Contents

Back

| Overview8 |
|-----------------------------------|
| About This Manual8 |
| Introduction |
| Features11 |
| System Requirements |
| When in Portable Mode |
| When Connected to a MACINTOSH |
| When Connected to a PC |
| Electromagnetic Emissions14 |
| Japan |
| Taiwan |
| European Union (EU) |
| USA |
| About the DCS Pro Back Plus |
| Overview |
| Rear |
| Front (Attaches to Camera Body)16 |
| Sides |
| Top |
| Imager |
| Focus Screen Overlay19 |
| Applying an Overlay |
| |

Index

Contents-1

Next

| IR Filter |
|---|
| Anti-aliasing Filter |
| Removing an IR or Anti-aliasing Filter |
| Inserting a Filter |
| Image LCD |
| How the Image LCD Works |
| Turning the Image LCD On and Off |
| Tilting the Image LCD |
| Menu Bar |
| Menus |
| Status Screen |
| Displaying the Status screen |
| Digital Buttons |
| Four-way Switch |
| Menu Button |
| OK Button |
| Cancel Button |
| Quick Guide for Using the Image LCD and Digital Buttons |
| Power Button |
| Ports and Jacks |
| Lens Sync Cable Jack |
| IEEE 1394 Port |
| Flash Sync Cable Jack |
| 25 2 2 3 3 31 31 |



Back Next

Contents

Back

| Battery Connection Jack |
|--|
| S-Video Output Port 32 The Basics 33 Assembling the Camera 33 Connecting the DCS Pro Back Plus to the Camera Body and Accessories 34 MAMIYA Interface Plate 34 Connecting the DCS Pro Back Plus to the Camera Body 35 Disconnecting the DCS Pro Back Plus from the Camera Body 37 Connecting the Camera Lens 38 Connecting Flash/Strobe Units 39 Image Files 40 Storing Images 41 Compact Flash (CF) Cards 42 Inserting a CF Card 43 |
| Ejecting a CF Card |
| Configuring Your Camera49 |

Index

Contents-3

Next

Contents

Back

| Setting the Date and Time 49 Setting Camera Properties 50 Displaying the Properties Menu 50 Setting Battery Save Onset 51 Setting Display Off Time 51 Total Actuations 52 Use Folder01 52 Video Format 53 Video Signal 53 |
|---|
| Using the Camera Connected to a Computer54Getting Started54Connecting the Camera to the Computer and Power Supply55AC Adapter55Connecting to a Computer with Two IEEE 1394 Ports56Connecting to a Computer with a Single IEEE 1394 Port57Connecting to a Computer and Using Battery Power58Powering Your Camera59 |
| Using the Camera in Portable Mode |

Index

Contents-4

Next

| Connecting to the AC Adapter62Turning the Camera On and Off62Conserving Batteries63Battery Save State63 |
|---|
| Capturing Images |
| Overview |
| Formatting Images65 |
| Intervalometer |
| Intervalometer Options |
| Using the Image LCD |
| Reviewing Images |
| Selecting a Display Mode |
| Single Image Display Mode |
| Zoom Display Mode |
| Histogram Display Mode |
| Multiple Image Display Mode |
| Image Delete Display Mode |
| Status Bar |
| Location Bar |
| Navigating through Displayed Images |
| Deleting Groups of Images |

Back

Contents

Back

| Display Contrast.76Overexposure Indicator.76Tagging Images.77 |
|--|
| Caring for Your DCS Pro Back Plus 78 Cleaning 78 Cleaning the DCS Pro Back Plus 78 Cleaning the IR or Anti-aliasing Filter 78 Storing 79 Firmware 81 Checking the Current Firmware Version 81 Updating Firmware 82 |
| Specifications |
| Unsupported Features |
| Using an S-Video Monitor86Connecting86Enabling87Disabling87 |

Index

Contents-6

Next

| Navigating Through Images | |
|---------------------------|--|
| Warnings and Cautions88 | |
| Glossary | |
| Warranty93 | |
| | |







About This Manual

This manual describes the functions available with the KODAK PROFESSIONAL DCS Pro Back Plus (DCS Pro Back Plus). It does not describe the following:

- ✓ Functions available with the HASSELBLAD 555ELD, 553ELX, 503CXi, 503CW, or MAMIYA RZ67 PRO II camera bodies, except to point out unsupported features (page 84). Refer to the manual included with your HASSELBLAD or MAMIYA camera body.
- ✓ Functions in the KODAK PROFESSIONAL DCS Capture Studio, DCS Photo Desk, or DCS Camera Manager software that open, edit and convert images from your DCS Pro Back Plus. Refer to the user's manuals or Help on the software CDs.

This is an on-line manual. Click the following items to jump to the associated topic:

- ✓ Entries in the Table of Contents or Index
- ✓ Page numbers underlined in blue
- ✓ The Contents, Back, Next, or Index buttons

In this manual, the term "camera" refers to the camera body with attached DCS Pro Back Plus.

Some menu screens (page 26) have OK and Cancel choices. These choices are implemented by pressing the OK or Cancel digital buttons (page 28).

Contents

Back

Next

Introduction

Thank you for purchasing the KODAK PROFESSIONAL DCS Pro Back Plus. This digital camera back attaches to the following camera bodies:

- ✓ HASSELBLAD 555ELD, 553ELX, 503CXi, and 503CW
- ✓ MAMIYA RZ67 PRO II (when used with the optional KODAK PROFESSIONAL DCS Pro Back Plus RZ Interface Kit)

The DCS Pro Back Plus is interchangeable with the camera body's film magazine. You can use the camera body for digital or film photography. If you use a HASSELBLAD 503CXi or 503CW camera body, you must use the HASSELBLAD Winder CW and the KODAK PROFESSIONAL DCS Pro Back Plus 503CW/CXi Cable Assembly (EK Cat. Number 195 3736).

If you use a HASSELBLAD 553ELX camera body, you must use the KODAK PROFESSIONAL DCS Pro Back Plus 553ELX Cable Assembly (EK Cat Number 837 1205).

The DCS Pro Back Plus is designed for studio and portable use. Take care to avoid inclement weather.

You can use the DCS Pro Back Plus connected to a MACINTOSH computer (page 54), a PC, or in portable mode (page 60).

When connected to a computer, use the included AC adapter as the power source. Power is supplied to the DCS Pro Back Plus through the IEEE 1394 cable. If the included Capture Studio software is running, images are saved on the computer. If the software is not running, images are saved on a Compact Flash Card (CF Card).

When used in portable mode, you must supply the DCS Pro Back Plus power from a battery. Suitable batteries may be obtained from these Web sites: DIGITAL CAMERA BATTERY (www.digitalcamerabattery.com) or QUANTUM INSTRUMENTS Inc. (www.qtm.com.)

Contents

Back

Next

Features

- √ 16 Megapixel imager (4080 x 4080 pixels)
- ✓ Untethered burst rate: 1 image / 2 seconds, burst depth: 6 images (varies depending on image content and type of Compact Flash Card)
- ✓ ISO:100
- ✓ Removable IR filter
- ✓ Image Display LCD with two-position viewing (vertical and 45°) provides image thumbnails and status of digital features
- ✓ S-Video output jack for viewing images on an external monitor (not included)
- ✓ Remote Shutter Release jack for connection to HASSELBLAD camera bodies 553ELX, 503CXi, and 503CW (cables not included)

- ✓ Power source When connected to computer: From included AC adapter When in portable mode: Battery pack from DIGITAL CAMERA BATTERY, QUANTUM INSTRUMENTS Inc. or other third party vendor.
- ✓ Two slots for Type II Compact Flash Cards, each slot with a card-busy LED
- ✓ Images can be edited using DCS Capture Studio or DCS Photo Desk software (included with DCS Pro Back Plus)
- √ 400 Mbps IEEE 1394 interface

System Requirements

In addition to items included with the DCS Pro Back Plus, your camera body and its accessories, the following items are required:

When in Portable Mode

- ✓ Battery pack and cable from DIGITAL CAMERA BATTERY or from QUANTUM INSTRUMENTS Inc. Refer to their web sites for model numbers and ordering information: www.digitalcamerabattery.com or www.qtm.com
- ✓ QUANTUM battery cable adapter: QUANTUM INSTRUMENTS part MDC3
- ✓ Compact Flash Cards
- ✓ Card reader
- To process the images, you need a computer with an operating system and RAM as described in the following sections.

When Connected to a MACINTOSH

- ✓ Mac OS 9.1 or higher (with CarbonLib 1.5 or higher) or Mac OS 10.2.3 or higher
- ✓ MACINTOSH or compatible with POWERPC G3 processor (G4 recommended)
- ✓ 256 MB RAM (512 MB recommended)
- ✓ 200 MB free disk space
- ✓ Free IEEE 1394 port for tethered camera operation

Contents

Back

Next

When Connected to a PC

- ✓ WINDOWS 2000 or WINDOWS XP
- ✓ WINDOWS/INTEL PC with 266 MHz PENTIUM II processor
- ✓ 256 MB RAM (512 MB recommended)
- ✓ 200 MB free disk space
- ✓ IEEE 1394 OHCI compatible adapter with a free port for tethered camera operation
- √ 1024 pixel by 768 pixel display

If your PC does not have IEEE 1394 ports, you need an IEEE 1394 card with dual ports or an IEEE 1394 card with a single port and an IEEE 1394 hub. If you do not have an IEEE 1394 hub and you have a computer with a single IEEE 1394 port, you must operate the DCS Pro Back Plus using battery power.

Contents

Back

Next

Electromagnetic Emissions

Japan

この装置は、情報処理装置等電波障害自主規制協議会(VCCI)の基準に基づくクラスA情報技術装置です。この装置を家庭環境で使用すると電波妨害を引き起こすことがあります。この場合には使用者が適切な対策を講ずるよう要求されることがあります。

This is a Class A product based on the standard of the Voluntary Control Council for Interference by Information Technology Equipment (VCCI). If this equipment is used in a domestic environment, radio disturbance may arise. When such trouble occurs, the user may be required to take corrective action.

