Overview

This section describes the structure of this manual, outlines the main functions of Camera Control Pro 2, and gives the system requirements and installation instructions.

Using Camera Control Pro 2

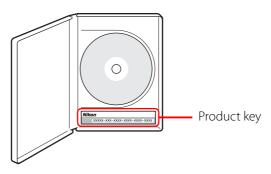
This section describes how to use Camera Control Pro 2.

Appendices

This section lists preferences and describes how to uninstall the software.

Important Information on the Product Key

The product key may be found on the CD-ROM case. *Do not lose this key.* It is required when installing or upgrading this software and can not be replaced if lost.



SB8A02(B1) 6MS541B1-02 **Using Camera Control Pro**

Appendices

Overview

Intro	duction	3
Abo	ut This Manual	6
Syste	em Requirements	
	Windows	7
	Macintosh	8
Installing Camera Control Pro		
	Windows	10
	Macintosh	16
Gett	ing Started	
	Starting and Exiting Camera Control Pro	21
	Getting Help	28
	Software Updates	29

Click a page number to view.

Overview

Introduction

This manual has been written to help you take advantage of the many features included in Camera Control Pro 2. Be sure to read this manual thoroughly, and to keep it handy when using Camera Control Pro 2.

Conventions

This manual assumes basic knowledge of cameras and Windows or Finder operations. Refer to the documentation provided with your computer or camera for more information. Where the Windows and Macintosh versions of the program use differing commands, the Windows menu name is listed first, followed by the Macintosh menu name in square brackets. Where multiple menu items or folders are selected in sequence, the menu items are separated by a ">".

Throughout this manual, Windows Vista Home Basic, Home Premium, Business, Enterprise, and Ultimate 32-bit editions are referred to as "Windows Vista." Windows XP Professional and Windows XP Home Edition are referred to as "Windows XP." Windows 2000 Professional is referred to as "Windows 2000." D1, D1X, and D1H cameras are referred to as "D1-series cameras," D2Xs, D2X, D2Hs, and D2H cameras as "D2-series cameras," D70s and D70 cameras as "D70-series cameras," and D40 and D40X cameras as "D40-series cameras." Except where necessary to distinguish it from older versions of Camera Control Pro, Camera Control Pro 2 is referred to as "Camera Control Pro."

Illustrations

This manual is for use with both Windows and Macintosh. While the majority of the illustrations come from Windows Vista Ultimate, save where otherwise noted the operations described are the same in other operating systems. Depending on the operating system used, the dialogs and menus may differ from slightly from those shown here. Some illustrations are composites.

Printing This Manual

To print this manual, select **Print** from the **File** menu in Adobe Reader. This manual is A5 size, allowing facing pages to be printed on a single sheet of A4 paper (to print facing pages, start printing from an even-numbered page).

Installing/Uninstalling Camera Control Pro 2

Use an account with administrator privileges to install or uninstall Camera Control Pro 2.

Camera Control Pro 2

Overview

Using Camera Control Pro

Appendices

Introduction

Camera Control Pro

Changes made to settings in the Camera Control Pro window only apply to photographs taken after the changes are made, not to photographs that have already been taken. Camera Control Pro can not be used to modify existing photographs.

The controls in the Camera Control Pro window vary with the type of camera connected. More information on camera settings may be found in the documentation provided with your camera.

Illustrations

Save where otherwise noted, the illustrations in this section show the dialogs displayed when the D3 is connected.

Camera Control Pro 2 for D100 Cameras (Macintosh)

Before using Camera Control Pro with a D100 digital camera under Mac OS X, confirm that the camera firmware is version 2.00 or later. Users of earlier versions will need to upgrade the camera firmware before using Camera Control Pro. Contact a Nikon-authorized service representative for information on firmware upgrades.

Using Camera Control Pro

Appendices

Introduction

Customer Support

To link to a Nikon customer support website, click **Link to Nikon** in the Camera Control Pro 2 installer window and click the link for your region. Click <u>here</u> for more information.



Notices

- No part of the manuals included with this product may be reproduced, transmitted, transcribed, stored in a retrieval system, or translated into any language in any form, by any means, without Nikon's prior written permission.
- Nikon reserves the right to change the specifications of the hardware and software described in these manuals at any time and without prior notice.
- Nikon will not be held liable for any damages resulting from the use of this product.
- While every effort has been made to ensure that the information in these manuals is accurate and complete, we would appreciate it were you to bring any errors or omissions to the attention of the Nikon representative in your area (address provided separately).

Note

The copying or reproduction of copyrighted creative works such as books, music, paintings, woodcut prints, maps, drawings, movies, and photographs is governed by national and international copyright laws. Do not use the camera for the purposes of making illegal copies or to infringe copyright laws. Do not use in venues where photography or recording is prohibited.

Trademark Information

Microsoft, Windows, and Windows Vista are registered trademarks of Microsoft Corporation. Adobe Reader and Acrobat are registered trademarks of Adobe Systems, Inc. Macintosh, Mac OS, and QuickTime are registered trademarks of Apple Computer, Inc. All other trade names mentioned in this manual or the other documentation provided with your Nikon product are trademarks or registered trademarks of their respective holders.

Camera Control Pro 2

About This Manual

How to Use This Manual

The pages of this manual are structured as shown here:

(1)	Overview	Using Camera Control Pro Appendices
$\check{2}$	Came	ra Controls 3/18
3		osure 2 Tab ing settings can be adjusted from the Exposure 2 tab.
	Focus Point Focus Area Metering Mode	The focus point and focus area can be selected using the arrow buttons; see the camera manual for details. Excinformation on AF-area mode and focus mode, see The Mechanical Tab ; 4 The metering mode can be selected from this menu (D3, D2 series, D300, D200, D80, D70 series, D50, and D40 series only). Metering mode defaults to the option selected with the camera. If a D1-series or D100 camera is connected, the current metering mode will be shown, but changes can only be made using camera controls. See the camera manual for details
	Flash Sync Mode	This option controls the camera flash sync mode. See the camera manual for de- tails.
(5)	Return to first	page Camera Control Pro 2 56

- (1) Click here to go to the beginning of each of the three chapters. The chapter you are currently viewing is displayed in a darker color.
- 2 Page title
- 3 Description
- (4) <u>Blue underlined text</u> indicates a link to another part of this manual or the World Wide Web. Click the text to follow the link (note that a web browser and an Internet connection are required to link to the World Wide Web). To return to the previous topic, click the Solution in Adobe Reader.
- **(5)** Click here to return to the first page.

System Requirements

Windows

Before installing Camera Control Pro, be sure that your system meets the following requirements:

CPU	Intel Celeron, Pentium 4, or Intel Core series processor with a clock speed of 1 GHz or faster recommended
OS	Preinstalled versions of Windows Vista (32-bit Home Basic/Home Premi- um/Business/Enterprise/Ultimate editions), Windows XP (Home Edition/ Professional), Windows 2000 Professional
Hard-disk space	50 MB required for installation, with an additional 1 GB of free disk space available when Camera Control Pro is running
RAM	 Windows Vista: 512 MB (768 MB or more recommended) Other versions of Windows: 256 MB (768 MB or more recommended)
Video resolution	1,024×768 pixels or more with 24-bit color (True Color) or higher
Interface [*]	USB : Only built-in USB ports supported IEEE 1394 : OHCI-compliant IEEE 1394 interface board or card required ⁺
Supported cameras	D3, D2-series, D1-series [‡] , D300, D200, D100, D80, D70-series, D50, and D40- series cameras
Miscellaneous	 CD-ROM drive required for installation Internet connection required for Nikon Message Center

* Connect the camera directly to the computer. The camera may not function as expected when connected via a hub, extension cable, or keyboard.

- + See the website below for the latest information on boards that have been tested and approved for use.
- ‡ D1-series cameras not supported under Windows Vista.

Check the support information at the website below for the latest on compatible cameras and operating systems.

Europe ,Africa: <u>www.europe-nikon.com/support</u>

Asia, Oceania, Middle East: <u>www.nikon-asia.com</u>

U.S.A.: www.nikonusa.com

Additional information may be available from the Nikon representative in your area. Visit <u>http://nikonimaging.com/</u> for contact information.

System Requirements

Macintosh

Before installing Camera Control Pro, be sure that your system meets the following requirements:

CPU	PowerPC G4 or G5 model, Intel Core, or Intel Xeon with a clock speed of 1 GHz or faster recommended
OS	Mac OS X version 10.3.9 or 10.4.10
Hard-disk space	100 MB required for installation, with an additional 1 GB of free disk space available when Camera Control Pro is running
RAM	256 MB (768 MB or more recommended)
Video resolution	1,024×768 pixels or more with 24-bit color (millions of colors) or higher
Interface [*]	USB : Only built-in USB ports supported FireWire : Only built-in FireWire ports supported
Supported cameras	D3, D2-series, D1-series ⁺ , D300, D200, D100, D80, D70-series, D50, and D40- series cameras
Miscellaneous	 CD-ROM drive required for installation Internet connection required for Nikon Message Center

* Connect the camera directly to the computer. The camera may not function as expected when connected via a hub, extension cable, or keyboard.

+ D1-series cameras not supported on computers with Intel CPUs running Mac OS X version 10.3.9.

Check the support information at the website below for the latest on compatible cameras and operating systems.

Europe ,Africa: <u>www.europe-nikon.com/support</u>

Asia, Oceania, Middle East: <u>www.nikon-asia.com</u> U.S.A.: <u>www.nikonusa.com</u>

Additional information may be available from the Nikon representative in your area. Visit <u>http://nikonimaging.com/</u> for contact information.

Installing Camera Control Pro

Before installing Camera Control Pro:

- Confirm that the computer satisfies the <u>system requirements</u> for Camera Control Pro.
- Exit any other applications that may be running, including anti-virus software.

Follow the links below to view installation instructions for your operating system:

Windows

Macintosh

Existing Versions of Camera Control Pro

If an earlier version of Camera Control Pro is installed, uninstall the existing version before installing Camera Control Pro 2. If an existing copy of Camera Control Pro 2 is detected during installation, a notification will be displayed. Follow the on-screen instructions.

Camera Control Pro 2

Using Camera Control Pro

Appendices

Installing Camera Control Pro

Windows 1/6

Use an account with administrator privileges when installing Camera Control Pro.

Camera Control Pro 2 Install Options

To display install options for Camera Control Pro:

1 Insert the installer CD in a CD-ROM drive.

Windows Vista

An AutoPlay dialog will be displayed; click **Run Welcome.exe**. A "User Account Control" dialog will be displayed; click **Allow**.

2 A language-selection dialog will be displayed; select a language and click Next. If the desired language is not available, click Region Selection to choose a different region and then choose the desired language.

Welcome to the world of N select a Language from the		
Language: English		•
Region Selection	Next	Quit

If the Language Selection Dialog Is Not Displayed

To display the language selection dialog, select **Computer** or **My Computer** from the **Start** menu (*Windows Vista* or *Windows XP*) or double-click the **My Computer** icon on the desktop (*Windows 2000*) and double-click the CD-ROM (Camera Control Pro) icon in the My Computer window.

Camera Control Pro 2

Overview

Using Camera Control Pro

Appendices

Installing Camera Control Pro

Windows 2/6



Easy Install: Install the minimum software needed to run Camera Control Pro.

Custom Install: Install selected software (not displayed in Windows Vista).

Link to Nikon: Download ViewNX or trial versions of Nikon software or visit Nikon technical support websites (Internet connection required).

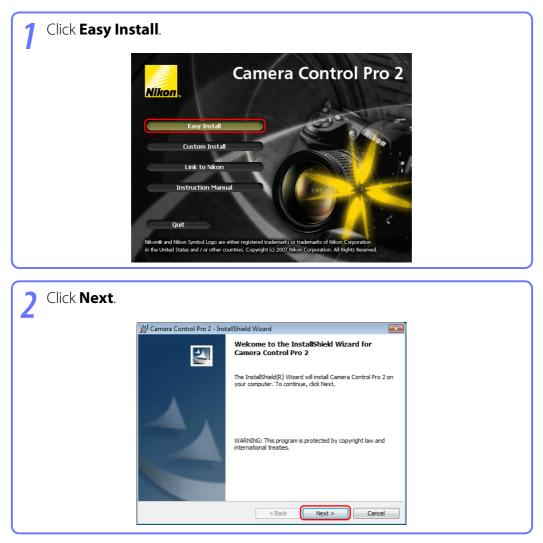
Instruction Manual: Open the "Manuals" folder, which contains software instruction manuals. Double-click **INDEX.pdf** to view a region selection screen.

To uninstall Camera Control Pro, see Uninstalling Camera Control Pro.

Installing Camera Control Pro

Windows 3/6

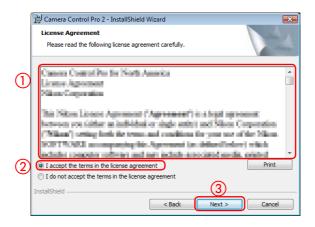
Follow the steps below to install Camera Control Pro:



Installing Camera Control Pro

Windows 4/6

After reading the license agreement (1), select I accept the terms of the license agreement (2) and click Next (3) to proceed with installation.



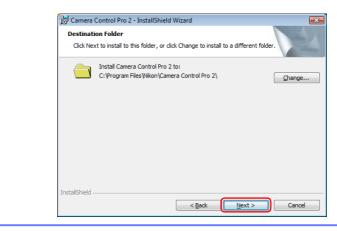
A "ReadMe" file will be displayed. Take a moment to read this file, which may contain information that could not be included in this manual, and then click **Next**.

4 Personalize yc	our copy of Camera Control Pro (1) and click Next (2).
(Camera Control Pro 2 - InstallShield Wizard Customer Information Please enter your information. User Name: Organization:
	InstallShield

Installing Camera Control Pro

Windows 5/6

The destination folder for Camera Control Pro will be displayed under "Install Camera Control Pro to." Click **Next** to install Camera Control Pro to this folder, or click **Change...** to select another destination.



