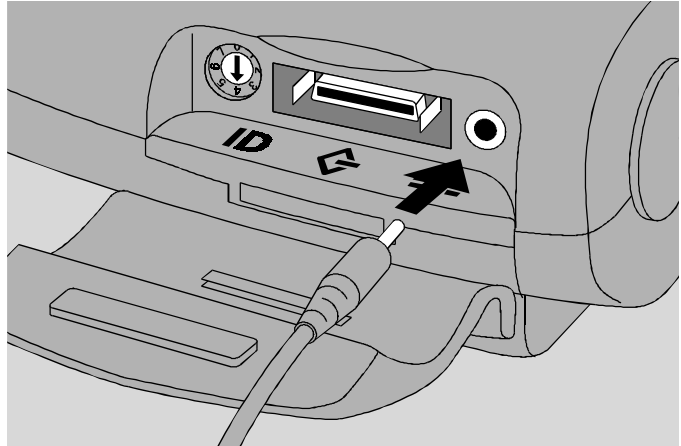


WARNING: USE ONLY THE BATTERIES PROVIDED OR THE “AA” NICAD RECHARGEABLE BATTERY TYPES LISTED ABOVE. OTHER TYPES, SUCH AS ALKALINE OR LITHIUM “AA” BATTERIES, WILL NOT OPERATE THE CAMERA, AND MAY CAUSE INJURY OR DAMAGE THE CAMERA IF YOU ATTEMPT TO CHARGE THEM AS DESCRIBED BELOW.



Charging the batteries in the camera

To charge the batteries while they are in the camera, connect the power adapter/trickle charger to the camera and to AC power.



Charge the batteries completely by leaving the charger connected to the camera for about 6 hours (12 hours for new batteries). You can use the camera while the batteries are charging.

Note: Connecting the camera to the computer and using the viewfinder mode while the batteries are charging may extend the time necessary for completely charging the batteries.



WARNING: USE ONLY THE POWER ADAPTER/TRICKLE CHARGER PROVIDED FOR CHARGING THE BATTERIES WHILE THEY ARE IN THE CAMERA. OTHER AC ADAPTERS AND CHARGERS SIMILAR IN APPEARANCE ARE AVAILABLE, BUT THEY CAN OVERHEAT THE BATTERIES AND CAUSE INJURY OR CAMERA DAMAGE.

BE SURE TO REMOVE THE BATTERIES FROM THE CAMERA WHEN USING THE OPTIONAL 3-AMP POWER SUPPLY INSTEAD OF THE POWER ADAPTER/TRICKLE CHARGER DESCRIBED ABOVE.

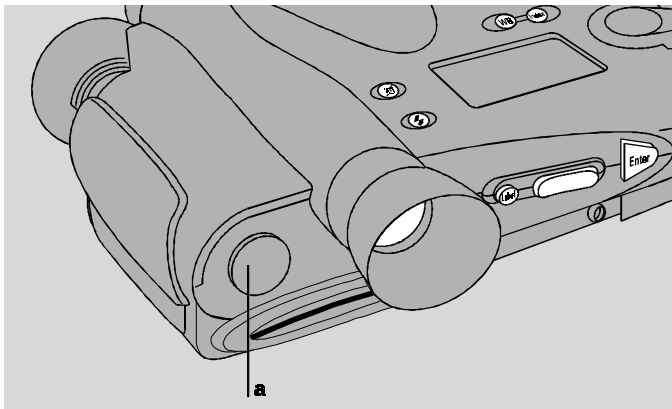


Charging the batteries outside the camera

If you wish to charge the batteries outside the camera, use the optional 110-volt 5-hour battery charger or another charger designed for NiCad “AA” batteries.

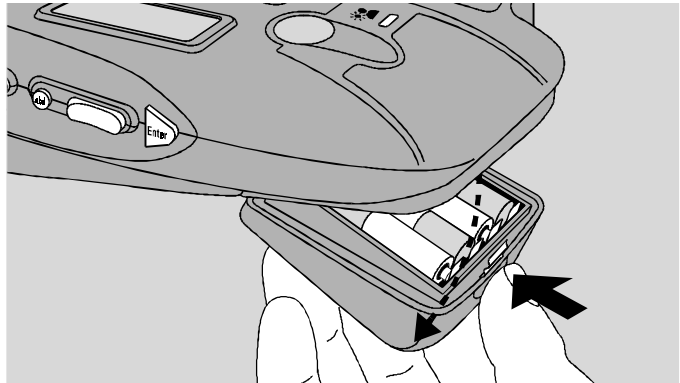
Recharge the batteries as follows:

- 1 Turn off the camera by pressing the power button (a).