Taiwan

警告使用者:

這是甲類的資訊產品,在居住的環境中使用時,可能會造成射頻干擾,在這種情況下,使用者會被要求採取某些適當的對策。

Contents Back Next Index 14

European Union (EU)

Warning:

This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

USA

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

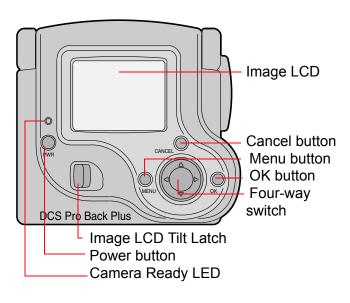
Contents

Back

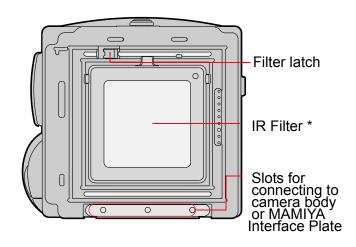
Next

Overview

Rear



Front (Attaches to Camera Body)



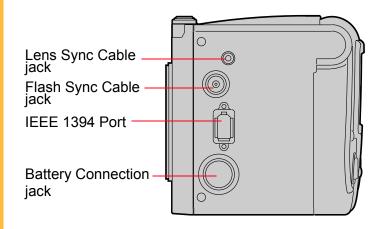
* To obtain correct focus you must use either an IR filter (included) or an anti-aliasing filter (available as an accessory).

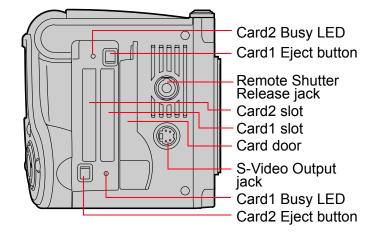
Contents

Back

Next

Sides



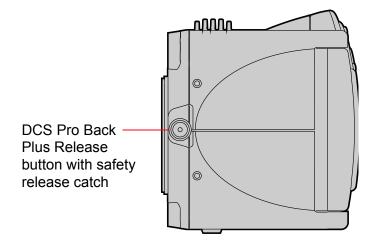


Contents

Back

Next

Top



Imager

The imager converts light into electrical charges when you capture an image. Its specifications are noted below:

Horizontal pixels: 4080 Vertical pixels: 4080

Total pixels: 16,646,400

Horizontal active area (mm): 36.72 Vertical active area (mm): 36.72

The imager is located behind the IR or antialiasing filter (page 20).

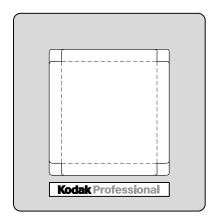
Focus Screen Overlay

The viewfinder's field of view is greater than that of the imager. Therefore, an apparent focal length magnification or telephoto effect appears in the captured image.

Five viewfinder overlays are included with the DCS Pro Back Plus. Each indicates the scene content that is actually captured. Each overlay has crop indicators which indicate the view captured when you choose an Image Format option (page 65).

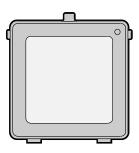
Applying an Overlay

- 1 Remove the viewfinder from the camera body.
- 2 Lay a Focus Screen overlay over the focus screen.
- 3 Replace the viewfinder.



IR Filter

A removable (page 21) IR filter is included with the DCS Pro Back Plus. This filter, which is installed in front of the imager, maintains proper focus, filters out infrared light to improve image quality, and helps protect the imager's coverglass.

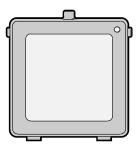


For proper focus, you must use either the IR filter or the anti-aliasing filter.

Anti-aliasing Filter

You can replace the IR filter with an anti-aliasing filter which can be purchased separately from Kodak. The filter performs the IR filter functions and helps reduce aliasing at certain focal distances.

The anti-aliasing filter has a white dot in its upper-right corner. The IR filter does not.

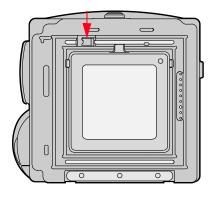


Removing an IR or Anti-aliasing Filter

CAUTION:

The Anti-aliasing filter and IR filter are fragile devices and must be handled with care.

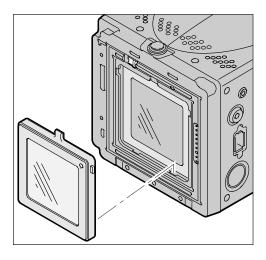
Slide the Filter latch to the right, then carefully remove the filter.



Store the unused filter in the pocket of the included body cap (page 79).

Inserting a Filter

Insert the two tabs at the bottom of the filter into the slots on the DCS Pro Back Plus.



2 Gently press the top of the filter into place until it is latched.

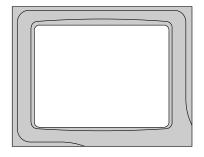
Contents

Back

Next

Image LCD

There is a two-inch diagonal Image LCD on the rear of the DCS Pro Back Plus where you can view images and change settings.



When an S-Video monitor (page 86) is in use, the Image LCD turns off. (Pressing the OK, Cancel, or Menu buttons (page 28) restores the display to the Image LCD and disables the external monitor.)

How the Image LCD Works

You can view images on the Image LCD in a variety of display modes. You can also access options from the Menu bar and from menus which are accessible from the Menu bar.

Access the options on the Image LCD in a hierarchical manner:

Display mode (page 68): Appears when you turn the Image LCD on

Menu bar (page 24): Accessible from Display mode

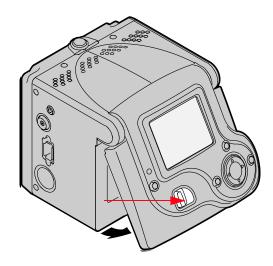
Menus (page 25): Accessible from the Menu bar

Turning the Image LCD On and Off

- 1 Power the DCS Pro Back Plus by battery (page 61) or AC Adapter (page 55).
- 2 Press the OK button to turn the Image LCD on.
- 3 Press the Cancel button to turn the Image LCD off. If the LCD is not in Display mode, press the Cancel button more than once.

Tilting the Image LCD

Slide the Image LCD Tilt Latch and tilt the LCD to a 45° angle for easier viewing, if needed.



Slide the latch and gently press to return the tilted section to its original position.

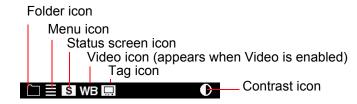
Contents

Back

Next

Menu Bar

The Menu bar is available in any Display mode (page 68) except Zoom mode when the Region of Interest box is disabled. The Menu bar appears on the Image LCD and contains icons which access various digital functions.



Displaying and Navigating the Menu Bar

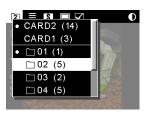
- 1 Turn the Image LCD on (page 23).
- 2 Press the Menu button to turn the Menu bar on.
- 3 Press the left or right side of the Four-way switch to highlight the needed Menu bar icon.
- 4 Press the Cancel button or Menu button to turn the Menu bar off.

Menus

Many DCS Pro Back Plus functions can be accessed through the menus on the Image LCD.

Making a Menu Selection

- 1 Navigate the Menu bar (page 24) until the Folder or Menu icon is highlighted.
 - The appropriate menu appears.



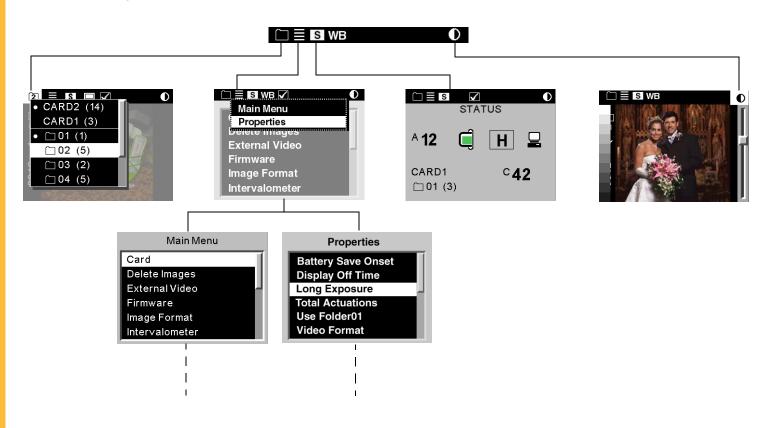


2 Press the top or bottom of the Four-way switch to highlight a menu option.

- 3 Press the OK button to activate the option.
 Additional screens may appear, depending on your choice.
- 4 Repeat steps 2 and 3 for each screen. (If the choices are "horizontal" as in the example below, use the left or right of the Four-way switch when highlighting options.)



Menu Hierarchy



Contents

Back

Next

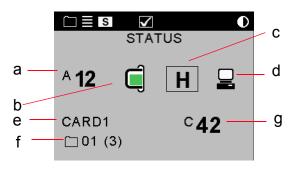
Status Screen

You can view information about the DCS Pro Back Plus on the Status screen.

Displaying the Status screen

Highlight the Status screen icon (page 24).

The Status screen appears with the following information:



- a Number of available images that can be captured to the active CF Card (page 42)
- b Fill level (in color) indicates the approximate amount of space available on the active card
- c Current image format full frame, horizontal, or vertical (page 65)
- d Appears if the DCS Pro Back Plus is connected to a computer (page 55) and flashes if the Capture Studio software is not running
- e Indicates the active card if two are inserted (page 42)
- f Name of active folder and the number of images in that folder
- g Number of the currently selected image (page 74)

Digital Buttons

The Four-way switch and the OK, Cancel, and Menu buttons activate the digital functions.