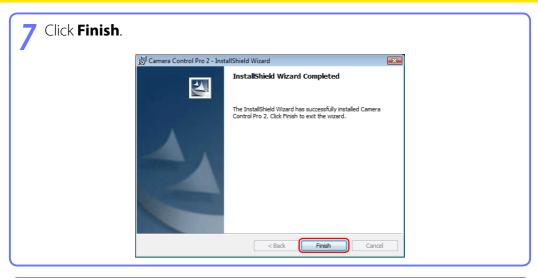
6 Click Install.		
	🙀 Camera Control Pro 2 - InstallShield Wizard	
	Ready to Install the Program The wizard is ready to begin installation.	
	Click Install to begin the installation.	
	If you want to review or change any of your installation settings, dick Back. Click Cancel to exit the wizard.	
	InstallShield Cancel Cancel	

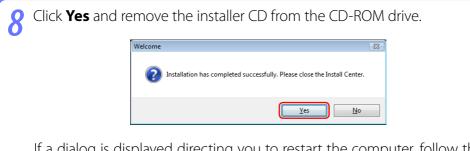
Using Camera Control Pro

Appendices

Installing Camera Control Pro

Windows 6/6





If a dialog is displayed directing you to restart the computer, follow the onscreen instructions.

This completes installation of Camera Control Pro.

Installing Camera Control Pro

Macintosh 1/5

Use an account with administrator privileges when installing Camera Control Pro.

Camera Control Pro 2 Install Options

To display install options for Camera Control Pro:

Insert the installer CD in a CD-ROM drive. Double-click the Camera Control Pro CD-ROM icon (_____) on the desktop and then double click the **Welcome** (<a>20) icon.

The following dialog will be displayed; enter an administrator name and password and click **OK**.

	Authenticate
	Welcome requires that you type your password.
	Name:
	Password:
Details	
?	Cancel OK

3 A language-selection dialog will be displayed; select a language and click Next. If the desired language is not available, click **Region Selection** to choose a different region and then choose the desired language.

Welcome to the a Language fro		shotograf	ny. ried	ac Sele
Language:	English			÷
Region Selecti	on	Quit		Next

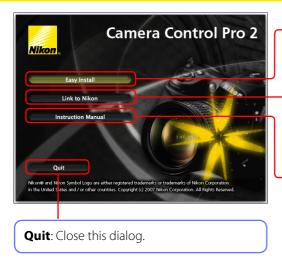
Overview

Using Camera Control Pro

Appendices

Installing Camera Control Pro

Macintosh 2/5



Easy Install: Install the minimum software needed to run Camera Control Pro.

Link to Nikon: Download ViewNX or trial versions of Nikon software or visit Nikon technical support websites (Internet connection required).

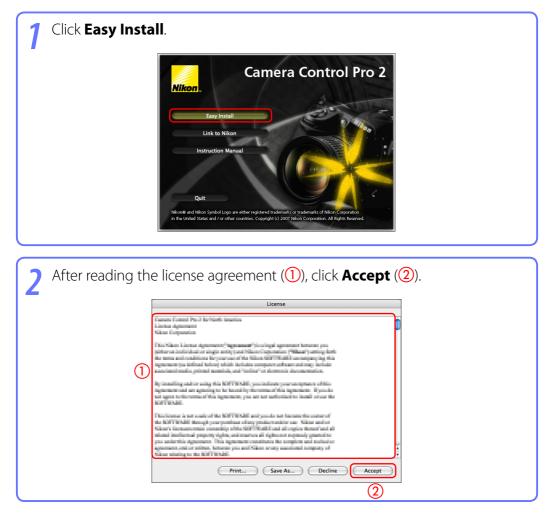
Instruction Manual: Open the "Manuals" folder, which contains software instruction manuals. Double-click **INDEX.pdf** to view a region selection screen.

To uninstall Camera Control Pro, see Uninstalling Camera Control Pro.

Installing Camera Control Pro

Macintosh 3/5

Follow the steps below to install Camera Control Pro:



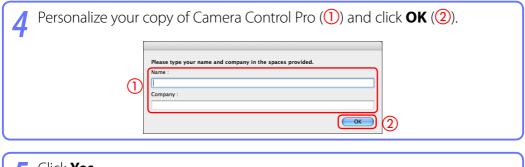
Using Camera Control Pro

Appendices

Installing Camera Control Pro

Macintosh 4/5

3 Click Install.			
	$\bigcirc \bigcirc \bigcirc \bigcirc$	Camera Control Pro 2 Installer	
	⊕ Installation Type ● Installing ● Finish Up	Click the "Install" button to install • Camera Control Pro 2	
		Installation powered by VISE X	Install





Using Camera Control Pro

Appendices

Installing Camera Control Pro

Macintosh 5/5

6 Click Quit.			
	00		
	Finish Up		
	⊖ Installation Type ⊖ Installing ⊖ Finish Up	The software was successfully installed.	
		Installation powered by VISE X —	Quit



Starting Camera Control Pro

1 Turn the camera off and use the interface cable to connect the camera to the computer as described in the camera manual. If you are using a D1-series camera, choose "PC" as the operating mode. If you are using a D100, choose P, S, A, or M mode. Users of D3, D2-series, D300, and D200 cameras can select any mode other than M-up (mirror up). Other cameras can be connected in any shooting mode.

LANs

See the wireless transmitter user's manual for information on controlling cameras connected to local area networks (LANs) using WT-2, WT-3, or WT-4 wireless transmitters.

USB

When using the D100 under Windows 2000, log in to an administrator account and set the camera **USB** option to **Mass Storage**; otherwise, set the camera **USB** option to **PTP**. When using other cameras equipped with a USB interface, set the camera **USB** option to **PTP** or **MTP/PTP**. D1-series cameras do not support USB.

Camera Control Pro 2

2/7

Starting and Exiting Camera Control Pro

Turn the camera on. If Nikon Transfer or PictureProject Transfer starts, click the close button.

USB Connection to Windows Vista/XP Computers

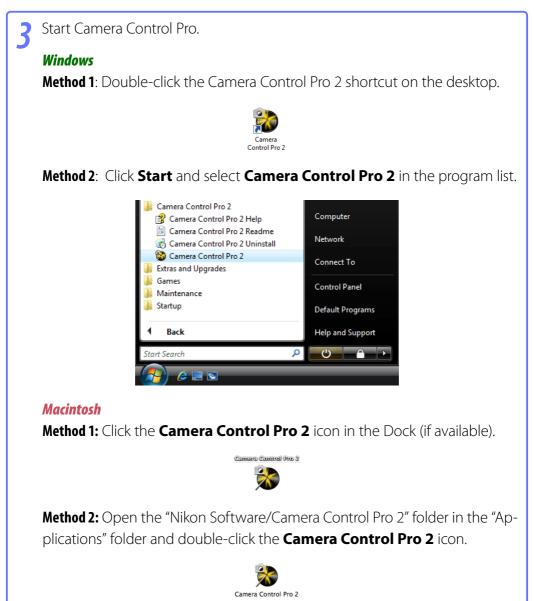
When a camera with USB interface is connected to a Windows XP computer, an AutoPlay dialog may be displayed.



Select the Camera Control Pro option to start Camera Control Pro.

3/7

Starting and Exiting Camera Control Pro



Product Key

If prompted to supply a **product key**, enter the key found on the product packaging and click **OK**. Be sure not to lose the key or the key for any existing versions of Camera Control Pro, as they may be required when re-installing or upgrading the product.

4/7

Starting and Exiting Camera Control Pro

4 The Camera Cont	rol Pro window will be displayed.
	😵 Camera Control Pro
	File Camera Image Settings Tools Help
	The D3 is connected. ■
	Exposure 1 Exposure 2 Storage Mechanical Image Processing
	Exposure Mode: Programmed Auto
	Shutter Speed: 🔳 📄 🕞 1/40 sec
	Aperture: ◀ · · · · · · · · · · · · · · · · · ·
	Exposure Comp.: Fiash Comp.: Fish Comp.:
	Flexible Program: 🕢 👘 🕞 0 Step(s)
	🖸 30 F3.5 ° (r (3)
	AF and Shoot Shoot
	Windows
	O Camera Control Pro
	The D3 is connected.
	Exposure 1 Exposure 2 Storage Mechanical Image Processing
	Exposure Mode: Programmed Auto
	Shuter Speed: I/25 sec Aperture: I/25 sec
	Exposure Comp.: Exposure Comp.: Expos
	Flash Comp.:
	Flexible Program: 4 0 Step(s)
	🖸 25 F3.5 P (r (3)
	AF and Shoot Shoot
	Macintosh

5/7

Starting and Exiting Camera Control Pro

Product Key

If prompted to supply a **product key**, enter the key found on the product packaging and click **OK**. Users of the trial version will see a dialog listing the time remaining in the thirty-day trial period; click **Trial** to use the trial version or **Buy** (if available) to visit a website where you can purchase a product key (Internet connection required). Be sure not to lose the key, as it may be required when re-installing or upgrading the product.

No Camera Connected

Most features of Camera Control Pro are only available when a camera is connected and turned on. If no camera is detected, the message shown below will be displayed. Connect the camera and turn it on.

🍪 C	amera Con	trol Pro				- • •
File	Camera	Image	Settings	Tools	Help	
•	No came	era was	detecte	d.		
		AF	and Shoot		Shoo	t

6/7

Starting and Exiting Camera Control Pro

Exiting Camera Control Pro



Macintosh

Select Quit Camera Control Pro from the application menu.



7/7

Starting and Exiting Camera Control Pro

Disconnecting the Camera

To disconnect the camera:

- USB (PTP or MTP/PTP)/IEEE 1394 (FireWire): Turn the camera off and disconnect the interface cable.
- USB (Mass Storage): When using a D100 camera under Windows 2000 with the camera USB option set to Mass Storage, click the "Unplug or Eject Hardware" icon in the taskbar and select Stop USB Mass Storage Device from the menu that appears, then turn the camera off and disconnect the interface cable.



Getting Help

To view help on Camera Control Pro, select **Camera Control Pro Help** from the **Help** menu.



Overview

Using Camera Control Pro

Appendices

Software Updates

Camera Control Pro is equipped with an automatic update function known as Nikon Message Center. Nikon Message Center checks for updates to a variety of Nikon digital products, including Camera Control Pro. If the computer is connected to the Internet, Nikon Message Center will automatically check for updates when Camera Control Pro starts. You can also check for updates by selecting **Check for Software Updates...** from the **Help** menu. If an update is available, an update dialog will be displayed.

Downloading Updates

An Internet connection is required to download updates. The user bears all applicable fees charged by the phone company or Internet service provider.

Dial-up Connections

When using a dial-up connection, be aware that the connection is not automatically terminated when download is complete. Be sure to terminate the connection manually.

Privacy

Information provided by the user as part of this service will not be given to third parties without the user's permission.

Camera Control Pro 2

Using Camera Control Pro

Screen Layout	31
Capturing Photographs to Disk	33
Viewing Captured Photographs	39
Time Lapse Photography	42
Live View	46
The Camera Control Pro Window	50
Camera Controls	54
Saving and Loading Camera Control Settings	72
The Camera Menu	73
Custom Settings	77

Screen Layout

Camera Control Pro screen layout is described below using the D3 as an example.

Windows

	Camera Control Pro
3	The D3 is connected.
Ú	
5	Exposure Mode: Programmed Auto
	Flash Comp.: 🔌 🗸 🕞 🕞 🛛 Step(s)
6	AF and Shoot Shoot
	(7)

1 Menu bar

- 2 **<u>Connection status</u>**: Shows the status and name of any cameras connected.
- ③ ▼/►: View or hide camera controls. Camera controls can also be displayed or hidden by selecting **Show/Hide Camera Control Panels** in the **Tools** menu.
- **(4)** Camera control tabs: Click to view the associated camera controls.
- **(5)** Camera controls
- 6 <u>Simulated LCD panel</u>: Performs the same function as the information display in the camera viewfinder.
- Shoot buttons: Click these buttons to take pictures.

2/2

Screen Layout

 \bigcirc

Macintosh

The D3 is co	nnected.				Ê	
Exposure 1	Exposure 2	Storage	Mechanical	Image P	rocessing]4
Exposure Mode:	Programmed	Auto		•		
Shutter Speed:	•	\bigcirc			1/25 sec	
Aperture:					f/3.5	
Exposure Comp.:	•	9			D EV	
Flash Comp.:	• 🖓					
Flexible Program:	•				0 Step(s)	
						J
	25	.35 P		(r (3)	

Menu bar

- 2 **<u>Connection status</u>**: Shows the status and name of any cameras connected.
- (3) ▼/▶: View or hide camera controls. Camera controls can also be displayed or hidden by selecting Show/Hide Camera Control Panels in the Tools menu.
- 4 Camera control tabs: Click to view the associated camera controls.
- **(5)** Camera controls
- 6 <u>Simulated LCD panel</u>: Performs the same function as the information display in the camera viewfinder.
- **Shoot buttons**: Click these buttons to take pictures.

1/6

Capturing Photographs to Disk

If Camera Control Pro is running when a supported camera connected, pictures taken with the camera will be stored on your computer hard disk, not the camera memory card.

Start Camera Control Pro.	
😵 Camera Control Pro 📃 🗉 💌	
File Camera Image Settings Tools Help	
The D3 is connected. the D3 is connected.	
Exposure 1 Exposure 2 Storage Mechanical Image Processing	
Exposure Mode: Programmed Auto	
Shutter Speed: 🔳 👘 1/40 sec	
Aperture: 🔳 🖞 📂 f/3.5	
Exposure Comp.: 🗨 🕞 0 EV	
Flash Comp.: 🗐 🗁 🕨	
Flexible Program: 🔳 🗍 D Step(s)	
🖸 30F3.5 P (r 13)	
AF and Shoot Shoot	

2 Select **Download Options...** in the **Tools** menu to display download options.

d from the camera:	
	Browse
d from the camera:	Edit
Do nothing	•
1	
OK Cancel	Help
	n

Capturing Photographs to Disk

Adjust capture options:

Folder for images downloaded from the camera

Select the folder to which photographs will be downloaded as they are taken.

Next file name to be used

Shows how images download to the computer will be named. To change how files are named, click **Edit...**. The dialog shown at below will be displayed. Using the sample file name as a guide, enter a prefix and suffix and choose the starting number and number of digits for automatic file numbering. You can also use the shooting date and time in the file name.