- 2 Press the latch on the side of the battery holder to release it, then remove the holder from the camera.



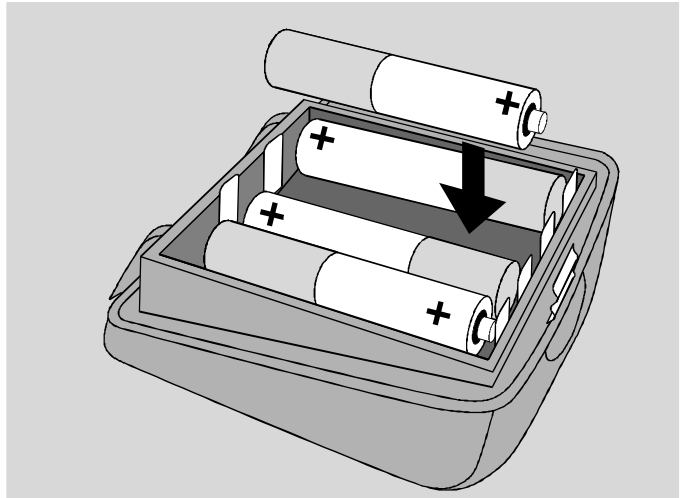
- 3 Remove the four batteries from the holder.
- 4 Charge the batteries according to the instructions for the charger you are using.



Note: The camera is **not** operable while the batteries are removed, even if the power adapter/trickle charger is connected. Furthermore, you may need to reset the camera's date, time, default picture label and automatic shutoff settings if the batteries are removed from the camera for more than 30 minutes. For these reasons, you may want to purchase additional "AA" NiCad batteries for use while others are charging. (See *Recommended battery types* on page 210.)

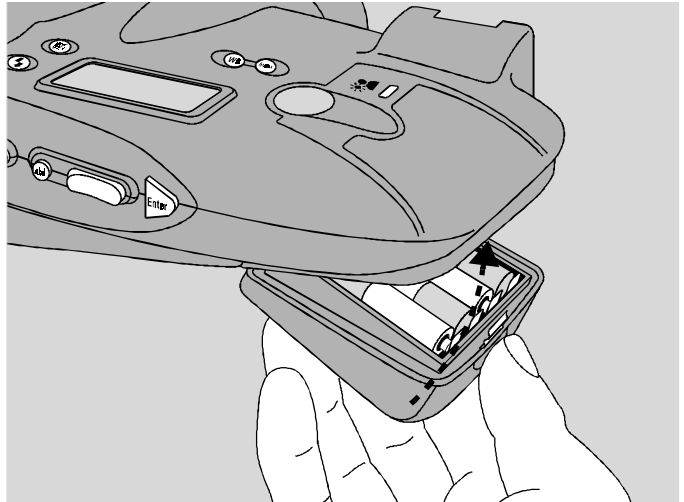


- 5 After the batteries have been charged, reinsert them into the battery holder. Be sure to observe the battery orientation label. (Install the two outside batteries first, then install the two inside batteries.)





- 6 Insert the battery holder in the camera and close it, making sure it latches.

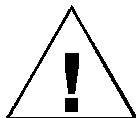


- 7 Turn on the camera to verify that the batteries have been installed correctly.



Replacing the camera batteries

The NiCad batteries provided with the PDC-3000 are capable of being recharged hundreds of times, but they may eventually wear out. Replace the batteries when they require abnormally frequent recharging. NiCad “AA” batteries of the types recommended on page 210 are usually available at electronics and department stores.



WARNING: USE ONLY THE BATTERIES RECOMMENDED ON PAGE 210. OTHER TYPES, SUCH AS ALKALINE OR LITHIUM “AA” BATTERIES, WILL NOT OPERATE THE CAMERA, AND MAY CAUSE INJURY OR DAMAGE THE CAMERA IF YOU ATTEMPT TO CHARGE THEM AS DESCRIBED ABOVE.



Caring for CompactFlash cards

Memory cards should be handled carefully and be protected from dust, moisture and extreme heat.

Purchasing additional CompactFlash cards

Additional CompactFlash cards in various capacities can be purchased from your computer dealer. Cards must be SanDisk CompactFlash memory cards or their equivalent.