Four-way Switch

Press the left or right side to:

- ✓ Navigate through images
- ✓ Navigate the Menu bar
- ✓ Move the Region of Interest box (Zoom mode)

Press the top or bottom to:

- ✓ Change the Display mode
- ✓ Navigate a drop-down menu
- ✓ Move the Region of Interest box (Zoom mode)

Menu Button

✓ Toggles the Menu bar off and on

OK Button

- ✓ Turns the Image LCD on
- ✓ Enables the Region of Interest box (Zoom mode)
- ✓ Implements a zoom when Region of Interest box is enabled
- ✓ Implements a highlighted menu option
- ✓ Deletes the active image (Delete mode)
- ✓ Turns the Overexposure indicator on

Cancel Button

- ✓ Exits from menus without applying any changes
- ✓ Turns the Image LCD off
- ✓ Disables the Region of Interest box (Zoom mode)
- ✓ Turns the Overexposure indicator off

Quick Guide for Using the Image LCD and Digital Buttons

The digital buttons take on different functions, depending on the current state of the Image LCD.

| Turn the Image LCD on: | Press the OK button. |
|---|--|
| Select a highlighted menu option: | Press the OK button. |
| Enable Region of Interest box (Zoom mode): | Press the OK button. |
| Implement a zoom (Zoom mode): | Press the OK button. |
| Delete an image (Delete mode): | Press the OK button. |
| Toggle the Menu bar on/off: | Press the Menu button. |
| Turn the Image LCD off: | Press the Cancel button. |
| Dismiss a menu without implementing change: | Press the Cancel button. |
| Disable Region of Interest box (Zoom mode): | Press the Cancel button. |
| Navigate through images in all Display modes (except Zoom mode when Region of Interest box is enabled): | Press the left or right side of the Four-way switch. |
| Navigate the Menu bar and display menus: | Press the left or right side of the Four-way switch. |
| Navigate a drop-down menu: | Press the top or bottom of the Four-way switch. |
| Change to a different Display mode: | Press the top or bottom of the Four-way switch. |
| Move the Region of Interest box (Zoom mode): | Press any edge of the Four-way switch. |

Contents

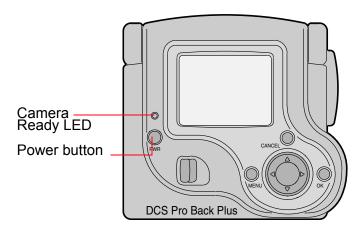
Back

Next

Power Button

The Power button turns the camera on and off when the camera is powered by a battery. This button does not function when the camera is powered by the IEEE 1394 connection.

The Camera Ready LED is illuminated when the DCS Pro Back Plus is receiving power.

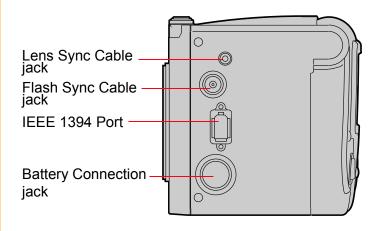


Contents

Back

Next

Ports and Jacks



Lens Sync Cable Jack

The included lens sync cable plugs in here and allows the DCS Pro Back Plus to monitor whether the lens-shutter is open or closed.

IEEE 1394 Port

The included 10 m IEEE 1394 cable connects here.

Flash Sync Cable Jack

Your flash sync cable connects here. The DCS Pro Back Plus triggers your flash/strobe when the lens-shutter opens.

Battery Connection Jack

The cable from your compatible battery pack plugs in here.

Contents

Back

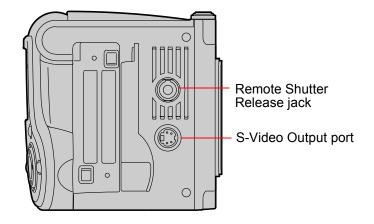
Next

Remote Shutter Release Port

Kodak carries two accessory cables which plug into the Remote Shutter Release Port. One cable allows the DCS Pro Back Plus to work with the HASSELBLAD 555ELX camera body. The other cable allows the DCS Pro Back Plus to work with the HASSELBLAD 503CW or 503CXi camera bodies (page 8).

S-Video Output Port

An industry standard S-Video cable connects here and allows you to review your images on an external S-Video monitor (page 86). You can obtain this type of cable at any high-end video dealer.



Contents

Back

Next

Assembling the Camera

Do the following before using your camera.

- In this manual, the term "camera" refers to the camera body with attached DCS Pro Back Plus.
- 1 Verify that your computer meets system requirements (page 12).
- 2 Install an included focus screen overlay (page 19).
- 3 Connect the DCS Pro Back to the HASSELBLAD 555ELD, 553ELX, 503CXi or 503CW (page 34) or to the DCS Pro Back Plus MAMIYA interface plate that has been attached to the MAMIYA RZ67 PRO II (page 34).

- 4 Connect the following cables, as needed:
 - ✓ DCS Pro Back Plus Lens Shutter Sync cord (page 38)
 - ✓ Flash Sync cable (page 39)
 - ✓ IEEE 1394 cable (page 55) or battery cable (page 61)
 - ✓ S-Video cable (page 86)

If you are using a HASSELBLAD 503CW, 503CXi or 553ELX camera body, connect the KODAK PROFESSIONAL DCS Pro Back Plus 503CW/CXi Cable Assembly or the 553ELX Cable Assembly. Follow the instructions included with your cable.

5 Follow the instructions for using your camera connected to a computer (page 54) or in portable mode (page 60).

Connecting the DCS Pro Back Plus to the Camera Body and Accessories

This section provides instructions for connecting the DCS Pro Back Plus to the camera body, and for connecting a lens, a flash, and an S-Video monitor to the DCS Pro Back Plus.

For instructions on connecting the DCS Pro Back Plus to the computer and/or power supply, refer to the sections on using the camera connected to the computer (page 54) or in portable mode (page 60).

MAMIYA Interface Plate

A DCS Pro Back Plus MAMIYA Interface Plate (available from Kodak) must be attached to the MAMIYA RZ67 PRO II camera body before connecting the DCS Pro Back Plus.

Refer to the instructions included with the DCS Pro Back Plus MAMIYA interface plate.

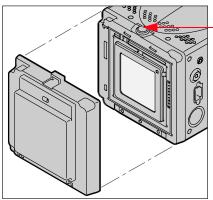
Contents

Back

Next

Connecting the DCS Pro Back Plus to the Camera Body

- If using a MAMIYA RZ67 PRO II, you must first attach a DCS Pro Back Plus MAMIYA interface plate (page 34). (This is not necessary with the HASSELBLAD 555ELD, 553ELX, 503CXi or 503CW.)
- 2 Remove the protective body cap from the DCS Pro Back Plus. (Pull the bottom off, then lift the top slightly to clear the release button.)



IMPORTANT:

Do not touch or strike the exposed IR filter (or anti-aliasing filter) or set it down on a surface.

3 Using isopropyl alcohol on a lint-free lens cleaning tissue, clean the contact pads on the DCS Pro Back Plus and the contact pins and locating posts on the camera body.

IMPORTANT:

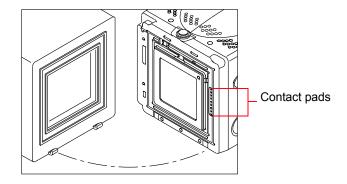
Do not connect a power source to the DCS Pro Back Plus until it is connected to the camera body or the MAMIYA Interface Plate.

Contents

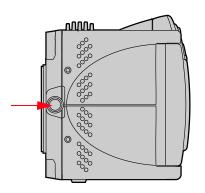
Back

Next

4 Position the slots at the bottom of the DCS Pro Back Plus on the locating posts on the camera body or MAMIYA interface plate.



5 Press the safety release pin (located at the top of the DCS Pro Back Plus Release button) and slide the DCS Pro Back Plus Release button to the right.



6 Gently press the DCS Pro Back Plus onto the camera back or to the attached DCS Pro Back Plus MAMIYA interface plate.

The DCS Pro Back Plus Release button snaps back to its original position.

IMPORTANT:

Ensure that the DCS Pro Back Plus is firmly attached before releasing your grip.

7 Complete the assembly (page 33).

Contents

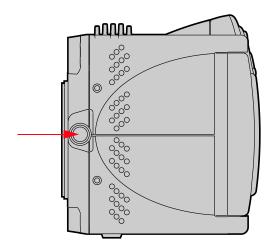
Back

Next

Disconnecting the DCS Pro Back Plus from the Camera Body

- 1 Place the camera on a table or other flat surface.
- 2 If the DCS Pro Back Plus is being powered by a battery pack, turn the camera off and unplug the battery cable (page 61).
- 3 Remove the following cables if they are connected:
 - ✓ Lens Sync cable (page 38)
 - ✓ Flash Sync cable (page 39)
 - ✓ IEEE 1394 cable (page 55) or battery cable (page 61)
 - ✓ S-Video cable (page 86)
 - ✓ KODAK PROFESSIONAL DCS Pro Back Plus 503CW/CXi or 553ELX Cable Assembly

- 4 Press the safety release pin (located at the top of the DCS Pro Back Plus Release button).
- 5 Slide the DCS Pro Back Plus Release button to the right.



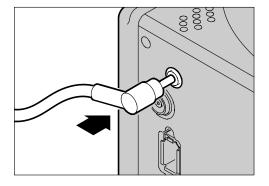
6 Carefully remove the DCS Pro Back Plus from the camera body.

Connecting the Camera Lens

You must connect the included Lens Sync cable to the camera lens and the DCS Pro Back Plus so that the DCS Pro Back Plus knows when the lens shutter opens and closes.

- 1 Attach the lens to the camera body.
- 2 Connect one end of the DCS Pro Back Plus Lens Shutter Sync cord to the PC socket on the lens.

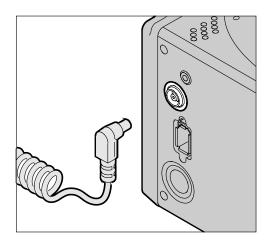
3 Connect the other end of the cord to the Lens Sync Cable jack on the DCS Pro Back Plus.



Connecting Flash/Strobe Units

Only external flash/strobe units can be used with the DCS Pro Back Plus. There is no built-in flash or hot shoe.

Connect your studio flash sync cable to the Flash Sync Cable jack.



Contents

Back

Next

Image Files

Images captured using the DCS Pro Back Plus are saved in a proprietary format with a .DCR extension.

You must use the DCS Capture Studio or DCS Photo Desk software to convert the .DCR files to a format such as JPEG or TIFF before you can open, view, or print them using other image editing or processing applications.

The DCS Capture Studio and DCS Photo Desk software convert the images as well as provide image-editing features.



Storing Images

Images are stored on either a Compact Flash Card (page 42) inserted in the DCS Pro Back Plus or on the computer hard drive.