Prefix: Img Suffix: D3 Between Prefix and Suffix: Use sequential number Start numbering at: 1 Length of number: 4 digits Sample: Img0001D3.???	File Na	ming	
Start numbering at: 1 Length of number:			
Sample: Img0001D3.???	Ler	igth of number: 4 digits	
		Sample: Img0001D3.???	

Step 3 continues on the next page

File Naming Conventions

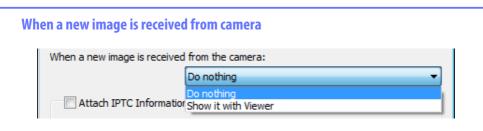
Windows: File names may not contain quotes or any of the following characters: "\" "/" ":" "*" "?" "<" ">" and "|". Periods (".") may not appear at the beginning or the end of file names.

Macintosh: The maximum length for Macintosh file names is thirty-one characters. Colons (":") are not allowed.

Extensions: Extensions are assigned automatically. The following extensions are used: ".JPG" (JPEG images), ".TIF" (TIFF images), ".NEF" (NEF/RAW images), and ".NDF" (Image Dust Off reference data).

```
Return to first page
```

Capturing Photographs to Disk



Choose the application that will be used to display captured photographs after they are saved to disk.

- **Do nothing**: Photographs are not displayed after being saved to the computer hard disk.
- Show it with Viewer: Photographs are displayed in the viewer window.
- Show it with ViewNX (available only if ViewNX is installed): ViewNX starts automatically and displays the captured images. See ViewNX help for details. Use the latest version of ViewNX.
- Send it to Capture NX watched folder (available only if Capture NX is installed and the "Watched folder" is selected): If CaptureNX (available separately) is running, photographs will be saved in the folder currently selected as the "Watched folder" (be sure that Capture NX supports the camera; see the Capture NX manual for details). Capture NX will automatically process the pictures according to the batch settings in Capture NX.

Step 3 continues on the next page

4/6

Check this option to add IPTC information to captured images and enable the **Copy Shooting Data to IPTC Caption** option.

IPTC Information...

Clicking this button displays a dialog where you can select the IPTC information, including keywords and captions, that will be added to images as they are captured.

Copy Shooting Data to IPTC Caption

Check this option to copy shooting data to the caption field of images as they are captured.

Embed ICC Profile

Select this option to embed an ICC profile according to the camera Color Space settings. The ICC profile is embedded in JPEG and TIFF images as they are captured.

Image Authentication D3 D2Xs D300 D2X* D2Hs* D200*

The **Attach IPTC Information** and **Embed ICC Profile** options do not apply to photographs taken with Image Authentication on. Image authentication information is not embedded in TIFF photographs when capturing images using the Camera Control Pro.

* Image Authentication supported from camera firmware version 2.00.

4

Appendices

Capturing Photographs to Disk

After adjusting options as described in Step 3, click **OK** to exit the dialog and apply settings to subsequent photographs. Note that if **On** or **Automatic** (the default setting) is selected for the auto image rotation option in the camera setup menu, D3, D2-series, D300, D200, D80, D70-series, D50, and D40-series cameras will detect camera orientation and automatically embed this information in photographs (note that in continuous mode, the orientation for the first image in each burst applies to all images in the series, even if camera orientation is changed during shooting). If **Off** is selected, camera orientation will not be recorded. To add information on picture orientation during download, open the **Image** menu and selecting **Rotate all downloaded images by 90 degrees CCW** to mark pictures as being rotated 90° to the right, or **Rotate all downloaded images by 90 degrees CW** to mark pictures as being rotated 90° to the left.

Image Authentication D3 D2Xs D300 D2X* D2Hs* D200*

The "Rotate all downloaded images..." options do not apply to photographs taken with Image Authentication on. Image authentication information is not embedded in TIFF photographs when capturing images using the Camera Control Pro.

*Image Authentication supported from camera firmware version 2.00.

Camera Control Pro 2

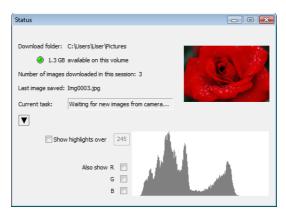
6/6

Capturing Photographs to Disk

Take pictures using the camera shutter-release button or the **AF and Shoot** or **Shoot** buttons in the Camera Control Pro window. The Status dialog shown below will be displayed.



To display a histogram of the current image, click the triangle at the bottom of the Status dialog.



If the **Show highlights over** option is checked, any areas of the preview image with a brightness over the value entered in the neighboring text box will be indicated by a flashing border. To display *histograms* (graphs showing the distribution of pixels of different brightnesses in the image) for the red (**R**), green (**G**), and blue (**B**) channels, put a check in the corresponding box.

Click **Close** to close the Status dialog.

6

Appendices

1/3

Viewing Captured Photographs

If **Show it with Viewer** is selected for <u>When a new image is received from camera</u> in the <u>"Download Options" dialog</u>, pictures will automatically be displayed in the "Viewer" window after capture. The "Viewer" window can also be started by selecting **Show Viewer** from the **Tools** menu. The most recent image in the folder selected for **Folder for images downloaded from the camera** in the "Download Options" dialog will be displayed.



The Title Bar

The title bar contains the following items:

ltem	Description	
	The file name of the image currently displayed in the image area. If the image	
Img0003.jpg	was recorded at an image quality of NEF (RAW)+JPEG, both extensions will be	
	displayed (e.g., "Img0001.jpg/nef").	
	Click to minimize the "Viewer" window.	
	Click to maximize the "Viewer" window.	
-23-	Click to close the "Viewer" window.	

Viewing Captured Photographs

The Toolbar

The toolbar contains the following items:

ltem	Name	Description
	Back	Click this button or press the left arrow on the keyboard to
	Dack	select the next image to the left in the thumbnail area.
Next		Click this button or press the right arrow on the keyboard to
	NEXC	select the next image to the right in the thumbnail area.
	Thumbnail slider	Choose the size of the thumbnails displayed in the thumbnail
	Thumbhan shuer	area.
**	Thumbnail	View or hide the thumbnail area.
	Show focus point	Display focus point or focus area used when taking picture.
	Show locus point	Focus area is displayed in red.
E	Fit to screen	Fit image to viewing area (maximum zoom ratio is 100%).
100 %	100%	View image at 100%.
50 %	50 %	View image at 50%.
		Click this button or press the Delete key on the keyboard
Î	Delete	(Macintosh users press command+ delete) to delete the current
		image.

Show Focus Point

Focus point (focus area) display is only available with photographs taken with Nikon digital SLR cameras. It will not be displayed in photographs taken with a non-CPU lens, manual focus, or when focus areas not displayed in the viewfinder.

Viewing Captured Photographs

The Thumbnail Area

Lists the images in the folder selected for **Folder for images downloaded from the camera** in the "Download Options" dialog, sorted by date of modification with the most recent images on the right.

The Image Area

Shows the image currently selected in the thumbnail list. If **Show it with Viewer** is selected for <u>When a new image is received from camera</u> in the "Download Options" dialog, the most recent picture will automatically be displayed in the image area after capture.

The D3 and D300 Buffer

If **Show it with Viewer** is selected for **When a new image is received from camera** in the "Download Options" dialog, the images in the camera buffer will be displayed on the right of the thumbnail area before being downloaded to the computer. To preview an image in the image area, select it in the thumbnail list (no file name will appear in the title bar). Images deleted from the buffer will not be downloaded to the computer.

Camera Control Pro 2

Time Lapse Photography

Using Camera Control Pro, you can take a series of photographs automatically at a time interval you select.

Select Time Lapse Photography dialo Lapse Photography dialo	tography from the Camera menu. The Time g will be displayed.
Time	Lapse Photography
Shot	utofocus before each shot eep shooting until cancelled s: 2 y: 0 Hours 0 Minutes 0 Seconds uto Bracketing Set BKT Start Cancel Help

Time Lapse Photography

Before shooting starts, adjust the following settings:

Autofocus before each shot

If this option is checked, the camera will perform an autofocus operation before each shot. If the selected focus mode is AF-A (D80, D50, and D40-series cameras) or single-servo AF, an autofocus operation will be performed even when the check box is off.

Keep shooting until cancelled

If this option is checked, the camera will continue to take photographs until you click **Stop Shooting** in the Time Lapse Photography dialog.

Auto bracketing D3 D2 series D300 D200 D80 D70 series D50 Select this option to perform exposure, flash, or white balance bracketing during shooting. To change bracketing options, click Set BKT . The dialog shown at right will be displayed.			
AE/WB/Flash	Choose the type of bracketing per-	Exposure increment (EV) 0.0 -1.0	
Bracketing	formed.	1 2 shoot Order	
Change Factor when		CK Cancel Help	
Exposure Mode is set	Change have bracketing is par	D3/D2 series/D300/D200	
to Manual	Choose how bracketing is per-	Bracketing Mode	
D3 D2 series	formed in manual exposure mode.	AE/W8/Flash Bracketing (Custom #13): AE & Flash	
D300 D200		Bracketing Type: Total 2 shots / Minus side	
	Choose the bracketing program, ex-	Bracketing Order (Custom #14): Metered > Under > Over Exposure Mode: Manual Change Factor: Shutter / Flash	
Bracketing Type/	posure or white balance increment,		
Bracketing Step/	bracketing order, and exposure	Exposure increment (EV) -5.0 -5.3	
Bracketing Order/	mode. Bracketing type and brack-	1 2 Shoot Order	
Exposure Mode	eting order are not available with	OK Cancel Hep	
	the D50.	D80/D70 series/D50	

3/4

Time Lapse Photography

Use the **Shots** box to choose a number of shots from 2 to 9,999. This option is not available when **Keep shooting until cancelled** is selected.

The delay between shots can be set to any value between 00:00:01 (one second) and 99:59:59 (ninety-nine hours, fifty-nine minutes, and fifty-nine seconds).

5 Click Start. If Send it to Capture NX watched folder is selected for When a new image is received from camera in the "Download Options" dialog, photographs will be saved to the "watched" folder selected in Capture NX (available separately; see the Capture NX manual for details). Capture NX will automatically process the pictures according to the batch settings in Capture NX.

Time Interval Settings

If the delay is shorter than the time required to record each photograph, the actual interval between photographs will be longer than that specified in the "Time Lapse Photography" dialog.

Auto Off D1 series

When the camera is operated on battery power and <u>for 15 minutes</u> has been selected for "While Camera Control Pro is running, keep camera awake" in the General tab of the Preferences dialog, choose a delay of fifteen minutes or less. When taking photographs at longer intervals, use an AC adapter (available separately) to power the camera.

During Time-Lapse Photography

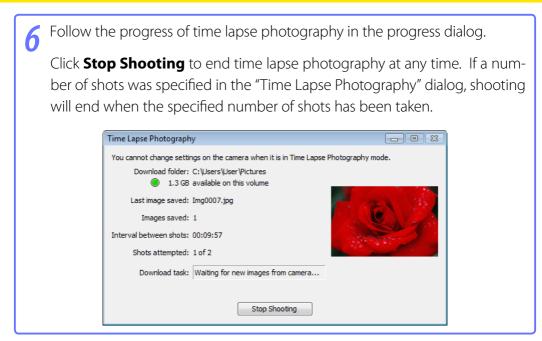
No operations can be performed in the "Camera Control Pro" window until the "Time Lapse Photography" dialog is closed.

Camera Control Pro 2

Appendices

4/4

Time Lapse Photography



7 Once the specified number of shots has been taken, the **Stop Shooting** button will change to **Shooting Complete**. Click **Shooting Complete** to exit the "Time Lapse Photography" dialog.

Error Logs

If an error occurs during shooting, an error log will be displayed; click **OK** to close the log and return to the Camera Control Pro window.

The Time Lapse Photography Dialog

If you make a mistake in entering settings in the "Time Lapse Photography" dialog, a warning will be displayed. Return to the "Time Lapse Photography" dialog and adjust settings as directed.

Hard Disk Full

A warning will appear when space is no longer available on the destination disk for photographs taken using time lapse photography. Use the information in the warning to reduce the number of photographs or change the destination drive.

Camera Control Pro 2

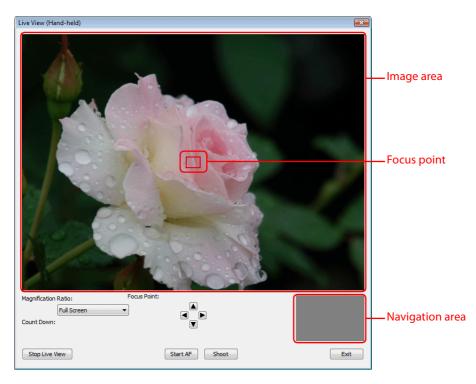
Appendices

Live View

When a camera that supports live view is connected, **Live View (Hand-Held)** and **Live View (Tripod)** options are available in the **Camera** menu. Selecting either of these options opens the "Live View" window. Camera controls can not be used while the "Live View" window is displayed; the "Live View" window will close automatically if the camera is disconnected.

Live View (Hand-Held)

The following window is displayed when **Live View (Hand-held)** is selected in the **Camera** menu.



Live View

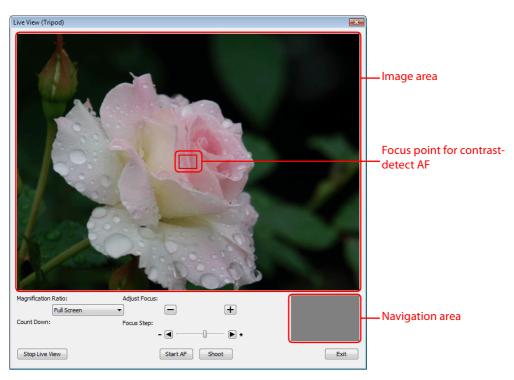
The image area shows the view through the camera lens, updated in real time, with the current focus point superimposed. The other controls in the "Live View (Handheld)" window are described below:

ltem	Description	
Start/Stop		
Live View	Click to start or stop live view.	
Focus Point	Click the arrows to move the focus point.	
	To prevent damage to the its internal circuits, the camera will automatically end	
Count Down	live view if the temperature inside the camera becomes too high. The count-down	
	timer shows the time remaining until live view ends.	
Start AF	Focus the camera using normal (phase-detection) AF.	
Shoot	Take a picture.	
Exit	Close the "Live View (Hand-held)" window.	
Magnification	Zoom the view in the image area in or out. The navigation area shows the portion	
Ratio	of the image currently displayed in the image area.	