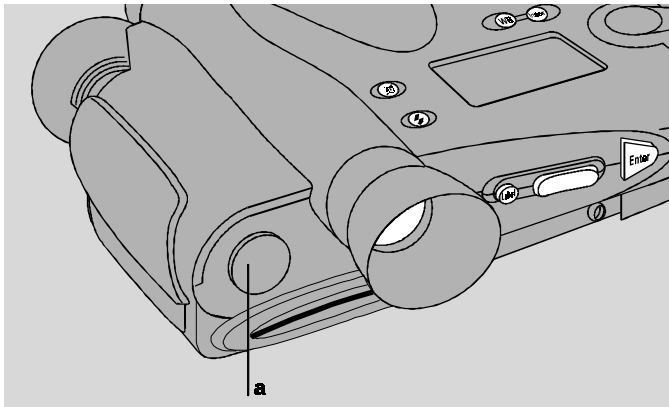
Initializing CompactFlash cards

Before using a new CompactFlash card for the first time, you may need to initialize (“format”) it with the following procedure to prepare it for accepting pictures. You should also initialize a CompactFlash card if the camera fails to recognize it or if it appears to have less than its rated capacity.



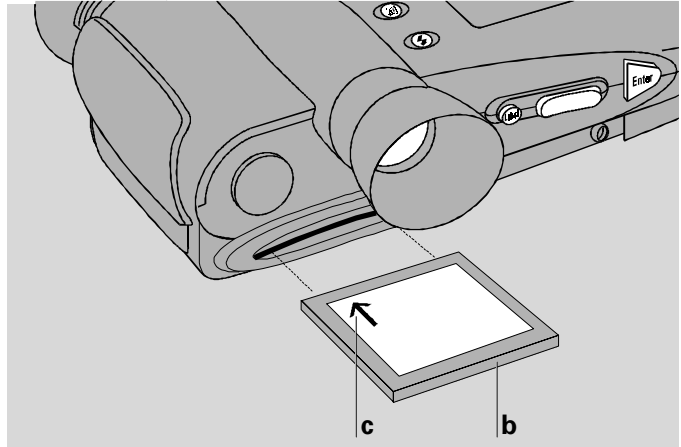
WARNING: INITIALIZING THE CARD ERASES ANY PICTURES STORED ON IT.

- 1 Turn on the camera by pressing the power button (a).





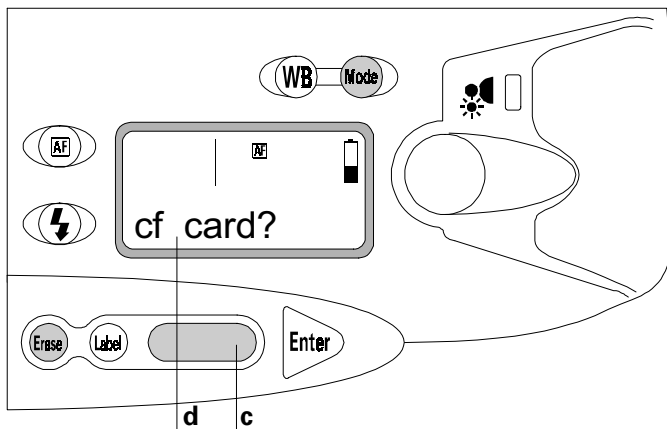
- 2 Insert the CompactFlash card (**b**) into the camera by sliding it into the CompactFlash card slot. Be sure to orient the card with the insertion arrow (**c**) facing upward and pointing into the slot.



Slide the card into the slot until it stops, then press it firmly to engage the connector on the forward edge.



- 3 Press the Mode button to display "compress?" on the LCD panel, then press the scroll button (d) until "cf card?" (e) appears.



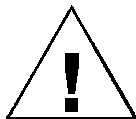
- 4 Press the Enter button to display "erase."
- 5 Press the scroll button to display "format."
- 6 Press the Erase button to format the CompactFlash card and return to the Capture mode.



Troubleshooting error messages

When necessary, the PDC-3000 camera displays one or more error messages on the LCD panel to inform you about operating or hardware problems. The list below recommends specific action for each error message.

Error messages not listed below may also appear on the LCD panel. If an unlisted message appears, turn the camera off briefly, then turn it back on. If the message reappears, contact Polaroid Technical Assistance (see page 230).