Refer to the DCS Capture Studio, DCS Camera Manager, or DCS Photo Desk software User's Manual or Help for instructions on storing images on the computer. Images are stored on an inserted Compact Flash Card when ANY of the following conditions occur:

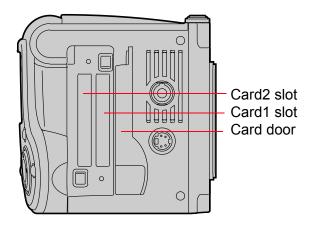
- ✓ Camera is operating in portable mode
- ✓ Camera is connected to a computer but the computer is not turned on
- ✓ Camera is connected to a computer that is powered but the Capture Studio software is not running

Images are stored on the computer hard drive when BOTH of the following conditions occur

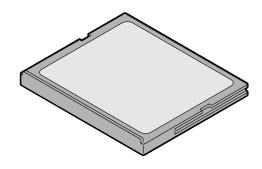
- ✓ Camera is connected to an appropriately configured computer
- ✓ Capture Studio software is running

Compact Flash (CF) Cards

The DCS Pro Back Plus has two slots for Compact Flash+ Type 2 Cards (CF Cards). The cards can be solid state or IBM MicroDrives.



When the camera is connected to the computer and the Capture Studio software is running, images are saved to the computer, regardless of whether a card is present.



You can use one or two cards. Only one card is active at a time, and captured images are saved on the active card.

The cards are referenced as Card1 and Card2 on various menus which appear on the Image LCD.

The front slot (closest to the camera body) holds Card1, and the rear slot holds Card2.

Contents

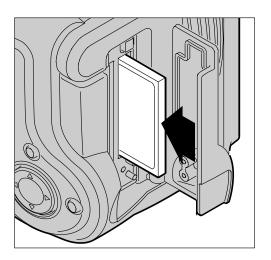
Back

Next

Inserting a CF Card

- Open the Card door.
- Insert a card in a slot and press firmly until you feel the card seat.

The card can only be inserted in one orientation.



- When using a single card, you can use either slot.
- 3 Insert a second card, if needed.
 The first card inserted is the active card unless you select the other card (page 45).
- 4 Close the Card door.

Contents

Back

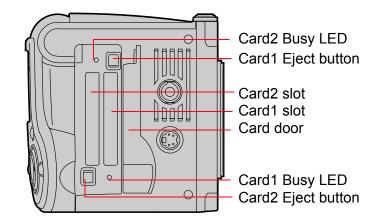
Next

Ejecting a CF Card

Open the Card door.

CAUTION:

The Card Busy LED flashes when images are being accessed. Do not remove the card when the LED is flashing. Doing so could destroy all image files on the card.



2 Press the Eject button next to the card to be ejected.

Selecting a CF Card or Folder

This procedure applies only when you are working in portable mode. When connected to the computer, images are saved on the computer. Use the Capture Studio or Camera Manager software to select folders on the computer.

With two CF Cards, the first card inserted is automatically selected. With either one or two cards, the default folder specified in Properties (page 52) is selected. You can select a different card or folder, if needed.

If no card is inserted, an x appears in the Folder icon on the Menu bar.



1 Highlight the Folder icon (page 24).



- 2 If two cards are inserted, press the top or bottom of the Four-way switch until CARD1 or CARD2 is highlighted, indicating the card to be made active.
- 3 Press the OK button.
- Repeat to select a folder.
 The active card and folder are indicated by a symbol.
- 5 Press the OK button.

Contents

Back

Next

Index

45

Accessing Images on a CF Card

After you capture images to a CF Card, you need to copy them to a computer with Capture Studio software.

- 1 Eject the CF Card (page 44) from the DCS Pro Back Plus.
- If your computer has a CF Card reader, insert the CF Card in the reader. If your computer uses a PC Card reader, first insert the CF Card into a PC Card adapter.
- 3 If the DCS Capture Studio or DCS Photo Desk software is installed on your computer, you can access the images directly from the CF Card or copy them from the card to a folder on the computer's hard drive. Otherwise, copy the image files to a server which can be accessed by a computer that has DCS Capture Studio or DCS Photo Desk software installed.

Formatting a CF Card

Occasionally you may need to format a CF Card if it was formatted incorrectly or if the data on the card becomes corrupted.

There are two ways to format a card:

- ✓ Quick format removes the directory structure but does not erase data. It may be possible to recover files (page 48) after a Quick format.
- ✓ Full format erases all information and "cleans up" the card. Images cannot be recovered.
- Cards are formatted in PC DOS format.

- 1 If two CF Cards are inserted, remove the card that you do not plan to format.
- The format operation will not occur when two cards are inserted, to prevent formatting the wrong card.
- 2 Highlight the Menu icon (page 24), and choose Main Menu from the drop-down menu (page 25).
- 3 Choose Card from the Main menu.
- 4 Choose Quick Format or Full Format from the Card menu.
- If you didn't remove the inactive card in step 1, remove it now, then press the OK button.
 If you removed the active card, re-insert it in the proper slot, then press the OK button.
- 6 Press the OK or Cancel button.

Contents

Back

Next

Recovering Data on a CF Card

The Recover Card feature lets you recover files recently deleted from a CF Card. Files can be recovered if:

- ✓ The card was formatted using a DCS Pro Back Plus
- ✓ The images were captured using a DCS Pro Back Plus
- ✓ The files have not been overwritten

When you recover files, a folder named Recover is automatically created on the card, and the recovered files are saved there.

You cannot capture images to the Recover folder. If you capture an image while the Recover folder is selected, the image is saved in the default folder specified in Properties (page 52).

- 1 Highlight the Menu icon (page 24), and choose Main Menu from the drop-down menu (page 25).
- 2 Choose Card from the Main menu.
- 3 Choose Recover Card from the Card menu.
 Images that have not been overwritten are recovered and saved in the Recover folder.
 - A Recovering Files screen appears during the recovery. When complete, another screen displays the number of files recovered.
- 4 Press the OK button.
 Another screen recommends that you format the card before capturing more images.
- 5 Press the OK button.

IMPORTANT:

Do not format until you save all needed images in another location.

Setting the Date and Time

A date and time stamp is associated with each image file.

Inside the DCS Pro Back Plus, a small built-in rechargeable battery maintains the date and time when the camera is not receiving power. It is recharged when the camera is powered, and maintains the date and time for up to 14 days. If this battery loses its charge, you need to reset the date and time.

You cannot access this battery.

To Set the Date and Time

- 1 Highlight the Menu icon (page 24) then choose Main Menu from the dropdown menu (page 25).
- 2 Choose Date/Time from the Main menu.
- 3 Press the left or right side of the Four-way switch to sequence through the numeric fields.
- 4 Press the top or bottom of the Four-way switch to change the highlighted numeric value.
- 5 Press the OK or Cancel button.

Setting Camera Properties

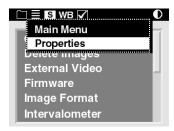
You can change the following camera properties:

- ✓ Delay before Battery Save mode activation (page 51)
- ✓ Delay before the Image LCD display turns off (page 51)
- ✓ Default folder for image capture (page 52)
- ✓ Video format (page 53)
- ✓ Video signal (page 53)

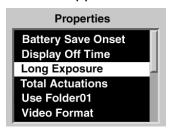
In addition, you can view the total number of camera actuations (page 52)

Displaying the Properties Menu

Highlight the Menu icon (page 24) then choose Properties from the drop-down menu (page 25).



The Properties menu appears.



Contents

Back

Next

Setting Battery Save Onset

When the DCS Pro Back Plus is powered by battery and you don't touch any controls during the specified Battery Save Onset time, it enters Battery Save state. You can change the onset time (page 63) from 1:00:00 to 23:59:59 (HH:MM:SS).

The default onset time is 60 minutes.

- 1 Display the Properties menu (page 50).
- 2 Choose Battery Save Onset from the Properties menu.

The Battery Save Onset screen appears.

- 3 Press the left or right side of the Four-way switch to sequence through the numeric fields.
- 4 Press the top or bottom of the Four-way switch to change the highlighted numeric value.
- 5 Press the OK or Cancel button.

Setting Display Off Time

Extended use of the Image LCD can drain your battery. For this reason, the LCD turns off after the length of time specified in the Display Off Time property.

The default Display Off Time is 60 seconds.

- 1 Display the Properties menu (page 50).
- 2 Choose Display Off Time from the Properties menu.
- 3 Press the left or right side of the Four-way switch to sequence through the numeric fields.
- 4 Press the top or bottom of the Four-way switch to change the highlighted numeric value.
- 5 Press the OK or Cancel button.

Total Actuations

You can determine the number of images captured by the DCS Pro Back Plus from the time of its manufacture.

- 1 Display the Properties menu (page 50).
- 2 Select Total Actuations.

The total number of images captured appears.

Use Folder01

You can change the default folder used when a CF Card is inserted (page 43).

If you do not change the default folder, the default is the lowest numbered empty folder.

- 1 Display the Properties menu (page 50).
- 2 Select Use FOLDER01.
- 3 Choose Yes or No.

If you choose Yes, FOLDER01 will be active when you insert a CF Card.

If you choose No, the lowest numbered empty folder will be active when you insert a CF Card.

Video Format

You can specify the format standard used when you view images on an external monitor (page 86):

- ✓ NTSC North America (default)
- ✓ PAL Europe and Asia
- Display the Properties menu (page 50).
- 2 Select Video Format.
- 3 Choose NTSC or PAL on the Video Format screen.

Video Signal

You can specify the video signal standard used when you view images on an external monitor:

- ✓ S-Video (page 86) provides a higher level of image quality (default - requires an S-Video cable - not included)
- ✓ Composite (requires a special cable not included)
- 1 Display the Properties menu (page 50).
- 2 Select Video Signal.
- 3 Select S-Video or Composite on the Video Signal screen.

Contents

Back

Next

Getting Started

To start using your camera connected to a computer, do the following.

- It is not necessary to turn the computer off.
- 1 Assemble the camera (page 33).
- Install the included DCS Capture Studio, DCS Camera Manager, and DCS Photo Desk software. (Follow the instructions on the software CDs.)
- 3 Connect the camera to the computer and power supply (page 55).
- 4 Turn the computer on, if it isn't already.
- The Power button has no effect when the camera is connected to a computer.