Live View

Live View (Tripod)

The following window is displayed when **Live View (Tripod)** is selected in the **Camera** menu.



Live View

The image area shows the view through the camera lens, updated in real time, with the focus point for contrast-detect AF superimposed. Click anywhere in the image area to move the focus point to that spot. The other controls in the "Live View (Tripod)" window are described below:

ltem	Description	
Start/Stop Live View	Click to start or stop live view.	
Count Down	To prevent damage to the its internal circuits, the camera will automatically end live view if the temperature inside the camera becomes too high. The count-down timer shows the time remaining until live view ends.	
Magnification	Zoom the view in the image area in or out. The navigation area shows the portion	
Ratio	of the image currently displayed in the image area.	
Adjust Focus	Click these buttons to adjust focus by the amount selected with the Focus Step slider. Click + to move the focal point away from the camera, – to bring it toward the camera.	
Start/Stop AF	Click Start AF to initiate contrast-detect autofocus. The button will change to Stop AF ; click again to end autofocus. The Adjust Focus buttons and Focus Step slider are not available while autofocus is in progress.	
Shoot	Take a picture.	
Exit	Close the "Live View (Tripod)" window.	

Appendices

The Camera Control Pro Window

The Camera Control Pro window shows current camera settings, which may be viewed by clicking the five page selection tabs. Camera settings can be altered using the controls in each tab as in "Camera Controls." The other settings in this window are described below.

Connection Status

🝪 Camera Control Pro		
File Camera Image Settings	Tools Help	
The D3 is connected.		-Connection status
Exposure 1 Exposure 2 Storage	Mechanical Image Processing	

This area shows the following information about the camera currently connected:

- Camera name
- Camera orientation D3 D2 series D300 D200 D80 D70 series D50
 D40 series: If **On** or **Automatic** is selected for the auto image rotation option in the camera setup menu, camera orientation will be indicated by an icon as shown below. No icon will be displayed if **Off** is selected.



Horizontal



Rotated 90° clockwise

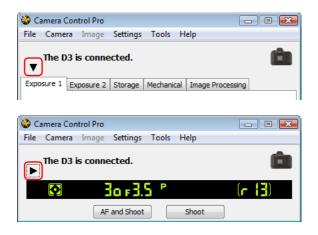


Rotated 90° counterclockwise

The Camera Control Pro Window

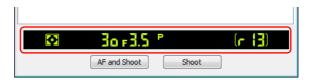
The 🔻 / 🕨 Button

Click this button to view or hide camera controls.



Simulated LCD Panel

This panel shows the information displayed in the camera's viewfinder, with the exception of camera errors. Clicking on an indicator in the panel opens the Camera Control Pro window to the tab that controls the selected option, where adjustments can be made.



The amount of memory remaining in the camera memory buffer is displayed at the right edge of the simulated LCD panel (this information is not displayed when a D1-series or D100 camera is connected). This information is updated at regular intervals, but temporary discrepancies may exist between the display and the actual amount of memory remaining in the buffer.

The Camera Control Pro Window

Shoot Buttons

Click either of these buttons to take a photograph at current settings. If a D3, D2-series, D300, D200, D80, D70-series, D50, or D40-series camera is connected, photos can be taken in continuous shooting mode; in this case, the **AF and Shoot** and **Shoot** buttons will instead be labeled **AF and Start** and **Start**. Continuous shooting with D1-series and D100 cameras can only be performed with shutter-release button on the camera body; the shooting buttons in the "Camera Control Pro" dialog can only be used to take pictures one at a time.



AF and Shoot/	When this button is clicked, the camera will perform an autofocus operation	
AF and Start	and then release the shutter to take a photograph.	
	Click this button to take a photograph. If the selected focus mode is AF-A (D80,	
Shoot/Start D50, and D40 series cameras) or single-servo AF, an autofocus operatio		
	performed before the shutter is released.	

The Function Dial D100

The D100 can only be used to take photographs when the function dial is set to P, S, A, or M. At other settings, the shoot buttons in the "Camera Control Pro" dialog will be disabled and the simulated LCD panel will not be displayed.

The Camera Control Pro Window

Camera Settings That Can Not Be Adjusted from Camera Control Pro

The following operations can only be performed using the controls on the camera body:

	Operation	Camera
	Burst photography (continuous shooting mode)	D1 series D100
	Continuous servo autofocus	All supported models
	Pressing the shutter-release button halfway to check focus	All supported models
S	Autofocus-only operation (use AF and Shoot to perform autofocus)	All supported models
Status not displayed	Manual aperture adjustment using the lens aper- ture ring	D3 D2 series D1 series D300 D200
t display	Reactivating the camera after it has entered sleep mode	(D1 series)
/ed	Depth-of-field preview	All supported models
	Auto bracketing	D1 series D100
	Compression options for NEF (RAW) images	D100
	Operation assigned to FUNC./Fn button	D3 D2 series D300 D200
	Remote (D80, D70 series, D50, and D40 series only)	D3 D2 series D300 D200
	and self-timer mode selection	D80 D70 series D50 D40 series
	Focus mode selection using camera focus-mode selector	All supported models
	Metering	D1 series D100
St	Exposure mode (can be adjusted if <u>Enable</u> <u>controls on camera body</u> is not selected when D80, D70 series, D50, or D40 series is connected)	D100 D80 D70 series D50 D40 series
atus	Shooting mode	D100
disp	Shutter-speed lock	D3 (D2 series) (D1 series)
Status displayed	Aperture lock	D3 D2 series D1 series
-	Autoexposure lock	All supported models
	Flash compensation	D3 D2 series D1 series D300
	M-up (mirror up) mode selection	D3 (D2 series) D300 (D200)
	Selection of second center focus area group (group dynamic-AF)	(D2 series) (D200)

Camera controls are described below using the D3 as an example:

The Exposure 1 Tab

The following settings can be adjusted from the Exposure 1 tab:

😂 Camera Control Pro				
File Camera Image Settings Tools Help				
The D3 is connected. ▼	The D3 is connected.			
Exposure 1 Exposure 2 Storage Mechanical Image P	Processing			
Exposure Mode: Programmed Auto 🔻				
Shutter Speed: 🔳 👘 🕨 1/	/40 sec			
Aperture: 🔳 👘 📂 f/	3.5			
Exposure Comp.: 🖪 🗍 🖡 🕒 0	EV			
Flash Comp.: 🖪 🖓				
Flexible Program: 🖪 👘 🕞 0	Step(s)			
🖸 30 F3.5 °	(r (3)			
AF and Shoot Shoot				

	Choose an exposure mode. If a D100 is connected, or if Enable controls on the		
Exposure	camera body is checked when a D80, D70-series, D50, or D40-series camera is con- nected, it will show the current exposure mode but the mode itself must be se-		
Mode			
	lected using the camera function dial. See the camera manual for details.		
	Shutter speed can only be adjusted in Manual and Speed Priority modes, when it		
Shutter	can be set to values between the maximum and minimum values supported by the		
Speed	camera. Use high shutter speeds to freeze motion, low shutter speeds to suggest		
	motion by blurring moving objects.		
	Aperture can only be adjusted in Manual and Aperture Priority modes, when it		
	can be set to values between maximum and minimum aperture (small apertures		
Anorturo	have high f-numbers, wide apertures low f-numbers; the actual apertures available		
Aperture	depend on the lens used). Aperture can not be controlled from Camera Control Pro		
	when Custom Setting 22 has been set to allow aperture to be adjusted manually		
	using the lens aperture ring (D1-series only).		

2/18

Camera Controls

The Exposure 1 Tab		
Exposure Comp.	Exposure compensation is useful when shooting subjects contain- ing sharp lighting contrasts, or on other occasions when you want to modify the exposure value determined by the camera. Expo- sure compensation is available in all exposure modes.	
Flash Comp. D300 D200 D100 D80 D70 series D50 D40 series D40 series	This option is used to adjust the level of the camera's built-in Speedlight.	
Flexible Program	Flexible program can only be used in Program Mode, when it al- lows you to choose from predetermined combinations of shutter speed and aperture appropriate to current lighting conditions.	

The Function Dial D100

The D100 can only be used to take photographs when the function dial is set to P, S, A, or M. At other settings, the controls in the Exposure 1 tab will be disabled.

Bulb

At a shutter speed of Bulb, the shutter remains open while the shutter release button is held down. Use the camera shutter-release button to take photos at this setting. Clicking either of the shoot buttons will display an error message.

The Exposure 2 Tab

The following settings can be adjusted from the Exposure 2 tab.

😵 Camera Control Pro	
File Camera Image	Settings Tools Help
The D3 is conne ▼	ected.
Exposure 1 Exposure 2	Storage Mechanical Image Processing
Focus Point:	
Metering Mode:	Multi-Pattern 👻
Flash Sync Mode:	Front Curtain 👻
Sensitivity:	ISO 200 💌
	ISO Auto Detail
White Balance:	Auto Fine Tune
Q	la f 3.5 ° (r (3)
AF	and Shoot Shoot

Focus Point Focus Area	The focus point and focus area can be selected using the arrow buttons; see the camera manual for details. For information on AF-area mode and focus mode, see <u>"The Mechanical Tab."</u>
Metering Mode	The metering mode can be selected from this menu (D3, D2 series, D300, D200, D80, D70 series, D50, and D40 series only). Metering mode defaults to the option selected with the camera. If a D1-series or D100 camera is connected, the current metering mode will be shown, but changes can only be made using camera controls. See the camera manual for details.
Flash Sync	This option controls the camera flash sync mode. See the camera manual for de-
Mode	tails.

Appendices

Camera Controls

4/18

	The Exposure 2 Tab		
ISO Sensitivity	ISO sensitivity can be raised when taking photographs in low ligh conditions. See the user's manual provided with your camera fo details.		
Auto ISO Sensitivity Auto Control D3 (D2 series) D300 D200 D100 D80 (D70 series) D50 (D40 series)	When this option is checked, the camera will adjust ISO sensitivity automatically. If this option is selected when a D3 or D300 camera is connected, the maximum sensitivity and minimum shutter speed can be set by clicking the Details button.		
White Balance	White balance is used to ensure that colors which appear white when viewed directly are white in the final photograph. It can also be used to produce an intentionally unbalanced rendering of a scene. If Fluorescent is selected when a D3 or D300 is connected, a menu of bulb types will be displayed. If Choose color temp. is selected when a D3, D2-series, D300, or D200 camera is connected, a menu of color temperatures will be displayed. See the camera manual for details.		
Fine Tune D3 D2 series D1 series D300 D200 D100 D80 D70 series D40 series	Click Fine Tune to make fine adjustments to white balance. Fine tuning is not available with Choose color temp. (D2 series and D200 only) or preset white balance. If a D3 or D300 is connected, white balance can be fine-tuned on the G reen-Magenta and B lue-Amber axes as described in the camera manual; to restore default settings, click Reset .		

Appendices

<u>5/18</u>

Camera Controls

all white balance presets. Clicking Edit when Preset is selected for white balance displays the dialog shown at right, where the comments for each of the white balance presets can be edite	The Exposure 2 Tab				
Click OK to copy the comments to the camera. Comments can be up to thirty-six characters long and contain letters, number quotes, apostrophes, spaces, and any of the following characters "," "." "!" "?" "#" "\$" "%" "%" "%" "(" ")" "[" "]" "{" "]" "{" "+" "+" "-" "/" ":" ";" "<" "	Comment D3 D2 series D300 D200	This field lists the comments for all white balance presets. Clicking Edit when Preset is selected for white balance displays the dialog shown at right, where the comments for each of the white b Click OK to copy the comments to be up to thirty-six characters long quotes, apostrophes, spaces, and a	ok Cancel Help palance presets can be edited the camera. Comments can and contain letters, numbers ny of the following characters		

The Storage Tab

The following settings can be adjusted from the Storage tab:

😂 Camera Control Pro		
File Camera Image Settings Tools Help		
The D3 is connected. ▼	<u>ê</u>	
Exposure 1 Exposure 2 Storage Mechanical Image Proces	sing	
Data Format: JPEG (8-bit) JPEG guality: Normal	•	
JPEG compression: Fixed size		
Image area: 🔽 Auto DX Crop	_	
FX format (36x24)	-	
Image Size: Large (4256x2832)	-	
NEF(RAW) recording		
Type: Lossless compressed	-	
NEF (RAW) bit depth: 12-bit	•	
L		
🖸 30 F3.5 P	(r (B)	
AF and Shoot Shoot		

	Choose from the file types supported by the camera (see the cam-
	era manual for details). This setting determines pixel bit depth and
	file size. If an option that includes JPEG is selected, the compres-
Data Format	sion ratio can be selected from the JPEG quality menu and other
	compression options (D3, D2 series, D300, and D200 only) from the
	JPEG compression menu. Note that JPEG quality is fixed at
	Basic when RAW (12-bit) + JPEG (8-bit) is selected with D70-
	series, D50, and D40-series cameras.
	Choose from Color and Black & White. Black & White is not
Color (D1 series)	available when RAW is selected for Data Format .
	If Auto DX crop is selected, the camera will select DX format auto-
Image area D3	matically when a DX lens is attached. If this option is not selected,
	the format can be selected from the menu.

Appendices

Camera Controls

The Storage Tab			
Image Size	Choose image size. See the camera manual for details.		
NEF RAW Compression	Choose bit depth (D3 and D300 only) and compression set-		
NEF (RAW) recording	tings for NEF (RAW) images. These options are only available		
D3 D2 series D1X	when an option that includes NEF (RAW) is selected Data		
D1H D300 D200	Format.		
High-speed crop D3 D2 series	Select this option to enable high-speed crop. See the camera manual for details.		