WARNING: WHEN THE INSTRUCTIONS BELOW DIRECT YOU TO TURN THE CAMERA OFF AND BACK ON, TURN OFF THE COMPUTER BEFORE DOING SO (IF THE CAMERA IS CONNECTED TO YOUR COMPUTER). FAILURE TO TURN OFF THE COMPUTER COULD CORRUPT DATA ON YOUR HARD DISK, DAMAGE THE CAMERA, OR DAMAGE THE COMPUTER.

charging The camera is not ready to take flash pictures because the electronic flash is still charging. Wait until the yellow indicator in the viewfinder goes out before trying again.



card full The CompactFlash card has reached its storage capacity. Replace the card, or transfer the pictures to your computer (page 128 for PowerMac/PowerPC and page 174 for PC) and erase the pictures from the card (page 141 for PowerMac/PowerPC and page 188 for PC).

error 01h The camera detected a problem with its picture storage hardware. Turn the camera off briefly, then turn it back on. If the message reappears, turn off the camera, connect it to the power adapter/trickle charger for 3 minutes, and then turn the camera on. If the error reappears, contact Polaroid Technical Assistance (see page 230). When this condition exists, you can still take pictures by operating the camera under computer control (page 146 for PowerMac/PowerPC and page 192 for PC) but you will not be able to store additional pictures in the camera or transfer pictures previously stored in the camera.

error 02h The camera detected a problem with the LCD panel. Turn the camera off briefly, then turn it back on. If the message reappears, contact Polaroid Technical Assistance (see page 230). When this condition exists, the camera will continue to operate normally except for the LCD panel.

error 04h The camera detected a problem with the hardware storing the current date and time and other data. Turn the camera off briefly, then turn it back on. If the message



reappears, turn off the camera, connect it to the power adapter/trickle charger for 3 minutes, and then turn the camera on. If the error reappears, contact Polaroid Technical Assistance (see page 230). Under this condition, the camera will continue to operate normally, but the time and date displayed and stored with pictures may be incorrect. In addition, time-related features (automatic shutoff, for example) may not operate normally.

error 08h Stored data for optimizing image quality may have become corrupted. Turn the camera off briefly, then turn it back on. If the message reappears, contact Polaroid Technical Assistance (see page 230). Under this condition, the camera will continue to operate normally. Picture quality, however, may be reduced and the stored user name and camera serial number may become corrupted.

error 10h Stored data for the camera's light sensor may have become corrupted. Turn the camera off briefly, then turn it back on. If the message reappears, contact Polaroid Technical Assistance (see page 230). Under this condition, the camera will continue to operate normally, but the pictures may contain small dots or lines.

error 20h Stored data for optimizing picture exposure may have become corrupted. Turn the camera off briefly, then turn it back on. If the message reappears, contact Polaroid



Technical Assistance (see page 230). Under this condition, the camera will continue to operate normally, but picture quality may be reduced.

error 40h The camera detected an internal communication error. Turn the camera off briefly, then turn it back on. If the message reappears, contact Polaroid Technical Assistance (see page 230). Under this condition, you will still be able to transfer pictures stored in the camera to your computer, but you will not be able to take additional pictures.

error 80h The camera detected an image-processing error. Turn the camera off briefly, then turn it back on. If the message reappears, contact Polaroid Technical Assistance (see page 230). Under this condition, you will still be able to transfer pictures stored in the camera to your computer, but you will not be able to take additional pictures.

low batt The camera batteries require charging. See *Caring for the camera batteries* on page 208.



low light The camera senses insufficient light for taking pictures without flash. Set the electronic flash to On or to Auto (see *Using flash* on page 86) before taking the picture.

no term Invalid buttons have been held down during camera power-up. Press the Erase button to clear the message.

stuck btn One of the camera control buttons is being held down. Make sure all buttons are released and continue. If the problem persists, turn the camera off briefly, then turn it back on. If this does not solve the problem, contact Polaroid Technical Assistance (see page 230).

term Invalid buttons have been held down during camera power-up. Press the Erase button to clear the message.



Troubleshooting SCSI connection problems

PowerMac/PowerPC SCSI ID conflicts

The SCSI ID number used for the PDC-3000 must be unique, and must not be used by any other of the computer's internal or external SCSI devices on any SCSI bus. If another SCSI device is using the same ID as the PCD-3000, the following message appears on the PowerMac/PowerPC display:
"Unable to communicate with camera..."

To identify the SCSI IDs being used by the devices connected to your PowerMac or PowerPC, use a program such as SCSI Explorer or Apple System Profiler (distributed on the Apple software CD).