- 5 Start the Capture Studio software or Camera Manager software.
- 6 Capture images.
- 7 Review and edit the images, as needed, in the DCS Capture Studio or DCS Photo Desk software and save them to the computer's hard drive in the desired format.

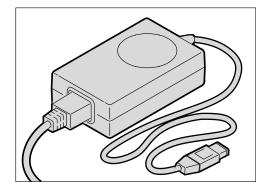
Connecting the Camera to the Computer and Power Supply

Depending on your computer configuration and your available accessories, choose one of the following ways to connect the DCS Pro Back Plus to a computer and a power supply.

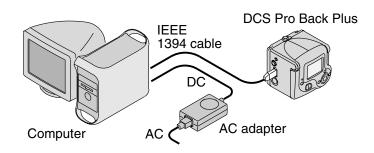
- ✓ DCS Pro Back Plus and DCS Pro Back Plus AC adapter connect to a computer with two IEEE 1394 ports (page 56)
- ✓ DCS Pro Back Plus and DCS Pro Back Plus AC adapter connect to an IEEE 1394 hub which connects to a computer with one IEEE 1394 port (page 57)
- ✓ DCS Pro Back Plus connects to a battery power source and a computer with one or more IEEE 1394 ports (page 58)

AC Adapter

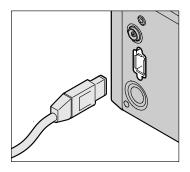
A DCS Pro Back Plus 24VDC AC adapter is included with the DCS Pro Back Plus. Do not use any other type of AC adapter with your camera.



Connecting to a Computer with Two IEEE 1394 Ports



1 Connect one end of the included 10m IEEE 1394 cable to the IEEE 1394 port on the DCS Pro Back Plus.

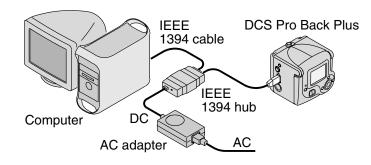


- 2 Connect the other end of the IEEE 1394 cable to an IEEE 1394 port on the computer.
- 3 Connect the cable from the included AC adapter to a different IEEE 1394 port on the computer.
- 4 Plug the AC adapter into a wall socket.

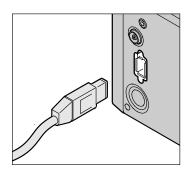
Connecting to a Computer with a Single IEEE 1394 Port

In addition to accessories included with the DCS Pro Back Plus, you need:

- ✓ IEEE 1394 hub
- √ 6-wire IEEE 1394 cable

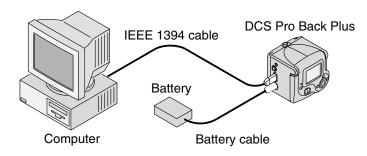


1 Connect one end of the included 10m IEEE 1394 cable to the IEEE 1394 port on the DCS Pro Back Plus (page 56).

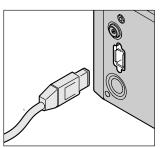


- 2 Connect the other end of the IEEE 1394 cable to any of the ports on the IEEE 1394 hub.
- 3 Connect the cable from the included AC adapter to either one of the remaining ports on the IEEE 1394 hub.
- 4 Connect another 6-wire IEEE 1394 cable (not included) from another port on the IEEE 1394 hub to the single IEEE 1394 port on the computer.
- 5 Plug the AC adapter into a wall socket.

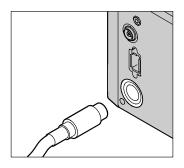
Connecting to a Computer and Using Battery Power



1 Connect one end of the included 10m IEEE 1394 cable to the IEEE 1394 port on the DCS Pro Back Plus.



- 2 Connect the other end of the IEEE 1394 cable to an IEEE 1394 port on the computer.
- 3 Following the instructions included with your battery pack, connect the battery pack and its cable.
- 4 Insert the cable into the Battery Connection jack on the DCS Pro Back Plus.



5 Turn on the battery pack's power switch.

Powering Your Camera

When connected to the computer, your camera receives its power from the included AC adapter (via the IEEE 1394 interface) or a compatible battery. If you use an IEEE 1394 cable other than the one included with your DCS Pro Back Plus, ensure that it is a 6-wire IEEE 1394 cable (4-wire cables will not work).

If you do not use the AC adapter with the IEEE 1394 cable, the DCS Pro Back Plus will not receive enough power. An error message appears.



To Power the Camera

With the IEEE 1394 cable and DCS Pro Back Plus AC Adapter (page 55) or a compatible battery (page 61) connected, turn the computer on.

It takes 5-6 seconds for the DCS Pro Back Plus to activate once the initial power signal is received. When ready, the Camera Ready LED illuminates. (The Power button has no effect when power is supplied by the IEEE 1394 connection.)

If you turn the Image LCD on, it turns off automatically after the time specified in the Display Off Time property (page 51).

To Turn the DCS Pro Back Plus Off

Disconnect the IEEE 1394 cable.

Contents

Back

Next

Getting Started

To start using your camera in portable mode (not connected to a computer), do the following:

- 1 Assemble the camera (page 33).
- 2 Connect a power supply (page 61).
- 3 Insert one or two CF Cards (page 42).
- 4 Turn the camera on (page 62).
- 5 Capture images.
- 6 Review the images (page 68) on the Image Display LCD (or enable the video output (page 86) to view them on a monitor.)

- 7 Remove the CF Cards from the camera and insert them in a card reader.
- 8 Copy the image files to the computer.
 If images are copied to a computer (page 12) running DCS Capture Studio or DCS Photo Desk software, you can access them using the software
 - Alternatively, you can copy them to a server accessible from a computer running the DCS Capture Studio or DCS Photo Desk software.
- 9 Edit the images, as needed, in the DCS Capture Studio or DCS Photo Desk software and save them in the desired format.

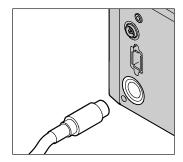
Connecting to a Power Supply

When you are working in portable mode, your camera may receive its power from either a compatible third party battery or the included DCS Pro Back Plus AC adapter (page 55).

Connecting to a Compatible Third Party Battery

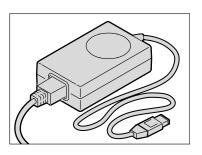
In addition to included accessories, you need:

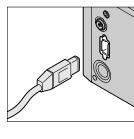
- ✓ Compatible battery
- ✓ Battery cable
- 1 Following the instructions you received with your battery, connect its cable to the battery pack.
- Insert the cable into the Battery Connection port on the DCS Pro Back Plus.



Connecting to the AC Adapter

1 Connect the cable from the included AC adapter (page 55) to the IEEE 1394 port on the DCS Pro Back Plus.

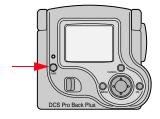




2 Plug the AC adapter into a wall socket.

Turning the Camera On and Off

Press the Power button to turn the camera on or off.



The button is only effective when the camera is powered by battery. When powered by AC adapter, the camera is always on.

The Camera Ready LED illuminates when the power is on.

If you turn the camera off while the DCS Pro Back Plus is busy, the Camera Ready LED flashes until the task completes.

Conserving Batteries

To extend the life of the battery pack, keep the following in mind:

- ✓ Follow the instructions you received with your compatible third party battery for its care and use.
- ✓ Older batteries may not last as long as newer batteries.
- ✓ Minimize use of the Image LCD and turn it off when not in use.
- You may be able to obtain information about the battery's charge level from lights on the battery pack. This information is not provided on the DCS Pro Back Plus.

Battery Save State

To conserve the battery's charge, the DCS Pro Back Plus enters Battery Save state if no DCS Pro Back Plus controls are touched for a specified period of time. When this happens, the Camera Ready LED is extinguished, and the Image LCD and DCS Pro Back Plus buttons become inactive.

The default onset of Battery Save state is 60 minutes. You can change the Battery Save Onset time in Properties (page 51).

To Exit Battery Save State

Press the Power button.

The DCS Pro Back Plus turns on with the same settings it had before Battery Save state began.

Overview

This section describes operations specific to the DCS Pro Back Plus.

Refer to the User's Manual for your HASSELBLAD 555ELD, 553ELX, 503CXi, or 503CW, or MAMIYA RZ67 PRO II camera body for additional instructions on image capture.

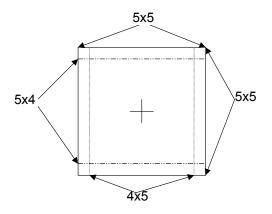
Refer also to the list of unsupported features (page 84) for the HASSELBLAD or MAMIYA camera when used with the DCS Pro Back Plus.

Formatting Images

The DCS Pro Back Plus has a square imager that captures images with a square format. You can change this format, if needed.

The new format is applied to subsequently captured images.

The Focus Screen overlay indicates the approximate area of coverage for each format.



To Format Images

- Highlight the Menu icon (page 24), and choose Main Menu from the drop-down menu (page 25).
- 2 Choose Image Format from the Main menu.
- 3 Choose the desired option from the Image Format menu (Full Frame, 4x5, or 5x4):



The current format is indicated on the Status screen (page 27).

- F Full frame image (5x5)
- H Horizontal format (5x4)
- V Vertical format (4x5)

Contents

Back

Next

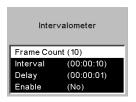
Intervalometer

Your camera has an Intervalometer that automatically captures a sequence of images at specified intervals over a specified time period. You might use the Intervalometer to capture a flower bud opening or for unattended surveillance.

The Intervalometer is disabled automatically after the specified time has elapsed, even if the specified number of images have not been captured. For example, if you set the Intervalometer for fifteen exposures at one second intervals, the buffer would fill after a few exposures, and the camera would not be able to maintain the one second interval. It would stop capturing images after fifteen seconds even though fifteen images had not been captured.

While the Intervalometer is enabled, the camera does not enter Battery Save state.

- 1 Highlight the Menu icon (page 24), and choose Main Menu from the drop-down menu (page 25).
- Choose Intervalometer from the Main menu.
- 3 Choose the desired option from the Intervalometer menu.