The Mechanical Tab

The following settings can be adjusted from the Mechanical tab:

😵 Camer	a Control I	Pro			
File Car	nera Ima	age Settings	; Tools	Help	
The ▼	D3 is co	onnected.			â
Exposure	1 Exposu	re 2 Storage	Mechani	cal Image P	rocessing
Rel	ease Mode:	Single			Shots
	Bracketing	: 📃 Auto Brad	keting		Set BKT
AF-	Area Mode:	Single Area			r
F	ocus Mode:	: Single Servo			
	Lens:	24-85mm f/3	3.5-4.5G		Edit
Main Ba	ttery Level:				
		AF and Shoo		Shoot	(F {3)

Sets the shooting mode for D1-series cameras connected in PC mode to Single or **Continuous**. Changes to this setting also apply to Custom Setting 30. The shooting mode for D80, D70-series, D50, or D40 series cameras can be selected from Single and Continuous. Unless Enable controls on the camera body is checked in the connection status area, the shooting mode for D3, D2-series, D300, and D200 cameras can be selected from Single, Continuous low speed, and Continuous high speed. If Continuous is selected for D80, D70-series, D50, or **Release Mode** D40 series cameras or if Continuous low speed or Continuous high speed is Shooting Mode selected for D3, D2-series, D300, or D200 cameras, the AF and Shoot and Shoot buttons will instead be labeled AF and Start and Start and the maximum number of shots that can be taken in a single burst can be entered in the **Shots** text box (see below). If **Enable controls on the camera body** is checked or a D100 camera is connected, the current shooting mode will be shown, but changes can only be made using camera controls. See the camera manual for details.

Appendices

Camera Controls

The Mechanical Tab				
Shots D3 D2 series D300 D200 D80 D70 series D50 D40 series	Use the arrows to choose the maximum number of shots that can be taken in a single burst in continuous mode, or enter a value directly in the text box. The maximum permitted value varies with the current image-qual- ity setting; the value chosen should not, however, exceed the capacity of the camera memory buffer as shown at the right edge of the LCD display. Values larger than the capacity of the camera memory buffer will be shown in red. This setting only applies when the camera is connected, and differs from the maximum selected in the Custom Settings menu.			
Auto Bracketing D3 D2 series D300 D200 D80 D70 series D50	Select this option to perform exposure, flash, or white balance bracketing during shooting. See " <u>Time Lapse Photography</u> " for details.			
AF-Area Mode	Choose the AF-area mode. If Enable controls on the camera body is checked (D3, D2 series, D300, and D200 only), the current AF-area mode will be shown, but changes can only be made using camera controls. See the camera manual for details.			
Focus Mode	Choose the focus mode for D80, D50, or D40-series cameras (see the camera manual for details). The focus mode for other cameras is displayed but can not be changed from Camera Control Pro.			

Appendices

Camera Controls

	The Mechanical Tab		
Lens	Displays the focal length and maximum aperture of the lens currently at- tached to the camera. Depending on the lens type, some information may not be displayed. If the lens focal length or maximum aperture have been specified manually, an asterisk will appear next to these values. If a D3 or D300 is connected with a non-CPU lens attached, lens data can be select- ed.		
Edit D3 (D2 series) D300 (D200)	This button is only available when a non- CPU lens is mounted on the camera. Click- ing Edit displays the dialog shown at right, where the lens focal length and maximum aperture can be entered. Click OK to copy the values to the camera.		
Main Battery Level	Displays the level of the main camera battery. Green indicates that the bat- tery has enough charge for continued operation. Yellow indicates that bat- tery level is low; ready a fully charged spare battery pack. Red indicates that the battery is exhausted, and that no further photographs can be taken until the battery pack has been replaced. You may not be able to control the camera from Camera Control Pro when the battery is exhausted. Replace with a fully charged spare battery pack or use an AC adapter (available sepa- rately).		
Clock Battery Level	Displays the level of the camera clock battery. Should this display turn yel- low or red, have the clock battery replaced by an authorized Nikon service representative (a fee is charged for this service).		

Self-Timer and Remote Modes

When a D3, D2-series, D300, D200, D100, D80, D70-series, D50, or D40-series camera is set to selftimer mode, or when a D80, D70-series, D50, or D40-series camera is set to delayed remote or quickresponse remote mode, the Mechanical tab will show a shooting mode of **Single**, and any photographs taken with the Camera Control Pro shoot buttons will be taken in single-frame mode with no shutter-release delay. To take pictures in self-timer or remote mode, use the shutter-release button on the camera or remote control.

Live View D3 D300

When the camera release mode dial is set to **Lv**, the Mechanical tab will show a shooting mode of **Single**, and any photographs taken with the Camera Control Pro shoot buttons will be taken in single-frame mode. To take pictures in live view mode, use the live view options in the **Camera** menu.

Camera Control Pro 2

Appendices

Camera Controls

Continuous Mode (All Models Except D1 series) D100

The amount of memory remaining in the camera memory buffer is displayed at the right edge of the simulated LCD panel. This information is updated at regular intervals, but temporary discrepancies may exist between the display and the actual amount of memory remaining in the buffer.

Non-CPU Lenses

The following restrictions apply to Camera Control Pro when a non-CPU lens is mounted on the camera (the operations listed can still be performed using the controls on the camera body; see the camera manual for details):

	D3 D2 series D300 D200				D80 D70 series
	With lens data No	data D1 ser	ies	D100	D50 D40 series
				Can not be adjust-	Can only be ad-
				ed. Mode select-	justed if <u>Enable</u>
Exposure	Can be selected from \mathbf{A}	perture-pri	or-	ed with camera	<u>controls on the</u>
Mode	ity auto and Manual.			displayed. Photos	<u>camera body</u> is not
				can only be taken	checked. Otherwise
				in mode M.	same as D100.
Shutter Speed	Can only be adjusted in manual exposure mode.				
Aperture	Shown with asterisk. Aperture shown as "f/". Can not be adjusted.				
AF and Shoot	Can not be used.				
Shoot	Can be used.				Can be used.*

* Warning will be displayed in exposure modes other than M.

The Image Processing Tab (D3/D300)

The following settings can be adjusted from the Image Processing tab:

😵 Camera Control Pro	
File Camera Image	Settings Tools Help
The D3 is conn ▼	
Exposure 1 Exposure 2	Storage Mechanical Image Processing
Picture Control:	Standard Edit
	Manage Picture Control
Color space:	sRGB 🔻
Active D-lighting:	OFF •
	Long exposure Noise Reduction
High ISO NR:	Off 🔹
•	30 F 3.5 ° (r 13)
A	F and Shoot Shoot

Picture Control	Choose a Picture Control (see the camera manual for details), or click					
Picture Control	Edit to modify the selected Picture Control.					
Manage Picture Control	Select, rename, or delete custom Picture Controls.					
Color space	Choose a color space. See the camera manual for details.					
Active D-lighting	Choose active D-lighting options. See the camera manual for details.					
Long exposure Noise	Select this option to reduce noise at slow shutter speeds. See the camera					
Reduction	manual for details.					
High ISO NR	Choose a noise reduction option for high ISO sensitivities. See the camera					
	manual for details.					

Nikon Picture Controls

Picture Controls provided by Nikon are known as "Nikon Picture Controls." They include the Picture Controls provided with the camera and optional Picture Controls available for download from Nikon websites. See the camera manual for details.

Editing Picture Controls

Clicking **Edit...** in the Image Processing tab displays options for the selected Picture Control (monochrome controls are shown at right, other controls at left).

Standard						x	Monochrome
© Quick		<					Auto Sharpening 🔲 - 🛋 🔂 🕨 + 3
Manua	al						User Custom Curve
		Auto					Contrast 🔲 – 🖪 — 🗍 🕨 + 0
	Sharpening	-	 — 	0	+	+3	Brightness - - + 0
\odot	User Custom Curv	ve.	Edit				Filter effects: Off
۲	Contrast	-	•	0	+	0	Toning: B & W
۲	Brightness	-	 — 	0	+	0	- • +1
	Saturation			0	+	0	
	Hue	-		0	+	0	Save as a new Custom Picture Control
				9			OK Reset Cancel
	6 21/2 20 2		tom Dict u	o Control			
Save as a new Custom Picture Control							
	ОК	Re	set	Cancel			

Select this option and drag the slider to the left or right to re-		
duce or exaggerate the effect of the selected Picture Control.		
Select this option to make separate adjustments to the settings		
listed below.		
Select the Auto checkbox to adjust sharpening automatically, or		
choose a value with the slider.		
Select this option and click Edit to manually edit the tone		
curve for the selected Picture Control. Note that changes can		
only be saved using Save as a new Custom Picture Control.		
Select the radio button and adjust the sliders (saturation is not		
available with monochrome controls). Select the Auto check-		
boxes for automatic contrast or saturation. Contrast and bright-		
ness can not be adjusted when <u>active D-lighting</u> is on .		
Use the slider to adjust hue.		
Choose a filter effect. See the camera manual for details.		
Choose a monochrome tint. Tint can be adjusted with the slider.		

Appendices

Camera Controls

	Editing Picture Controls					
	Click this button to save settings as a new custom Picture Control. The following					
	dialog will be displayed; name the new control and click Save .					
Save as a new	Save as a new Custom Picture Control					
Custom Picture	Save as: C-1:VIVID-02					
Control	Name:					
	Save Cancel					
OK	Save changes and exit.					
Reset	Undo any changes to the selected Picture Control. Custom Picture Controls are					
neset	reset to the values in effect when the Picture Control was first created.					
Cancel	Exit without saving changes.					

The "Custom Picture Control" Dialog

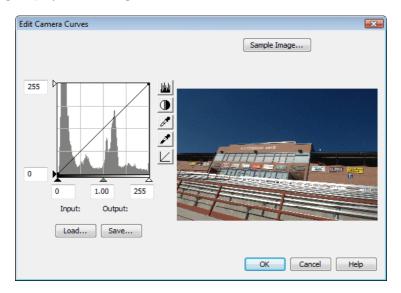
Clicking **Manage Picture Control...** in the Image Processing tab displays the dialog shown below.

Custom Picture Control	×
Custom Picture Control:	
C-1:VIVID-02	•
Rename	
Delete	
Close	

Custom Picture Control	Select a custom Picture Control.				
	Rename the selected custom Picture Control. The following dialog will be				
	displayed; rename the control and click OK .				
Rename	Rename				
	C-1:				
	OK Cancel				
Delete	Delete the selected custom Picture Control.				
Close	Close the "Custom Picture Control" dialog.				

The "Edit Camera Curves" Dialog

Clicking **Edit...** when **User Custom Curve** is selected in the Picture Control settings dialog displays the dialog shown below.



The controls in the Edit Camera Curves window are similar to those used to edit tone curves in Adobe Photoshop and other imaging software, except in the following respects: (1) only the master channel, not individual RGB channels, may be edited; (2) there is a limit of 20 spline points; (3) the midpoint may not be edited; and (4) a user-defined sample image can be selected by clicking **Sample Image...** (the sample image must be an NEF (RAW) image created with a supported Nikon digital camera). Any changes to curves are reflected in the sample image. To copy the edited curve to the Picture Control, click **OK**.

The upper left section of the Edit Camera Curves window contains **Load...** and **Save...** buttons. Click **Load...** to load previously stored curves created with Camera Control Pro, Nikon Capture (available separately), or Capture NX (available separately; settings must include "Levels and Tone Curves" data). Look for files with the ".ntc", ".ncv", or ".set" extension.

The **Save...** button opens the "Save As" dialog, where you can save the current curve.

Camera Control Pro 2

The Image Processing Tab (Other Cameras)

The following settings can be adjusted from the Image Processing tab:

😵 Camera Control Pro			
File Camera Image	Settings Tools Help		
The D80 is connected.			
Exposure 1 Exposure 2	Storage Mechanical Image Processing		
Optimize image:	Custom		
Sharpening:	Auto 👻		
Tone Comp:	Auto		
Color Mode:	Mode Ia (sRGB)		
Saturation:	Auto		
Hue Adjustment:	■ ▶ 0°		
	Long exposure Noise Reduction		
High ISO NR:	On (Normal)		
Þ	30 F3.5 ° (r (3)		
A	F and Shoot Shoot		

Image Optimize D200 D80 D70 series D50 D40 series	Choose the type of image optimization performed. See the cam- era manual for details.
Sharpening	Choose how much the camera sharpens outlines. See the camera manual for details.
Tone Comp	Adjust contrast. See the camera manual for details. Selecting "Custom" or "Custom 1–3 " (D2Xs only) and clicking Edit will dis- play <u>"Edit Camera Curves" dialog</u> .
Filter Effects D80	Choose a filter effect for black-and-white photographs. This op- tion is only available when Black-and-white (Custom) is select- ed for Image Optimize .
Color space	Choose a color space. See the camera manual for details.

Appendices

Camera Controls

	The Image Processing Tab
Color ModeD2 seriesD1XD200D100D80D70 seriesD50D40 series	Choose a color mode. See the camera manual for details. With the D1, colors are optimized for the NTSC color space, regardless of the option chosen.
Saturation D200 D80 D70 series D50 D40 series	Adjust color saturation. See the camera manual for details.
Hue AdjustmentD2 seriesD1XD1HD200D100D80D70 seriesD50D40 series	Modify hue while leaving brightness and chroma unaffected. Adjustments can be made in the range -9° to 9° , with 0° representing the original hues as recorded by the camera (in D1-series cameras, -9° is equivalent to a camera hue setting of 0, 0° to a setting of 3, and 9° to a setting of 6).
Long Exposure Noise ReductionD2 seriesD200D80D70 seriesD50	Select this option to reduce noise at slow shutter speeds. See the camera manual for details.
High ISO Noise Reduction D2X D2Xs D2Hs D200 D80	Choose a noise reduction option for high ISO sensitivities. See the camera manual for details.
Noise reduction (D40 series)	Select this option to reduce noise at slow shutter speeds and high ISO sensitivities. See the camera manual for details.

Saving and Loading Camera Control Settings

The Camera Control Pro option in the **Settings** menu is used to save Camera Control Pro settings and to load and apply previously saved settings.

Setti	ings
	Load Control Settings
	Save Control Settings

	Select this item to load camera settings previously saved using Save Control Set-
	tings (see below). A dialog will be displayed where you can navigate to the drive
Load Control	(volume) and directory containing the desired settings file (only files with the exten-
Settings	sion ".ncc" will be displayed; choose settings created with the camera currently con-
	nected). The settings in the Camera Control Pro window will instantly revert to the
	saved settings. Bracketing settings are not affected.
	Select this item to save the settings in the Camera Control Pro window to a named
	file. These settings can later be recalled using Load Control Settings Choosing
Save Control	Save Control Settings displays a dialog where you can choose a destination and
Settings	file name for current camera settings. Camera Control Pro settings are saved with the
	extension ".ncc". Note that bracketing settings, non-CPU lens settings, and changes
	to settings for the current Picture Control are not saved.