Windows 95 SCSI ID registry entries

When the SCSI ID of the PDC-3000 is changed and the computer running Windows 95 is rebooted, Windows 95 adds another PDC-3000 entry to the registry corresponding to the new SCSI ID. If you change the PDC-3000 SCSI ID back to its original setting, you must delete the new registry entry before the PDC-3000 software will recognize the camera.

Refer to the Windows 95 documentation for registry-editing instructions.



PDC-3000 full one-year warranty

Polaroid Corporation warrants the PDC-3000 camera, excluding the batteries, against defects in manufacture or workmanship for a period of one year from the date of purchase. To verify the warranty period, you should keep the invoice, sales receipt, or other proof of the purchase date.

Should this product or any component or accessory included with it, except software or batteries, prove to be defective at any time during the warranty period, Polaroid Corporation will, at its discretion, either replace or repair this item, without charge. Please refer to the Software Warranties under Software License Agreements (page 246) for the PDC software warranty.

This warranty does not cover damage caused by accident, incorrect installation, unauthorized modification, and misuse or abuse. A charge will be made for repair of such damage.

This warranty excludes all consequential damages.

Some states do not allow the exclusion or limitation of consequential damages, so the foregoing exclusion may not apply to you.



Service

U.S.A. and Canada

If your PDC-3000 camera requires service, call Polaroid Technical Assistance from within the U.S.A. at **1-800-432-5355**, Monday through Friday, 8 a.m. to 8 p.m., (Eastern Time). From Canada, call **1-800-268-6970**.

To return the camera for service, pack it carefully in its original shipping carton or other sturdy container, with plenty of padding. Shipping instructions are available from Polaroid Technical Assistance specialists at the telephone numbers above.

Outside North America

Please contact your nearest Polaroid office or service center (see page 251).



Radio and television interference

FCC Notice (U.S.A.)

Warning: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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 communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment to an outlet on a circuit different from the one to which the receiver is connected.



- Consult the dealer or an experienced radio/television technician for help.

EMI Notice (Canada)

This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications.

LE PRESENT APPAREIL NUMERIQUE N'EMET PAS DE BRUITS RADIOELECTRIQUES DEPASSANT LES LIMITES APPLICABLES AUX APPAREILS NUMERIQUES DE CLASS B PRESCRITES DANS LE REGLEMENT SUR LE BROUILLAGE RADIOELECTRIQUE EDICTE PAR LE MINISTERE DES COMMUNICATIONS DU CANADA.

EMC Statement (Europe)

Polaroid Corporation certifies that this product conforms to the following standards:

Safety

Low Voltage Directive 73/23/EEC
IEC 950/EN60950



EMC

89/336/EEC EMC Directive

EN 55022, Class B

EN 50082-1

IEC 801-2

IEC 801-3

IEC 801-4

Use only a harmonized detachable cordset that has conductors with a cross sectional area equal to or greater than 1.0mm. This cord shall be rated for 220-240VAC, 10 Amperes. It should be approved by a European agency such as VDE, SEMKO, ASTA or VTE.



PDC-3000 camera specifications

Camera type	Handheld point-and-shoot digital camera
Sensor resolution	Polaroid 1 million pixel CCD
Output resolution	High resolution: 800x600 pixels, 24-bit color (16.7 million colors), 1.4MB file Super high resolution: 1600x1200 pixels, 24-bit color (16.7 million colors), 5.6MB file



Picture storage capacity (typical, with a 15-megabyte CompactFlash card)	Compression off: 15 pictures No loss compression (2:1): 30 Lossy compression (5:1): 75 Lossy compression (10:1): 150
Computer interface	SCSI-2
Standard lens	11mm (38mm equivalent) <i>f</i> /2.8 glass
Optional lens	17mm (60mm equivalent) <i>f</i> /2.8 glass
Focus range	Standard lens: 10 inches (26cm) to infinity Optional lens: 24 inches (61cm) to infinity
ISO rating	25, 50 or 100 (film speed equivalent)
Shutter	Scanning aperture, microprocessor-controlled
Shutter speed	1/25 to 1/500 second
Aperture	<i>f</i> /2.8 to <i>f</i> /32
Electronic flash	Internal, 15-foot (4.6m) maximum range
Recycle time (minimum time between shots)	12 seconds with flash 10-12 seconds without flash



Power supply	Four rechargeable "AA" NiCad batteries IEC universal power adapter/trickle charger
Power adapter/ trickle charger	Input: 100-240VAC, 380mA, 50-60 Hz (surge protected) Output: +6.0VDC, 500mA
Dimensions	Length: 7.9 inches (20.1cm) Width: 6.3 inches (16.0cm) Height: 2.2 inches (5.6cm)
Weight with batteries	2.0 pounds (0.9kg)
Operating environment	Temperature: 32° to 120°F (0° to 48°C) Relative humidity: 5% to 90%, no condensation



Required printer settings for IQA

When you print pictures that have been enhanced with IQA processing, you must use the printer settings specified in this section for optimum image quality. (See *Specifying a destination profile* on page 137 for PowerMac/PowerPC or page 184 for PC.)