- 4 Change settings, as needed, on the Intervalometer options screens (page 67).
- 5 Press the left or right side of the Four-way switch to sequence through the numeric fields. Press the top or bottom of the Four-way switch to change the highlighted numeric value.
 - Press the OK or Cancel button. (In the Enable screen, choose Yes or No.)

Contents

Back

Next

Intervalometer Options

| | Frame Count | Interval | Delay | Enable |
|--------------|---|---|---|--|
| Screen: | Frame Count 30 OK Cancel | Interval 00:03:00 OK Cancel | Delay 00:15:00 OK Cancel | Enable Yes No |
| Description: | Specifies the number of frames to capture | Specifies the interval between image captures | Specifies the delay before onset of the Intervalometer function | Yes enables the Intervalometer with the values displayed in the Intervalometer screen No disables the Intervalometer |
| Range: | 1-9999 frames | 3 seconds to 23:59:59 (HH:MM:SS) | 1 second to 23:59:59 (HH:MM:SS) | |
| Default: | 10 frames | 10 seconds | 1 second | |

Contents

Back

Next

Reviewing Images

You can review images on the active CF Card (page 42) in one of five Display modes:

- ✓ Single Image mode
- ✓ Zoom mode
- ✓ Histogram mode
- ✓ Multiple Image mode
- ✓ Delete mode
- The Location bar (page 73) appears at the bottom of the screen in Single Image or Multiple Image Display mode.

Selecting a Display Mode

- Press the OK button to turn the Image LCD on or, if a menu is displayed, press the Cancel or Menu button to return to Display mode.
- 2 Press the top or bottom of the Four-way switch to change the Display mode.

A pop-up display containing icons for each Display mode appears briefly, with the active icon highlighted.



Contents

Back

Next

Single Image Display Mode

The thumbnail for the current image appears with the Status bar (page 73) at the left.

Zoom Display Mode

The thumbnail for the current image appears with a Region of Interest box and crosshairs (page 70). The Region of Interest box includes the area of the image that appears when you zoom in.



Enabling or Disabling the Region of Interest Box

Press the OK button to enable the Region of Interest box.

You can pan or zoom when the Region of Interest box is enabled.

Press the Cancel button to disable the Region of Interest box.

You can navigate to a different image when the Region of Interest box is disabled.

Contents

Back

Next

Zooming

With the Region of Interest box enabled (page 69) press the OK button.

The first actuation zooms to 1:4 (one pixel displayed for every four), the second to 1:1, and the third returns to the un-zoomed 1:16.

When zoomed in to 1:1, the crosshairs appear but the Region of Interest box does not. You can still pan, however.

Panning

With the Region of Interest box enabled, press the appropriate part of the Four-way switch to move the Region of Interest box around.

If the edge of the thumbnail is reached, the image moves in the opposite direction.

Navigating Through Images in Zoom Mode

Press the Cancel button to turn the Region of Interest box off and navigate (page 74) to other images.

Luminometer Crosshairs

The crosshairs, which appear when the Region of Interest box is on, indicate the level of luminance channel saturation of pixels below the center of the crosshairs. This level is indicated in stops (-3 to 3.25) and percentages (2 to 180%).



Contents

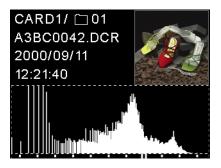
Back

Next

Histogram Display Mode

When Histogram mode is active, the following information appears for the active image:

- ✓ Active folder number/name
- ✓ Image number
- ✓ Date and time of image capture
- ✓ Image thumbnail
- ✓ Histogram for the image



Multiple Image Display Mode

Four image thumbnails appear with the Status bar (page 73) at the left. The current image is highlighted.

Thumbnails may appear with varying image formats (page 65) as each thumbnail is displayed in its selected image format.

Image Delete Display Mode

Use Image Delete Display mode to delete the current image. You can also delete groups of images (page 75) using a Main menu option.

If you delete an image by mistake, you can get it back if you immediately perform the Recover function (page 48).

One image thumbnail (for the current image) appears with instructions for deleting it.



To Delete a Single Image

- 1 Press the OK button to delete the displayed image.
- 2 Press the OK or Cancel button in response to the confirmation screen. (The Cancel button dismisses the screen without deleting the image.)



A feedback screen appears for two seconds or until you manipulate a button on the DCS Pro Back Plus.

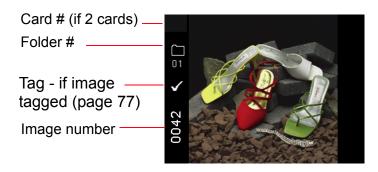
Contents

Back

Next

Status Bar

When image thumbnails are displayed in Single Image or Multiple Image Display mode (page 68), a Status bar appears at the left of the display. It contains some or all of the following information.



Location Bar

A Location bar appears at the bottom of the Image LCD when you are navigating through images in Single Image or Multiple Image Display mode (page 68). It indicates the position of the current image relative to the other images in the active folder.



Contents

Back

Next

Navigating through Displayed Images

Press the left or right side of the Four-way switch to navigate through images in the selected folder.

This works in all Display modes except Zoom mode (page 69) when the Region of Interest box is enabled.

The right side navigates "forward" to highernumbered images in the folder, and the left side navigates "backward."

If you continue navigating forward after the last image is reached, the navigation wraps around to the first image. If you continue navigating backward after the first image is reached, the navigation wraps around to the last image.

To indicate the first or last image in the folder, a blank screen appears after the last or first image.

Selecting an Image

As you navigate through the images in Multiple Image Display, the images are highlighted one at a time. Release the Four-way switch when the desired image is highlighted.

In the other Display modes, release the Four-way switch when the desired image appears.

Deleting Groups of Images

You can delete groups of images using a Main menu option. You can also delete single images using Image Delete Display mode (page 72).

To Delete Groups of Images

- 1 Highlight the Menu icon (page 24), and choose Main Menu from the dropdown menu (page 25).
- 2 Choose Delete Images from the Main menu.
- 3 Choose the desired option from the Delete Images menu.



- 4 When prompted, Press the OK or Cancel button.
 - If you Press the OK button, a progress screen appears. If you press the Cancel button while the deletion is in progress, images that have not yet been deleted remain on the card.
 - A final screen appears informing you of the number of images deleted.
- 5 Press the OK button.

Display Contrast

You can change the contrast and lighten or darken the images displayed on the Image LCD panel.

- Changing contrast does not affect the stored images, only the view of the images on the Image LCD.
- 1 Highlight the Contrast icon (page 24).
- 2 Press the top or bottom of the Four-way switch to move the slider bar up to lighten, or down to darken the displayed image.

Overexposure Indicator

You can highlight areas of overexposure in Single or Multiple Image Display modes.

- 1 Choose Single or Multiple Image mode (page 68).
- 2 Highlight the Menu icon (page 24), and choose Main Menu from the drop-down menu (page 25).
- 3 Choose Overexposure Indicator from the Main menu.
 - A check mark appears when highlighting is on.
- 4 Press the OK button to toggle highlighting on or off.

Contents

Back

Next

Tagging Images

You can tag one or more images then perform operations on the tagged (or untagged) images.

- 1 Select any Display mode except Delete mode (page 68).
- 2 Select the image to be tagged (page 74).

3 Highlight the Tag icon in the Menu bar.



A check mark appears in the Status bar.



To untag a tagged image, highlight the Tag icon when a tagged image is selected.

Contents

Back

Next

Cleaning

Clean the camera body as described in the HASSELBLAD or MAMIYA User's Manual.

Cleaning the DCS Pro Back Plus

- 1 Turn the DCS Pro Back Plus off or disconnect the DCS Pro Back Plus from the computer.
- 2 Using a lint-free cloth with light pressure, clean only the outside enclosures and the Image LCD panel.

IMPORTANT:

Do not use liquid cleaners or aerosol cleaners on the outside of the DCS Pro Back Plus.

Before connecting the DCS Pro Back Plus to the camera body, clean the slots at the bottom of the DCS Pro Back Plus and the locating posts on the camera body using isopropyl alcohol on a lint-free lens cleaning tissue.

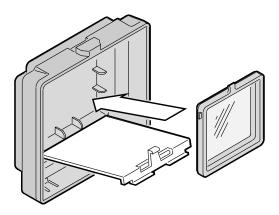
Cleaning the IR or Anti-aliasing Filter

- 1 Remove the filter from the DCS Pro Back Plus (page 21).
- 2 Gently blow off the dust using commercially available canned air (low pressure). If the filter is still dirty, contact your dealer or service representative.
- 3 If the imager is dirty, check the KODAK Web site (www.kodak.com) for instructions on cleaning. Choose Service and Support, then under Professional Photography choose Cameras, Digital and choose DCS Pro Back Plus. Follow the instructions under Cleaning Recommendations for CCD Coverglass.

Storing

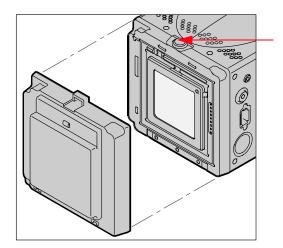
These storage tips apply to the DCS Pro Back Plus. Store the camera body as described in the HASSELBLAD or MAMIYA User's Manual.

✓ If you have an IR or anti-aliasing filter not in use, store it in the pocket on the included body cap.



- ✓ Wrap in a clean, soft cloth and place in a well-ventilated, cool, dry, dust-free place.
- ✓ Keep out of direct sunlight and away from "hot spots" such as the trunk of a car.
- ✓ Avoid places where chemical agents such as moth balls are used.
- ✓ In extreme humidity, use a desiccant.
- ✓ If the DCS Pro Back Plus has been stored for a long period of time, carefully check the operation or have it thoroughly tested at an authorized service center.
- After storing the DCS Pro Back Plus for several days, you may need to set the date and time (page 49).

✓ When the DCS Pro Back Plus is removed from the camera body, attach the body cap. Place the top of the body cap at an angle so that it catches the Release button, then press the bottom of the body cap in place.