1/4

The Camera Menu

The Camera menu contains the following options:

Cam	nera
	Custom Settings
	Set Date and Time
	Edit Camera Curves
	Measure White Balance
	Dust Off ref photo
	Edit Image Comment
	Select Shooting Settings Bank
	Set Bracketing Mode
	Time Lapse Photography
	Live View (Hand-held)
	Live View (Tripod)
✓	Enable Controls on Camera Body

Custom Settings...

Selecting this option opens the **Custom Settings dialog**, where camera Custom Settings can be adjusted.

Camera Date and Time
Date: 20 / 10 / 2007
Time: 14:30
Use Current Date/Time
Set Cancel Help

Ε

Using Camera Control Pro

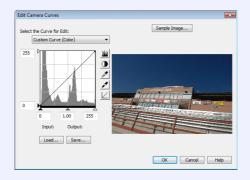
Appendices

2/4

The Camera Menu

dit Camera Curves	(all cameras except	D3	D300))

This option is used to create a custom tone compensation curve and download it to the camera, where it applies when "Custom" is selected for the camera tone compensation option.



The controls in the Edit Camera Curves window are similar to those used to edit tone curves in Adobe Photoshop and other imaging software, except in the following respects: (1) only the master channel, not individual RGB channels, may be edited; (2) there is a limit of 20 spline points; (3) the midpoint may not be edited; (4) a user-defined sample image can be selected by clicking **Sample Image...** (the sample image must be a RAW image created with a supported camera). Any changes to curves are reflected in the sample image. In the case of the D2Xs, up to three curves can be edited using the **Select the Curve for Edit** menu. To copy the edited curve to the camera, click **OK**.

The upper left section of the Edit Camera Curves window contains **Load...** and **Save...** buttons. Click **Load...** to load previously stored curves created with Camera Control Pro, Nikon Capture (available separately), or Capture NX (available separately; settings must include "Levels and Tone Curves" data). Look for files with the ".ntc", ".ncv", or ".set" extension.

The **Save...** button opens the "Save As" dialog, where you can save the current curve.

Appendices

Dust Off ref pho

Preset manual d-0

focus and auto exposure (Exposure Mode P, S, or A), and fill the viewfinder with dot the "OK" button, the camera will measure the White Balance required for the end why hy choosing the appropriate Preset" in the White Balance Control in the

OK Cancel Help

D2Xs (dialogs for other cameras may

differ)

When the OK button is clicked, the camera will take a dust off ref photo

OK Cancel Help

Take photo of featureless white object 10cm from lens. This photo may be used by Capture NX for Image Dust Off.

The Camera Menu

Measure White Balance...

Use this option to measure preset white balance. If the camera currently connected supports multiple values for preset white balance, the setting that will be used to store the measured value can be chosen from the pop-up menu at the top of the dialog. Adjust camera settings as described in the section on preset white balance in the camera user's manual and click **OK** to measure a value for white balance.

Dust Off Ref Photo	D3	D2 series	D300) D200
Dust on Kei Photo	D80	D70 series	D50	D40 series

Choose this option to take a reference photo for the Image Dust Off option in Capture NX (available separately) and other Nikon software. The dialog shown at right will be displayed. With the camera lens ten centimeters (four inches) from a featureless white object, frame the object so that it fills the viewfinder and click **OK** to record an Image Dust Off reference photo. See the camera manual for details.

Edit Image Comment...

Selecting this option displays the dialog shown at right, where you can enter a comment or title for subsequent photographs. If the camera currently connected is in the D1-series, enter a title of thirty-eight characters or less and click **OK**. The title will be used for all subsequent photographs taken while the camera is connected. When any other camera is connected, the title is stored in the camera as an image comment of thirty-six characters or less which is appended to photographs only when the **Attach comment to images** box is checked.

Edit Image Comment	×
Attach comment to image	
OK Cancel	Help

D2Xs (dialogs for other cameras may differ)

Choosing a Mode D100 D80 D70 series D50 D40 series

The Measure White Balance... option is only available in P, S, A, and M modes.

Appendices

The Camera Menu

Select Shooting Settings Bank D3 D2 series D300 D20				
Select Shooting Settings Bank D3 (D2 series) D300 D20 Selecting this option displays the dialog shown at right, where you can choose the shooting menu bank in which changes to settings will be stored while the camera is controlled from Cam- era Control Pro. See the camera manual for details.	0 D100 Select Shooting Settings Bank Shooting settings will be read from and written to: Bank A Cancel Help D100			
The D3, D2 series, D300, and D200 allow a descriptive comment to be added to the name of each shooting menu bank. Clicking Edit displays the dialog shown at right, where the comments for each bank can be edited. Click OK to copy the comments to the camera. Comments can be up to twenty characters long and contain letters, numbers, quotes, apostrophes, spaces, and any of the following characters: "," "." "!" "?" "#" "\$" "%" "&" "(" ")" "[" "]" "{" "}" "*" "+" "-" "/" ":" ";" "<" "=" ">" "_" and "@".	Select Shooting Settings Bank			
Set Bracketing Mode D3 D2 series D300 D200 D80	D70 series D50			
Selecting this option displays the BKT Mode dialog. See "Time La	pse Photography" for details.			
Time Lapse Photography				
Selecting this option opens the <u>"Time Lapse Photography" dia</u>	<u>log</u> .			
Live View (Hand-held) D3 D300				
Selecting this option opens the <u>"Live View (Hand-held)" dialoc</u>				
Live View (Tripod) D3 D300				
Selecting this option opens the <u>"Live View (Tripod)" dialog</u> .				
Enable controls on the camera body (all cameras except D1 series) D100)				
Check this option to enable camera controls, allowing settings to taken directly from the camera. If this option is not checked, only mode selector can be used.	, , , , , , , , , , , , , , , , , , , ,			

Appendices

1/4

Custom Settings

Most of the custom settings stored in camera memory can be viewed and adjusted from the Custom Settings window in Camera Control Pro. For more information on Custom Settings, see the documentation provided with your camera.

1	dialog for the current camera will	
	Custom Settings	
	Bank A (a) Autofocus	Edit
	AF-C mode priority (a	I): Release 🔻
	AF-S mode priority (a	2): Focus
	Dynamic AF area (a	3): 9 focus points
	Focus Tracking with Lock-On (a	4) Normal 💌
	Activate AF when Shutter B	utton is pressed halfway (a5)
	Focus point Illumination (a6)	
	Show Focus point when Ma	
	Show Focus point when us	ng a Continuous Shooting mode
	Focus point wrap-around (a	7): No wrap 🔹
	AF point selection (a	s): 51 points 🔹
	AF-On button (a): AF-ON 🔻
	Vertical AF-ON button (a1): AF-ON 🔻
	Prev. Next	K Reset Cancel Help

Changes to Custom Settings

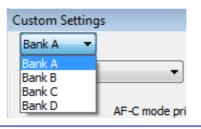
Changes made to settings in the Custom Settings dialog are stored in the camera, not on the computer hard disk. This means that changing settings in the Custom Settings dialog has the same effect as changing Custom Settings using camera controls.

Appendices

2/4

Custom Settings

Choose a Custom Settings bank (Custom Settings set) from the pop-up menu at the top right corner or the Custom Settings dialog (see the camera manual for details).



After making any changes to Custom Settings, click **OK** to save changes in the camera Custom Settings bank and exit the Custom Settings dialog.

Custom Settings

Custom Settings can not be saved to a separate file. Clicking the **Reset** button resets all Custom Settings to their default values.

Settings That Can Not Be Adjusted from the Custom Settings Window

The Custom Settings listed below can not be adjusted in the Custom Settings window.

- Mirror lock-up for CCD cleaning (D1-series Custom Setting 8)/Cleaning mirror up (D100 setup menu): can only be adjusted from the camera
- RAW (NEF) image save (D1-series Custom Setting 28): if this option is set to "0" (off) when Camera Control Pro is started, a message will be displayed. Clicking OK in this dialog sets Custom Setting 28 to "1" (uncompressed RAW image save enabled). Custom Setting 28 can only be returned to "0" from the camera.
- ISO Auto (D100 Custom Setting 3) / ISO Boost (D1-series Custom Setting 31): can be adjusted from the Exposure 2 tab of the Camera Control Pro window.
- PC Shooting Mode (D1-series Custom Setting 30): this option is adjusted from the Mechanical tab of the Camera Control Pro window.
- Tone Compensation (D1-series Custom Setting 24)/Color Mode (D1X/D1H Custom Setting 32)/ Hue Adjustment (D1X/D1H Custom Setting 33)/Noise Reduction (D100 Custom Setting 4): can be adjusted from the Processing tab of the Camera Control Pro window.

Custom Settings

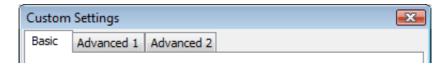
Custom Settings for D1-Series and D100 Cameras

Custom Settings for D1-series and D100 cameras are divided among three tabs: Page 1, Page 2, and Page 3. See the camera manual for details.

Custom Settings	X
Page 1 Page 2 Page 3	Bank A 🔹

Custom Settings for D70-Series and D50 Cameras

Custom Settings for the D70 series and D50 are divided among three tabs: Basic, Advanced 1, and Advanced 2. See the camera manual for details.



Custom Settings for D80 Cameras

Custom Settings for the D80 are divided among four tabs: Basic, Advanced 1, Advanced 2, and Advanced 3. See the camera manual for details.

Custom	Settings			×
Basic	Advanced 1	Advanced 2	Advanced 3	

Custom Settings

4/4

Custom Settings for D3, D2-Series, D300, and D200 Cameras

Custom Settings in each bank are divided into six groups. The group can be chosen from the group menu or by clicking the **Next** and **Prev.** buttons.

	Custom Settings		
	Bank A 🔻 5		
Group menu ———	(a) Autofocus 🔻		
	AF-C mode priority (a 1): Release		
	AF-S mode priority (a2): Focus		
	Dynamic AF area (a3): 9 focus points		
	Focus Tracking with Lock-On (a4) Normal		
	Activate AF when Shutter Button is pressed halfway (a5)		
	Focus point Illumination (a6)		
	Show Focus point when Manually Focusing		
	Show Focus point when using a Continuous Shooting mode		
	Focus point wrap-around (a7): No wrap		
	AF point selection (a8): 51 points		
	AF-On button (a9): AF-ON		
	Vertical AF-ON button (a 10): AF-ON		
Prev./Next			
buttons	Prev. Next		
battons	OK Reset Cancel Help		

A descriptive comment can be added to the name of each Custom Settings bank. Clicking **Edit...** displays an "Edit Custom Settings Comment" dialog, where the comments for each bank can be edited. Click **OK** to copy the comments to the camera. Comments can be up to twenty characters long and contain letters, numbers, quotes, apostrophes, spaces, and any of the following characters: "," "." "!" "?" "#" "\$" "%" "&" "(" ")" "[" "]" "{" "]" "*" "+" "-" "/" ":" ";" "<" "=" ">" "_" and "@".

Appendices

Appendices

Cam	era Control Pro Preferences	82
	The General Tab	83
	The Color Management Tab Windows	84
	The Color Management Tab Macintosh	86
Unin	stalling Camera Control Pro	
	Windows	88
	Macintosh	89
RGB Color Space Profiles		
Devi	ce Registration	92
	Windows XP	<i>9</i> 3
	Windows 2000	97
Cust	omer Support	105

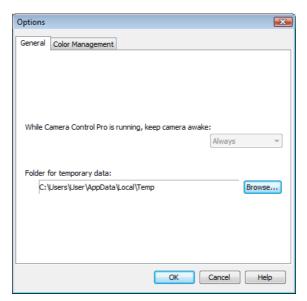
To view the Preferences (Options) dialog for Camera Control Pro, select **Options...** from the **Tools** menu (*Windows*) or select **Preferences...** from the application menu (*Macintosh*).

		Camera Control Pro	
		About Camera Control Pro	
Tools		Preference	ж,
Show Viewer		Services	•
Hide Camera Control Pane	ls.	Hide Camera Control Pro	жн
Show Camera Control Pan	els	Hide Others	₹₩Н
Download Options		Show All	
Options	Ctrl + K	Quit Camera Control Pro	ЖQ
Windows		Macintosh	

The Preferences dialog contains **General** and **Color Management** tabs.

The General Tab

The General tab contains the following items:



	Choose how long the exposure meters remain on when the camera is operated on		
	battery power. This setting only takes effect when a D1-series camera is connected		
While	and powered on with Camera Control Pro running, and takes precedence over the		
Camera	auto meter off option chosen using camera Custom Settings. D1-series cameras		
Control Pro	powered by an AC adapter and all other supported camera models will stay awake		
is running,	indefinitely, regardless of the setting chosen here.		
keep camera	for 15 minutes (D1-series only): The exposure meters turn off automatically if no		
awake	operations are performed for 15 minutes.		
	Always: The exposure meters remain on indefinitely. Note that this will increase		
	the drain on the battery.		
Folder for	Specify the folder or volume in which temporary data, such as image cache data,		
temporary	will be stored. The default folder for Windows is the "TEMP" folder in the Windows		
data/	directory, while the default volume for the Macintosh is the start-up disk. To choose		
Volume for	a different folder in the Windows version of the program, click the Browse button		
temporary	and navigate to the desired location. In the Macintosh version, a new volume can be		
data	chosen from the pop-up menu.		

The Color Management Tab (Windows)

The Color Management tab is where you specify the color management profiles used for displaying images on your monitor and for editing and saving RGB images.