Note: The settings in this section are presented with the Windows 95 and Windows NT labels and buttons. If you are using a PowerMac or PowerPC, use the equivalent settings for your system.



Canon BJC-4100 Printer

Paper tab

Media Type **Plain Paper**
or
Coated Paper
or
High Gloss Film

(set to paper type you are using)

Paper Feed **Auto Feeder** if Plain Paper or Coated Paper
selected above
Manual Feed if High Gloss Film selected
above

Graphics tab

Print Quality **Standard** if Plain Paper or Coated Paper
selected above
High if High Gloss Film selected above



Canon BJC-4100 Printer (continued)

Fine **On**
Image Color **Off**
Matching
Color Model **Color**
Print Model **Automatic**

Epson Stylus Color II Printer

Document Type tab

Document **Photograph**
Type
Ink **Color (CMYK)**

Image Settings tab

Image **0% (Default)**
Brightness
and Contrast
Color **Off**
Matching



Epson Stylus Color II Printer (continued)

Halftoning tab

Halftoning **Error Diffusion**

Printing Mode/Options tab

Printing Mode **Best-360 dpi** if printing on plain paper or
Special coated paper for 360 dpi

Super-720 dpi if printing on Special coated
paper for 720 dpi

Media Type **Plain paper** if
Best-360 dpi selected above
or
Special coated paper for 360 dpi if Best-
360 dpi selected above
or
Special coated paper for 720 dpi if Super -
720 dpi selected above
(use only paper type selected)

Print Options **MicroWeave On**
High Speed Off



Epson Stylus Color II Printer (continued)

Paper tab

All settings match paper and source being used



HP 680/682 Printer

Setup tab

ColorSmart **Manual**

ColorSmart **Intensity: centered (default)**

Options **Color Control: Match**

Halftoning: Scatter

Print Quality **Normal** or **Best** for printing on HP
Premium InkJet Paper

Best for printing on Plain Paper or HP
Glossy Paper

ICM **OFF**

Paper tab

Paper **Portrait** or **Landscape**

Orientation

Paper Size **Letter**



HP 680/682 Printer (continued)

Paper Type **Plain Paper**
or
HP Premium InkJet Paper
or
HP Glossy Paper
(set to paper type you are using)



HP 820/850/855/870 Printer

Setup tab

ColorSmart **Manual**

ColorSmart **Intensity: centered (default)**

Options **Color Control: Match**

Halftoning: Scatter

Print Quality **Normal** or **Best** for printing on HP
Premium InkJet Paper

Best for printing on Plain Paper or HP
Glossy Paper

ICM **OFF**



HP 820/850/855/870 Printer

Paper tab

Paper Orientation **Portrait or Landscape**

Paper Size **Letter**

Paper Type **Plain Paper**
or
HP Premium InkJet Paper
or
HP Glossy Paper
(set to paper type you are using)



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Your Acceptance of the Foregoing Agreement Will Be Indicated During Installation



Polaroid Offices and Service Centers

For information about technical support or service, contact the Polaroid Office or Service Center nearest you:

<i>Location</i>	<i>Telephone</i>
Australia	1800 066 021
België	02 714 31 02
Belgique	02 714 31 06
Brasil.....	0800 11 2177
Canada	1-800-268-6970
Danmark.....	80 01 59 56
Deutschland.....	069 9509 6056
España	01 377 81 03
France	01 41 91 38 10
Ireland	01 402 6897



<i>Location</i>	<i>Telephone</i>
Italia	02696 33253
Japan	(81-3) 3438 8811
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Luxembourg	08 00 25 42
México.....	01 800 70 72777
Nederland	020 487 45 34
New Zealand	09 377 3773
Norge.....	80 01 18 87
Österreich	06 60 74 33
Portugal	05 0544 6017
Puerto Rico	(787) 725 6240
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Suisse	01 838 53 48
Suomi.....	080 011 7008
Sverige	08 445 12 31
Svizzera.....	01 838 53 49
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U.S.A.	1-800-432-5355

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