Contents

Back

Next

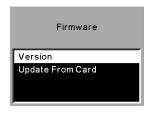
Firmware

Firmware is the software program that runs within the DCS Pro Back Plus and controls its operation. If a new firmware version becomes available, you can download it from the KODAK Web site (www.kodak.com/go/proback) and update the firmware within the DCS Pro Back Plus (page 82).

Checking the Current Firmware Version

You can check the firmware version currently running on your DCS Pro Back Plus.

- 1 Highlight the Menu icon (page 24), and choose Main Menu from the drop-down menu (page 25).
- 2 Choose Firmware from the Main menu.



- 3 Choose Version from the Firmware menu.
 The firmware version appears.
- 4 Press the OK button.

Updating Firmware

- 1 On a computer with Internet access, go to www.kodak.com, then choose Service and Support. Choose Cameras, Digital from the Professional Photography list, choose DCS Pro Back Plus, then choose Firmware and Host Software.
- 2 Download the firmware to your computer.
- 3 Insert a CF Card into the card reader attached to your computer.
- 4 On the computer, copy the firmware file to the card's root directory.

IMPORTANT:

The firmware can be updated only from the card's root directory.

5 Insert the CF Card (page 43) in the DCS Pro Back Plus.

- 6 Highlight the Menu icon (page 24), and choose Main Menu from the drop-down menu (page 25).
- 7 Choose Firmware from the Main menu.
- 8 Choose Update from Card from the Firmware menu.
 - A confirmation screen appears.
- 9 Press the OK or Cancel button.
 If you press OK, approximately fifteen seconds pass. A progress screen appears while the firmware is updating.
- The camera automatically restarts after the firmware is updated.

Specifications

Digital camera back which attaches to existing medium format **Type** camera bodies having removable film magazines **Imager size** 16 million pixels (4080 x 4080) Image LCD 2-inch diagonal LCD provides image thumbnail, adjustable contrast, and status of digital features IEEE 1394 interface and Used to connect power from the AC Adapter to the DCS Pro Back Plus and to transfer images from the DCS Pro Back Plus to a power source computer running Capture Studio or Camera Manager software DIGITAL CAMERA BATTERY with cable DCS-9.6V—see Power source in portable mode www.digitalcamerabattery.com QUANTUM Battery 2 with cable MDC3—see www.gtm.com Other compatible third party battery and cable 24VDC AC adapter Weight Approximately 3.5 pounds (with two CF Cards and lens sync cable) **Dimensions** 90 mm x 90 mm x 100 mm Burst rate 1 image every 2 seconds Burst depth 6 (possibly more, depending on scene content) DRAM on-board 128 MB ISO 100 S-Video NTSC or PAL

Unsupported Features

Unsupported or Partially Supported Features (HASSELBLAD Cameras)

Most camera body features are supported when the DCS Pro Back Plus is attached. (Refer to the HASSELBLAD instruction manual.) Exceptions are listed below.

Unsupported Camera Body Features

- ✓ When using HASSELBLAD lenses of the C/CB/CR/CFi and CFE series with the DCS Pro Back Plus, shutter speeds greater than 1/4 second are not supported.
- ✓ The Mode Selector dial must only be used in the O (Normal mode) or A (Automatic mode) positions. When a DCS Pro Back Plus is installed on a HASSELBLAD 555ELD or 553ELX, the O and A modes are essentially the same.
- ✓ Infrared photography is not supported.

- ✓ Trigger release commands sent to the remote control socket on the 555ELD autowinder are not supported.
- ✓ Multiple exposures are not supported.
- ✓ ISO settings other than 100 are not supported.
- ✓ The Automatic setting of the 555ELD and 553ELX Mode Selector dial has a frame rate of about 1 frame/second. The DCS Pro Back Plus does not support this frame rate.

Accessories

The DCS Pro Back Plus supports most accessories used by the HASSELBLAD 555ELD. Exceptions are listed below:

- ✓ HASSELBLAD Prism Viewfinder PM90
- ✓ Meter Prism Viewfinder PME90

Contents

Back

Next

Unsupported Features

Unsupported or Partially Supported Features (MAMIYA RZ67 PRO II)

Most camera body features are supported when the DCS Pro Back Plus is attached. (Refer to the RZ67 PRO II Instruction Manual by MAMIYA.) Exceptions are listed below.

Unsupported Camera Body Features

- ✓ With the DCS Pro Back Plus attached, shutter speeds greater than 1/4 second are not supported.
- ✓ With the DCS Pro Back Plus attached, the R-M lever must be set to the multiple exposure (M) position.
- ✓ Infrared photography is not supported.
- ✓ With the DCS Pro Back Plus attached, only a single ISO can be used.
- ✓ Multiple exposures are not supported.

Using an S-Video Monitor

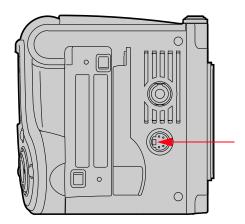
You can preview images on an external S-Video monitor. This provides a larger version of the image displayed on the Image LCD.

When the external monitor is enabled, the Image LCD turns off.

When you capture an image, it automatically appears on the connected S-Video monitor. You can preview it and make necessary camera adjustments. When you capture another image, the new one appears.

Connecting

Connect an S-Video cable (not included) to the S-Video Output port.



Contents

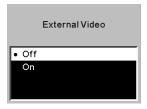
Back

Next

Using an S-Video Monitor

Enabling

- 1 Highlight the Menu icon (page 24) then choose Main Menu from the drop-down menu (page 25).
- 2 Choose External Video from the Main menu.
- 3 Choose On from the External Video screen.



A Video icon appears on the Menu bar.



- 4 Highlight the Video icon.
- 5 Press the OK button.

The current image appears on the external monitor and the Image LCD turns off.

Disabling

Press the OK, Cancel, or Menu button (page 28) to disable the external monitor and turn the Image LCD on.

Navigating Through Images

Press the left or right side of the Four-way switch to navigate through images in the selected folder.

This works only in Single Image Display mode (page 69).

Warnings and Cautions

- ✓ To prevent fire or shock hazard, use only the recommended accessories and attachments.
- ✓ Use only the power source type indicated on the name plate of the AC adapter. A line voltage outside this range can destroy the AC adapter and/or the DCS Pro Back Plus.
- ✓ Do not substitute other types of cables for supplied cables or cables listed in the System Requirements section (page 12).
- ✓ Do not remove a CF Card from the camera, disconnect or turn off a battery supply, or disable the AC adapter while the Card Busy LED inside the Card door is blinking. The blinking indicates that data is being read from or written to the card. You may lose data if you remove a card at this time.

- ✓ Use extreme care when handling CF Cards as they are easily damaged. If dropped, the CF Card may be destroyed, resulting in the loss of all data.
- ✓ Do not use the DCS Pro Back Plus where it can come in contact with water. It is not waterproof or splash-resistant.
- ✓ Handle the DCS Pro Back Plus with care.

 Treat the anti-aliasing filter with the greatest of care. It is a very expensive device.
- ✓ Retain the safety and operating instructions for future reference. Retain the packing case for use if your camera needs to be shipped.
- ✓ Treat the imager with extreme care. It is very expensive to replace.
- ✓ The anti-aliasing or IR filter is exposed when the cap is removed. Do not touch or strike this filter or set it down on a surface.

Aliasing

Artifacts that appear on an image but were not in the original scene

Anti-aliasing filter

Helps to reduce aliasing at certain focal distances

Camera Manager

Included software application used to capture images, copy and transfer images, and set properties for the DCS Pro Back Plus

Capture Studio software

Included software application used to capture and process images from the DCS Pro Back Plus (Macintosh only)

Compact Flash Card

(CF Card) A small, removable device with PCMCIA-ATA functionality which stores images captured by the DCS Pro Back Plus

.DCR files

Image files created by the DCS Pro Back Plus which can only be opened using the included DCS Capture Studio or DCS Photo Desk software

Focus screen overlay

Included overlays that fit over the viewfinder to indicate the scene content that is actually captured using the DCS Pro Back Plus

Contents

Back

Next

IEEE 1394 interface

High-speed serial interface that transfers image files from the DCS Pro Back Plus to the computer, provides power (using the included AC adapter) to the DCS Pro Back Plus, and allows the DCS Pro Back Plus to communicate with the Capture Studio and Camera Manager software

Image format

In the DCS Pro Back Plus, image format refers to cropping of images as they are captured. Choices are: 5x5, 4x5, and 5x4

Image LCD

A two-inch diagonal LCD where you can view images and change settings on the DCS Pro Back Plus

Intervalometer

Automatically captures a sequence of images at specified intervals over a specified period of time

IR filter

Maintains proper focus, filters out infrared light, and helps protect the imager's coverglass

IEEE 1394 hub

An IEEE 1394 accessory that lets you connect a number of IEEE 1394 peripherals to a computer. To be compatible with the DCS Pro Back Plus, use a hub which conforms to the IEEE 1394 standard (hot pluggable, can send and receive data at 00/200/400MBps) and has at least three ports

Contents

Back

Next

ISO

International Standards Organization settings regarding the properties of photographic speed

Luminometer

Measures the levels of luminance channel saturation in pixels at the center of the crosshairs in zoom box

Photo Desk

Included software application used to review and process images from the DCS Pro Back Plus

Portable mode

Using the camera without connections to the computer

S-Video

A video interface standard that enables you to view a camera image on an external monitor

Tethered

Connected to a host computer with an approved IEEE1394 cable

Contents

Back

Next

CAREFULLY READ THE FOLLOWING WARRANTY TERMS AND CONDITIONS BEFORE USING YOUR CAMERA. USE OF YOUR CAMERA INDICATES YOUR ACCEPTANCE OF THESE TERMS AND CONDITIONS. IF YOU DO NOT AGREE WITH THEM, PROMPTLY RETURN THE CAMERA, UNUSED, ALONG WITH THE ACCOMPANYING MATERIALS, IN THE ORIGINAL PACKAGING.

WARRANTY

KODAK PROFESSIONAL DCS Pro Back Plus

THIS WARRANTY APPLIES ONLY TO EQUIPMENT PURCHASED IN THE UNITED STATES.