Options 💌
General Color Management
Note: Changes made to items on this page will be reflected in ViewNX, Nikon Capture, Nikon View and PictureProject.
Change Display Profile
Default RGB color space:
C: \Program Files \Common Files \Nikon \Profiles \NKsRGB.icm Browse
OK Cancel Help

	To choose a display profile, click Change Display Profile The Windows
Change Display	"Display Properties" dialog will be displayed; open the Settings tab and click
Profile	Advanced to open the display adapter properties dialog. To select a display
	profile, open the Color Management tab and click Add .
	The output color-space profile used when working with RGB images is displayed
Default RGB	here. Click Browse to choose a new default RGB profile. If Use this instead
	of an embedded profile when opening files is checked, this RGB color space
color space	profile will be used for all images. If it is not checked, the profile embedded in
	each image will be used.

Multiple Displays

In a multiple display environment, choose a single profile suited to all displays.

Default Display Profile

The default Windows display profile is "NKMonitor_win.icm." This profile is equivalent to sRGB.

Supported Color Profiles

See "**RGB Color-Space Profiles**" for a list of the RGB color-space profiles supplied with Camera Control Pro.

The Color Management Tab

Changes to settings in the Color Management tab also apply to ViewNX, Nikon Capture (available separately), Nikon View, and PictureProject. They are not reflected in Capture NX (available separately).

The Color Management Tab (Macintosh)

The Macintosh version displays the following options.

Preferences			
General Color Management			
ColorSync Default Profiles for Documents			
Default RGB color space:	Generic RGB Profile		
Use this instead of an embedded profi	le when opening files		
Device Profiles Change Display Profile			
(?)	Cancel		

ColorSync	Lists the ICC color-space profile used to display images.			
Default	Default RGB color space: Choose the output color-space profile used when working			
Profiles for	with RGB images. If Use this instead of an embedded profile when opening files is checked, this RGB color space profile will be used for all images. If it is not			
Documents				
Documents	checked, the profile embedded in each image will be used.			
Lists the default color-space profiles for monitors.				
Device	Change Display Profile : If this button is displayed, you can click it to open the Di			
Profiles	plays section of the System Preferences dialog. Open the Color panel (Mac OS X) to			
	choose a display profile.			

Input Profiles

If an input profile is selected for the default RGB color space, images will be displayed in the sRGB color space.

Supported Color Profiles

See "**<u>RGB Color-Space Profiles</u>**" for a list of the RGB color-space profiles supplied with Camera Control Pro.

The Color Management Tab

Changes to the display profile apply system wide. Changes to other settings in the Color Management tab apply to ViewNX but are not reflected in Capture NX, Nikon Capture (available separately), Nikon View, and PictureProject.

Multiple Displays

Camera Control Pro will identify and list the profiles for all monitors in an extended desktop display, allowing you to choose a separate profile for each monitor.

Appendices

Uninstalling Camera Control Pro



Use an account with administrator privileges to perform the uninstall.



2 Click Yes to begin removing Camera Control Pro and all of its components.			
	Windows Installer 83		
	Are you sure you want to uninstall this product?		
	Yes No		

If the uninstaller encounters read-only files or components shared by another application, a confirmation dialog will be displayed. Read the information displayed carefully before deciding what to do with the affected components.

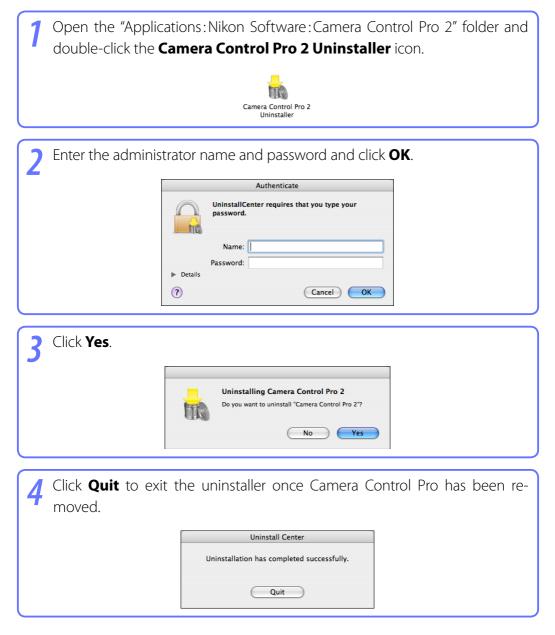
Click Finish. Restart the computer if so directed.

Appendices

Uninstalling Camera Control Pro

Macintosh

Use an account with administrator privileges to perform the uninstall.



Appendices

RGB Color Space Profiles

Profiles with a Gamma Value of 1.8

Profile	Windows	Macintosh	Description
Annia			This profile is used in desk-top publishing applications and in
		Nikon	Adobe Photoshop versions 4.0 or earlier, and is the typical RGB
Apple RGB	NKApple.icm	Apple RGB	profile for Macintosh monitors. The corresponding RGB setting
KUD		4.0.0.3000	in Adobe Photoshop is "Apple RGB." This profile is suitable for
			working with images displayed on the Macintosh.
Color-	Nikon Color-		The ColorMatch profile is native to Radius PressView monitors. It
Match	NKCMatch. icm Match RGB	has a wider gamut than Apple RGB, with a particularly wide area	
RGB		4.0.0.3000	devoted to the reproduction of blues. The corresponding RGB
		4.0.0.3000	setting in Adobe Photoshop is "Color Match RGB."

Profiles with a Gamma Value of 2.2

Profile	Windows	Macintosh	Description
sRGB	NKsRGB.icm	Nikon sRGB 4.0.0.3001	This RGB profile is used in the majority of Windows monitors. It closely resembles the RGB commonly used in color television, and is also used in the digital television broadcasting system that is on its way to becoming the industry standard in the United States of America. Software and hardware manufacturers use it as a default color profile and guarantee operation when it used. It is also on its way to becoming the standard for images on the web. This profile is suited to users who plan to use their digital images "as is," without editing or printing them. It however suffers from the drawback of a narrow gamut with a limited area available for reproducing blues. The corresponding RGB setting in Adobe Photoshop 5.0 and 5.5 is "sRGB," the corresponding setting in Adobe Photoshop 6.0 "sRGB IWC61966-2.1."
Bruce RGB	NKBruce.icm	Nikon Bruce RGB 4.0.0.3000	This color profile attempts to expand on the ColorMatch RGB gamut by defining the chromaticity for G as lying between the values for G in the Adobe RGB and ColorMatch color-space profiles. It was proposed by Bruce Fraser, who claims that it includes most of the colors in the SWOP CMYK gamut. The R and B used in the Bruce RGB and Adobe RGB color-space profiles match.
NTSC (1953)	NKNTSC.icm	NTSC (1953) 4.0.0.3000	This is the color space for video defined by the National Tele- vision Standards Committee (NTSC) in 1953 and used in early color televisions. This color space is also used in some Far-East newspaper and printing organizations. The corresponding RGB setting in Adobe Photoshop is "NTSC (1953)."

Appendices

2/2

RGB Color Space Profiles

Profile	Windows	Macintosh	Description
Adobe RGB (1998)	NKAdobe. icm RGB (1998)		A color-space profile defined in Adobe Photoshop 5.0. It has a wider gamut than sRGB and includes the colors found in most CMYK gamuts, making it suitable for users involved in desktop publishing. The corresponding RGB setting in Adobe Photoshop 5.0 is "SMPTE-240M," the corresponding setting in Adobe Photoshop 5.5 or later "Adobe RGB (1998)."
CIE RGB	NKCIE.icm	Nikon CIE RGB 4.0.0.3000	A video color-space profile established by the <i>Commission Inter-</i> <i>nationale de l'Éclairage</i> (CIE). While it boasts a fairly wide gamut, it suffers from the drawback that the area devoted to the re- production of cyan is relatively small. The corresponding RGB setting in Adobe Photoshop is "CIE RGB."
Adobe Wide RGB	NKWide.icm	Nikon Adobe- Wide RGB 4.0.0.3000	This color-space profile, designed by Adobe, incorporates most of the visible colors. This however has the consequence that most of the colors it can express can not be reproduced on standard monitors and printers. The corresponding RGB setting in Adobe Photoshop 5.0 or later is "Adobe Wide RGB."

If D1-series cameras are not recognized by the computer to which Camera Control Pro is installed, the camera or IEEE 1394 (FireWire) board may not be correctly registered with the Windows Device Manager. To check whether a device is registered with the Device Manager, click on the links below.

Windows XP Professional/Home Edition

Windows 2000 Professional

Opening the Device Manager

Devices are registered with the Windows Device Manager. To open the Device Manager:

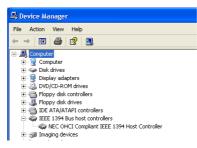
- *Windows XP*: Select Control Panel from the Start menu to open the "Control Panel" window, then click **Performance and Maintenance** icon to open the **Performance and Maintenance** control panel. Click the **System** icon to open the **System Properties** window. Open the "Hardware tab" and click **Device Manager**.
- *Windows 2000*: Right-click the **My Computer** icon on the desktop and select **Properties** from the menu that appears. In the "System Properties" dialog, open the "Hardware" tab and click the **Device Manager** button.

Windows XP 1/4

Registering the IEEE 1394 Interface Board

Confirm that the OHCI-compliant IEEE 1394 interface board or card has been correctly registered with the system.

Open the Device Manager. If the camera has been correctly registered with the system, the controller for your camera should appear under "1394 Bus Controller."



If "IEEE 1394 Bus host controllers" is not listed in the Device Manager, or if the IEEE 1394 interface board or card is listed as an unknown or miscellaneous device or is preceded by a red or yellow warning icon, follow the instructions in the manual provided with the board to ensure that the drivers are properly installed.

Install the driver for D1-series cameras from the Camera Control Pro CD, then connect the camera to the computer using an IEEE 1394 cable and turn the camera on. The camera will be registered automatically.

Logging On

Log on as the "Computer Administrator" when registering the camera.

Before Connecting the Camera

Be sure to install Camera Control Pro before connecting the camera to the computer.

Windows XP 2/4

Registering the Device Driver

Follow the instructions below to check that the camera has been correctly registered with the system.



Troubleshooting

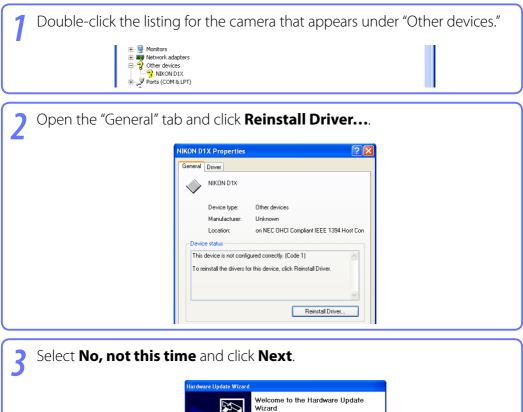
If "1394 Bus host Controller" is listed in the Device Manager but the entry for the Nikon D1 (D1X/D1H) does not appear, check the following:

- Is the camera on?
- Is the battery fully charged? If you are using an AC adapter (available separately), is it properly connected?
- Is the mode dial set to "PC"?
- Is the IEEE 1394 cable properly connected?

Windows XP 3/4

Reinstalling the Device Driver

If the camera is listed under "Other devices," reinstall the device drivers as instructed below.



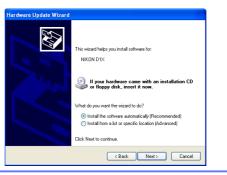


Appendices

Device Registration

Windows XP 4/4







6 Confirm that "This device is working properly" appears under "Device status" in the "General" tab of the camera "Nikon Digital Camera D1 Series Properties" dialog.

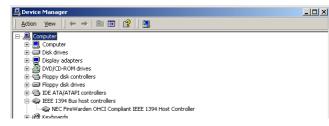


Windows 2000 1/8

Registering the IEEE 1394 Interface Board

Confirm that your OHCI-compliant IEEE 1394 interface board or card has been correctly registered with the system.

Open the Device Manager. If the camera has been correctly registered with the system, the controller for your camera should appear under "1394 Bus host Controller."



If "1394 Bus host Controller" is not listed in the Device Manager, or if the IEEE 1394 interface board or card is listed as an unknown or miscellaneous device or is preceded by a red or yellow warning icon, follow the instructions in the manual provided with the board to ensure that the drivers are properly installed.

2 Install the driver for D1-series cameras from the Camera Control Pro CD, then connect the camera to the computer using an IEEE 1394 cable and turn the camera on. The camera will be registered automatically.

Logging On

Log on as the "Administrator" when registering the camera.

Updating Drivers for the D1

If you are already using the D1 with Nikon View DX or Nikon Capture, <u>you will need to update the</u> <u>camera drivers</u>.

Before Connecting the Camera

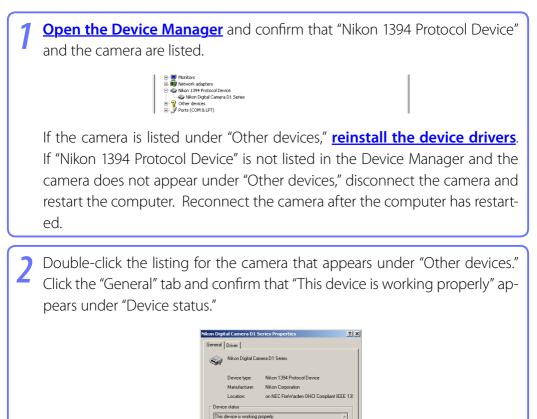
Be sure to install Camera Control Pro before connecting the camera to the computer.

Return to first page

Windows 2000 2/8

Registering the Device Driver

Follow the instructions below to check that the camera has been correctly registered with the system.



Troubleshooting

If "1394 Bus host Controller" is listed in the Device Manager but the entry for the Nikon D1 (D1X/D1H) does not appear, check the following:

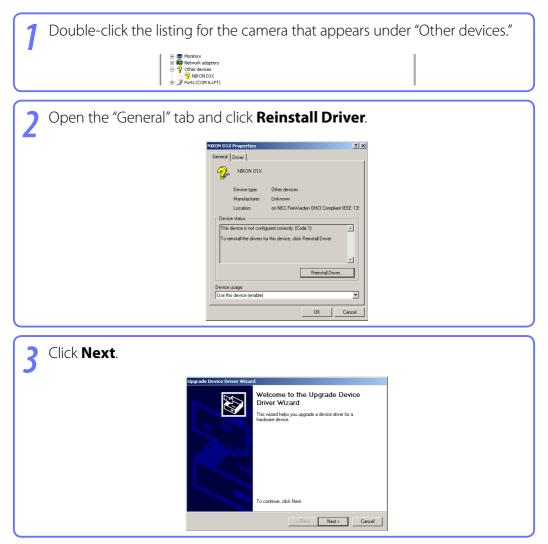
f you are having problems with this device, click Troubleshoo start the troubleshooter.

- Is the camera on?
- Is the battery fully charged? If you are using an AC adapter (available separately), is it properly connected?
- Is the mode dial set to "PC"?
- Is the IEEE 1394 cable properly connected?

Windows 2000 3/8

Reinstalling the Device Driver

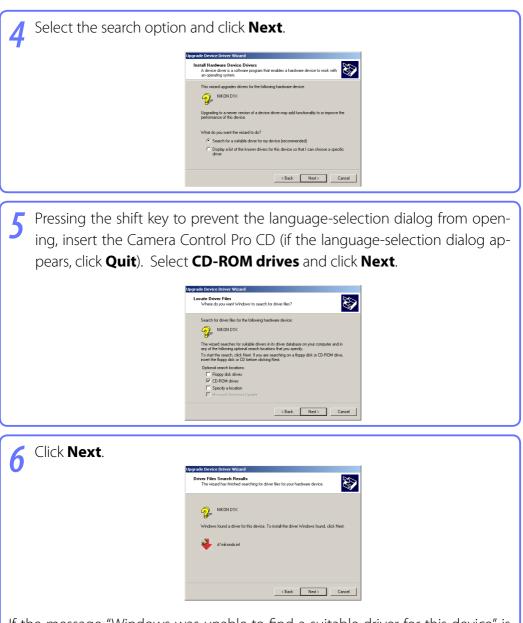
If the camera is listed under "Other devices," reinstall the device drivers as instructed below.



Appendices

Device Registration

Windows 2000 4/8



If the message "Windows was unable to find a suitable driver for this device" is displayed, the CD was not correctly inserted or the correct search location was not selected. Click **Back** to return to the dialog shown in Step 5 and confirm that the search location is correct.

Windows 2000 5/8



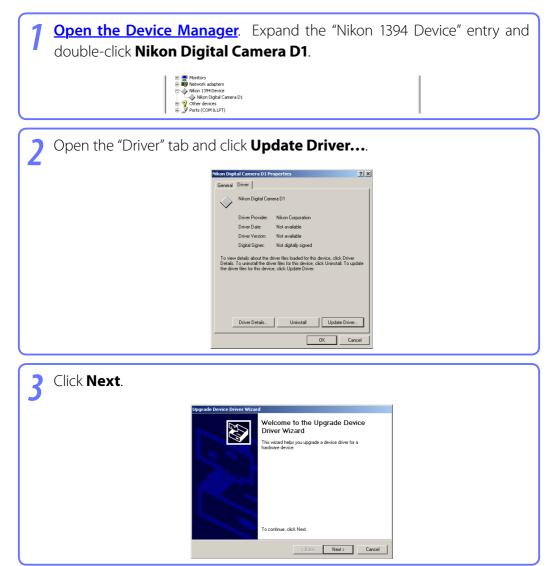
8 Confirm that "This device is working properly" appears under "Device status" in the "General" tab of the "Nikon Digital Camera D1 Series Properties" dialog.



Windows 2000 6/8

Updating the Device Driver

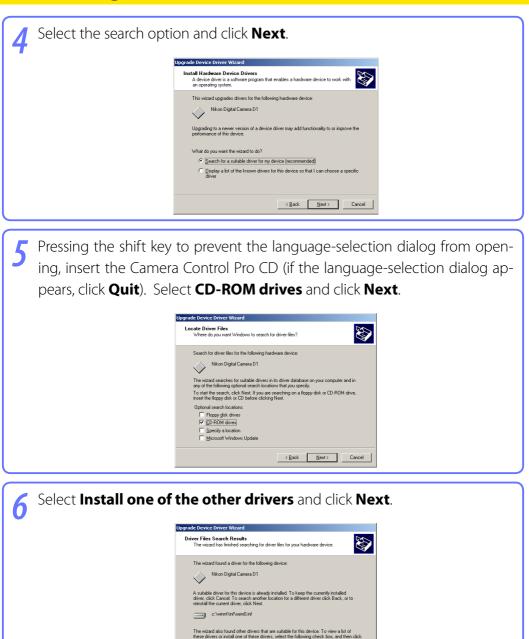
If you are already using the D1 with Nikon View DX or Nikon Capture, you will need to update the camera drivers.



Appendices

Device Registration

Windows 2000 7/8



Camera Control Pro 2

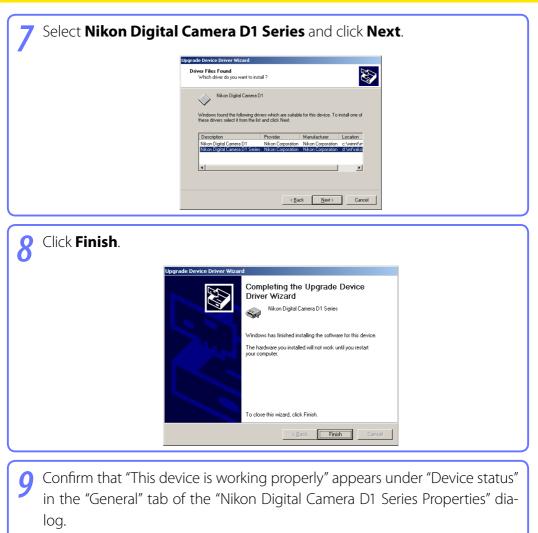
<<u>B</u>ack <u>N</u>ext> Cancel

Install one of the other drivers

Appendices

Device Registration

Windows 2000 8/8





Appendices

1/2

Customer Support

Nikon User Support Information

If you are in need of technical assistance with the installation or operation of your Nikon product(s), please do not hesitate to contact one of the following Nikon representatives. When calling support, you will be asked to supply the serial and/or version number(s) of your Nikon software. For efficient communication, it is highly recommended that you have your Nikon product in front of you.

Europe and Africa

Austria Nikon GmbH Austrian Branch Office Nikon GmbH Zweigniederlassung Wien Wagenseilgasse 5, A-1120 Wien Tel: 09001-50066 (0,45 €/min aus dem österreichischen Festnetz)

Belgium Nikon Belux Avenue de Bourget 50 - Bourgetlaan 50 1130 Bruxelles, Brussel Tel: +32 (0)2-626-45-05

CFD Switzerland Nikon A.G. Im Hanselmaa 10, CH-8132 Egg Zurich Tel: 0848 277 000

Czech Republic Nikon SRO Kodanska 46, 100 10 Praha 10 Tel: 800 900 980

DE Germany Nikon GmbH Tiefenbroicher Weg 25, 40472 Düsseldorf Tel: 0900-1225564 Phone line costs (# 0,24 €/min)

Denmark Nikon Nordic AB, dansk filial Ørestads Boulevard 67, 1, DK-2300 København S Tel: +45-32452000

ES Spain Finicon S.A.

C/Ciencias, 81 Nave-8, Poligono Pedrosa 08908 L'Hospitalet de Llobregat, Barcelona Tel: +34-(0)93-2649090 Fax: +34-(0)93-3363400

Finland Nikon Nordic AB Suomen toimisto Äyritie 8 B, 01510 Vantaa Tel: +358 (0)20 758 9570

FR France Nikon France S.A.S. 191, Rue du Marché Rollay, 94504 Champigny Sur Marne Cedex Tel: +33-(0)8-25-82-10-10

GB United Kingdom Nikon U.K. Ltd. 380 Richmond Road, Kingston, Surrey KT2 5PR Tel: +44 (0)871 200 1964 Phone line costs (10p/min)

GB Greece D. & J. Damkalidis S.A. 44 Zefyrou St. 17564 Tel: +30-210-9410888 Fax: +30-210-9427058

Hungary Nikon Kft. Budapest, Fóti út 56. 1047 Hungary Tel: +36-1-232-13-71 **Italy** Nital S.p.A. Via Tabacchi 33, 10132 Torino Tel: +39-199-12-41-72 Fax: +39-011-81-44-233

Luxembourg Nikon Belux Avenue de Bourget 50 - Bourgetlaan 50 1130 Bruxelles, Brussel, Belgium Tel: +32 (0)2-626-45-05

Netherlands Nikon Netherlands Branch Office of Nikon GmbH New Yorkstraat 66 NL- 1175 RD Lijnden Tel: 09001-225564 (09001-CALLNIKON) Phone line costs (0,45 €/min)

Norway Nikon Nordic AB NUF Martin Linges vei 17, 1367 Snarøya Tel: +47-67-82-74-00

Poland Nikon Polska Sp. z o.o. ul. Postępu 14, 02-676 Warszawa Tel: +48 (0)22 607 94 16

RUSSIA Nikon Europe B.V., CIS Representative Office Zubarev pereulok, d.15, k.1, office 541, 129164 Moscow Tel: +7 495 733 9170

SB Sweden Nikon Nordic AB Råsundavägen 12, 8 tr, 169 67 Solna Tel: +46-(0)8-594-109-00

Skovakia Nikon SRO Kodanska 46, 100 10 Praha 10, Czech Republic Tel: 0800 042 053

Slovenia Nikon GmbH Zweigniederlassung Wien Wagenseilgasse 5, A-1120 Wien Tel: +386 (0)1 2800 812

CA Rep. of South Africa Foto Distributors, Head Office Nikon House, 516 Kyalami Boulevard, Kyalami Business Park, Midrand 1685. Tel: +27-(0)11-466-2500 Fax: +27-(0)11-466-3400

Appendices

Customer Support

Asia, Oceania, Middle-East and Canada

Australia AU

Nikon Australia Pty Ltd. Unit F1, Lidcombe Business Park, 3-29 Birnie Avenue, Lidcombe NSW 2141 Tel: +61-(0)2-8748-5200 Fax: +61-(0)2-8748-5274

Canada CA

Nikon Canada Inc. 1366 Aerowood Drive, Mississauga, Ontario L4W 1C1 Tel: +1-(0)905-625-9910 Fax: +1-(0)905-625-6446

China CN

Nikon Imaging (China) Sales Co., Ltd. Tel: 4008-20-1665 (within the Chinese mainland) Tel: +86-(0)21-3428-4634 (from other countries and regions) Nikon Square (Shanghai) Rm.102B, Tian An Center, No. 338, West Nan Jing Road, Shanghai 200003 Tel: +86-(0)21-6327-8001

Nikon Square (Beijing) Shop PW1-(11-12), Podium Lever of the Malls at Oriental Plaza, No.1 East Chang An Ave., Dong Cheng District, Beijing China 100738 Tel: +86-(0)10-8515-2268

Hong Kong

Nikon Hong Kong Ltd. Suite 1001, 10F, Cityplaza One, 1111 King's Road, Taikoo Shing Tel: +852-(0)2902-9000 Fax: +852-(0)2907-0378

India 🔳

Photo Vision 223, Okhla Industrial Estate Phase III, Near Modi Flour Mill, New Delhi - 110 020 Tel: +91-(0)11-2692-8913 Fax: +91-(0)11-2692-9856

Indonesia D

Pt Alta Nikindo Kompleks Mangga Dua Square Block H 1&2 Jl.Gunung Sahariraya, Jakarta Utara 10730 Tel: +62-(0)21-6231-2770 Fax: +62-(0)21-6231-2777

Israel

Hadar Photo Supply Agencies Ltd. 36 - 38 Achad Haam St., Tel-Aviv P.O. Box 1686 Tel: +972-(0)3-5603947 Fax: +972-(0)3-5603905

Korea KR

Nikon Imaging Korea Co., Ltd. 12th Floor, Seoul Chamber Of Commerce & Industry Building, 4-45, Namdaemoon-Ro, Jung-Ku, Seoul 100-743 Tel: +82-(0)2-6050-1800 Fax: +82-(0)2-6050-1801



Gulbenk Trading Co. Hamra-Makdessi Street, Adhami Building, 5th Floor, Beirut P. O. Box 113-6645 Tel: +961-(0)1-353742 Fax: +961-(0)1-347613



Nikon (Malaysia) Sdn. Bhd. 11th Floor, Block A Menara PKNS No. 17, Jalan Yong Shook Lin 46050 Petaling Jaya Selangor Darul Ehsan Tel: +60-(0)3-7809 3688 Fax: +60-(0)3-7809 3600

New Zealand NZ

T.A. Macalister Ltd. 34 Vestey Drive, Mount Wellington, Auckland 1060 Tel: +64-9-573 1650 Fax: +64-9-573 1651

Philippines PH

Columbia Digital Sales Company #46 Sta. Rosa St., Brgy. Manresa, SFDM Quezon City, 1115 Tel: +63-(0)2-363-5315 Fax: +63-(0)2-364-3334

Singapore SG Nikon Singapore Pte. Ltd. 80 Anson Road #10-01/02 Fuji Xerox Towers Singapore 079907

Tel: +65-6559-3618 Fax: +65-6559-3665 Taiwan T Lin Trading Co., Ltd.

8F, 272 Nangking Road, Sec. 3, Taipei 10566 Tel: +886-(0)2-2740-3366 Fax: +886-(0)2-2781-2525

Thailand

Niks (Thailand) Co., Ltd. 166 Silom Road 12, Bangkok 10500 Tel: +66-(0)2-235-2929-39 Fax: +66-(0)2-236-7240

Turkey 🔳

Teleoptik Ltd Sti Ankara Caddesi Dedehan No. : 118-120, Kat : 1-2, Sirkeci 34112, Istanbul Tel: +90-(0)212-527-0789 Fax: +90-(0)212-520-6716

U. A. E. **(AB)** Grand Stores, L.I.c Saleh Bin Lahej Building, Mezzanine Floor, Al Garhoud, Deira, Dubai P. O. Box 2144 Tel: +971-(0)4-2823700 Fax: +971-(0)4-2828382

Please visit the web site appropriate for your area of purchase for downloads of updated software,

replacement manuals and technical support information:

Europe and Africa

http://www.europe-nikon.com/support/

Korea

http://www.nikon.co.kr

Asia Pacific Area

http://www.nikon-asia.com

Nikon Imaging Global Site http://nikonimaging.com/global/