Kodak warrants your KODAK PROFESSIONAL DCS Pro Back Plus internal electronics and mechanical assemblies to be free from defects in material and workmanship for 1 year from the day of purchase. Kodak warrants the Imager to be free from defects in material and workmanship for 4 years from the date of purchase. Kodak warrants the Infrared Blocking Filter (IR Filter) to be free from defects in material and workmanship for 30 days from the date of purchase.

Contents

Back

Next

Warranty Repair Coverage

If this equipment does not function properly during the warranty period due to defects in material or workmanship, Kodak will, at its option, either repair or replace the equipment without charge, subject to the conditions and limitations stated herein. Such repair service will include all labor as well as any necessary adjustments and/or replacement parts.

If replacement parts are used in making repairs, these parts may be remanufactured, or may contain remanufactured materials. If it is necessary to replace the entire system, Kodak may replace with a remanufactured system. Repair or replacement carries a 30-day warranty effective at the time of service problem resolution. This warranty will not extend the original warranty period, and, in the case of parts replacement, will only apply to parts and labor performed to repair the equipment.

Limitations

REPAIR OR REPLACEMENT WITHOUT CHARGE IS KODAK'S ONLY OBLIGATION UNDER THIS WARRANTY.

Warranty service will not be provided without dated proof of purchase. Please return the Warranty Registration card within 30 days of purchase.

As a condition of warranty service, before sending in your equipment to a Kodak authorized service center for repair, you must first contact a Kodak representative for return authorization and instructions.

Contents

Back

Next

Should you need to return equipment to Kodak, Kodak is not responsible for the loss or damage of equipment while in transport to a Kodak authorized service center. You may, at your option, choose to insure equipment for loss or damage with the carrier of your choice.

This warranty becomes null and void if, during shipment, you fail to pack your KODAK PROFESSIONAL DCS Pro Back Plus in a manner consistent with the repacking instructions.

This warranty does not cover the following:

- ✓ Scratches on Imager Cover Glass or IR Filter
- ✓ Cracked or damaged Imager Cover Glass or IR Filter
- ✓ Circumstances beyond Kodak's control
- ✓ Service or parts to correct problems resulting from the use of attachments, accessories or alterations not marketed by Kodak
- ✓ Unauthorized modifications or service
- ✓ Misuse
- ✓ Abuse
- ✓ Failure to follow Kodak's operating, maintenance, or repacking instructions
- ✓ Failure to use Kodak-supplied items (such as cables).

KODAK MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, AND SPECIFICALLY DISCLAIMS THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

KODAK WILL NOT BE RESPONSIBLE FOR ANY CONSEQUENTIAL OR INCIDENTAL DAMAGES RESULTING FROM THE PURCHASE, USE, OR IMPROPER FUNCTIONING OF THIS EQUIPMENT EVEN IF THE LOSS OR DAMAGE IS CAUSED BY THE NEGLIGENCE OR OTHER FAULT OF KODAK. SUCH DAMAGES FOR WHICH KODAK WILL NOT BE RESPONSIBLE INCLUDE, BUT ARE NOT LIMITED TO, LOSS OF REVENUE OR PROFIT, DOWNTIME COSTS, LOSS OF USE OF YOUR CAMERA, COST OF ANY SUBSTITUTE EQUIPMENT, FACILITIES, OR SERVICES, OR CLAIMS OF YOUR CUSTOMERS FOR SUCH DAMAGES.

Outside the United States

In countries other than the United States, warranty terms may be different. Unless a specific Kodak warranty is communicated to the purchaser in writing by Kodak, no warranty or liability exists even though defect, damage or loss may be by negligence or other act of Kodak.

Contents

Back

Next

How to obtain service

See your authorized Kodak dealer.

If service is required, your Kodak dealer will instruct you to return the unit to the nearest service center for repair and will issue a return authorization number.

When returning a KODAK PROFESSIONAL DCS Pro Back Plus for repair, you should pack the unit in its original packing materials according to the repacking instructions located on the shipping container. Packing will be the purchaser's responsibility if the original packing has been discarded or is not available.

Return of the repaired or replaced equipment to the customer can be expected five to seven business days from the date the equipment is received by the service center.

Product Support Options

During the warranty period for the KODAK PROFESSIONAL DCS Pro Back Plus, you are entitled to product support for both hardware and software, provided your camera is registered with Eastman Kodak Company. You may register with Kodak via mail, fax, or through Kodak's World Wide Web site: http://www.kodak.com.

Support is provided through a variety of options:

Contents

Back

Next

- 1 Technical Support through the Web site: http://www.kodak.com.
 - Support includes FAQs (Frequently Asked Questions), downloadable software updates, and technical topic articles for reading and downloading.
- 2 FaxBack Documents on a variety of subjects. In North America the FaxBack system is available at the following phone number: 1-800-508-1531.
- 3 Authorized Dealers:

Contact your authorized KODAK PROFESSIONAL dealer for help with operation and connection to your computer. Your dealer can also provide training for your DCS Pro Back Plus application software. Authorized dealers can also provide help in purchasing a service maintenance agreement.

- 4 Telephone Support:
 - Telephone support is provided without charge during your warranty period only by calling your authorized dealer. Your camera must be registered with Eastman Kodak Company. Fill out and return to Eastman Kodak Company the warranty registration card included with your camera. Failure to register your camera will cause delays in requesting repair of your camera during the warranty period.
- 5 Out-of-Warranty Support Options
 - There will be a charge for out-of-warranty call incidents if you wish to speak to a Kodak support representative. A call incident is defined to include only those issues raised during the first telephone or e-mail contact. Follow-up telephone calls by Kodak's representative, and callbacks to Kodak's Support Center to resolve the call incident will not be charged as long as charges for any valid, active call

number are provided. Calls to report bugs or anomalies will be cancelled. Calls to arrange for service will be cancelled or applied as a credit against the repair estimate or invoice.

Service maintenance agreements, which cover the repair and support of the DCS Pro Back Plus and software are available. In North America, contact the regional Service Marketing group at: 1-800-645-6325

No-charge options include:

- ✓ KODAK PROFESSIONAL World Wide Web site: http://www.kodak.com/go/support
- ✓ FaxBack Documents
- ✓ Your Kodak Professional dealer

Contents

Back

Next

| A | \mathbf{C} |
|--|--|
| Accessing images on a CF Card 46 Activate button 28 Actuations 52 | Camera Assembling 33 Firmware. See Firmware 81 |
| Anti-aliasing filter 20 Assembling the camera 33 | Turning on and off 62 Camera properties. See Properties 50 Cancel button 28 |
| B | CF Cards 42 Cleaning 78 Compact Flash Cards 42 Accessing images on 46 Ejecting 44 Formatting 47 Inserting 43 Selecting 45 Computer, Connecting to 55 Connecting Camera lens to DCS Pro Back Plus 38 Camera to the computer and power supply 55 Battery power 58 Single IEEE 1394 port 57 |
| Batteries, Conserving 63 Battery connection jack 31 Battery Save onset 51 Battery Save state 63 Buttons 28 Activate 28 Cancel 28 Four-way switch 28 Menu 28 Power 30 | |

Contents

Back

Next

Two IEEE 1394 ports 56 Display contrast 76 DCS Pro Back Plus to the camera Display mode 68 body 35 Histogram 71 Flash/Strobe units to the DCS Pro Multiple Image 71 Back Plus 39 Navigating 74 Power supply in portable mode Pan/Zoom. Zoom mode 69 AC adapter 62 Selecting 68 Contrast, Changing on Image LCD 76 Single image 69 Display off time 51 Dropdown menus 25 D Date and time 49 \mathbf{E} DCS Pro Back Plus Connecting Flash/Strobe units 39 Ejecting a CF Card 44 Connecting the camera lens 38 Connecting to the camera body 34 Storing 79 Features 11 Deleting Groups of images 75 Unsupported 84 Single image 72 Filters Digital buttons and Image LCD Anti-aliasing 20 IR 20 Using 29 Firmware 81 Digital buttons. See Buttons 28

Contents

Back

Next



Location bar 73 Checking version 81 Updating 82 Menu bar 24 Flash Sync Cable jack 31 Status bar 73 Focus screen overlay 19 Turning on and off 23 Folder, Selecting 45 Image LCD and digital buttons Folder01 as default 52 Using 29 Formatting a CF Card 47 Imager 18 Formatting images 65 **Images** Four-way switch 28 Deleting groups of 75 Deleting one 72 H Formatting 65 Reviewing 68 Histogram Display mode 71 Storing 41 Inserting a CF Card 43 Intervalometer 66 Options 67 IEEE 1394 interface Introduction 9 Connecting 56, 57, 58 IR filter 20 IEEE 1394 port 31 Image 72 L Image Delete Display mode 72 Image files 40 Lens Sync Cable jack 31 Image LCD 22 Location bar 73

Contents

Back

Next

Interest box 69 M Panning 70 Menu bar 24 Zooming 70 Displaying 24 Panning 70 Navigating 24 PC Cards, See Compact Flash Cards 42 Menu button 28 Portable mode 60 Menus 25 Ports and Jacks 31 Multiple Image Display mode 71 Battery connection 31 Flash Sync Cable connector 31 N IEEE 1394 31 Lens Sync Cable 31 Navigating S-Video Output port 32 In Image Display mode 74 Power button 30 In Zoom mode 70 Powering the camera In portable mode 61 0 When connected to a computer 59 Properties 50 Overexposure indicator 76 Battery Save onset 51 Display off time 51 P Total actuations 52 Use Folder 01 52 Pan/Zoom mode Video format 53 Enabling or Disabling the Region of Video signal 53

Contents

Back

Next

Output port 32 Properties menu Displaying 50 System requirements 12 R Recovering Data 48 Tagging images 77 Requirements 12 Total actuations 52 Reviewing images 68 Turning the camera on and off 62 S U Saving images 41 Unsupported camera features 84 Selecting a CF Card or folder 45 Single Image Display mode 69 Specifications 83 Video State 63 Format 53 Status bar 73 Signal 53 Status screen 27 Storing images 41 7 Storing the DCS Pro Back Plus 79 S-Video 86 Zoom Display mode 69 Connecting 86 Zoom mode Enabling/disabling 87

Contents

Back

Next

Navigating through images in 70 Zooming 70







