

En Notice to Customers Upgrading to Nikon Capture 4.2

In addition to support for the Nikon D2X digital camera, Nikon Capture 4 version 4.2 offers the new features described below.

Automatic Update

Nikon Capture 4 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 Nikon software. At default settings, Nikon Message Center will automatically check for updates if the computer is connected to the Internet when Nikon Capture 4 starts. If an update is available, the Nikon Message Center window will be displayed. Click **Available Messages** to view the updates available for your Nikon digital products and software, then click **Install** to download and install the desired updates. To personalize your list of Nikon digital products or to view a list of the installed software supported under Nikon Message Center, click **My Products**.

Mac OS 9

Nikon Message Center is not available in Mac OS 9.

Notice to Users in Europe and the U.S.A.

To activate Nikon Message Center, users in Europe and the U.S.A. must have an account with their regional Nikon Support Center. The first time a program equipped with the Nikon Message Center auto update feature starts, a license agreement will be displayed. After reading the agreement, click **Accept** to accept its terms and display an account activation dialog.

- **If you already have an account with your regional Nikon Support Center**, enter the supplied user ID and password and the e-mail address you used to register. After confirming that the computer is connected to the Internet, click **Activate Nikon Message Center**. A dialog allowing you to opt in or out of Nikon mailings will be displayed.
- **If you do not have an account or have forgotten your password**, confirm that the computer is connected to the Internet and click **Visit Nikon Support Center**. After obtaining the required account information, enter the details in the account activation dialog and click **Activate Nikon Message Center**. A dialog allowing you to opt in or out of Nikon mailings will be displayed.

The Opt-in/Opt-out Dialog

The first time Nikon Message Center starts, a dialog allowing you to opt in or out of Nikon mailings will be displayed. Select the desired options and click **OK** to display the Nikon Message Center window.

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.

Checking for Updates Manually

To check for updates manually, select **Check for updates...** from the **Help** menu.

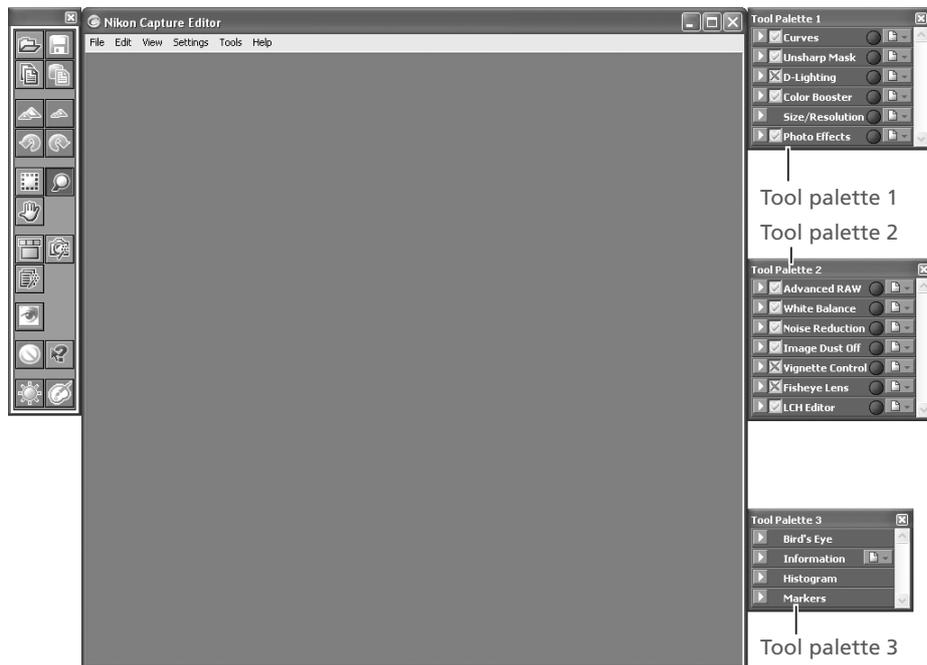
Quick Tools

The "Auto Contrast" button in the Quick Tools palette is now an "Auto Brightness" button that performs the same function as the **Auto** button in the Photo Effects palette (see page 13).



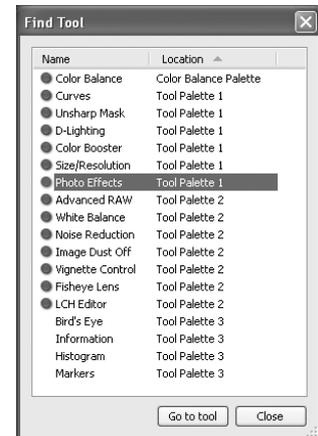
Tool palettes

The default tool palettes are shown below. A Color Balance Palette can be displayed by selecting **Show Color Balance Palette** from the **View** menu.



Finding Tools

To display a complete list of the tools available in Nikon Capture 4 Editor, select **Find Tool** from the **View** menu. Tools can be opened from the list by selecting the tool name and clicking **Go to tool**. Click **Name** to sort tools in ascending or descending order by name or **Location** to sort tools according to the tool palette window in which they can be found. A bright green dot next to the tool name indicates that it has been modified from its original settings.



“Undo” and “Redo”

The **Undo** and **Redo** options in the **Edit** menu are used to undo and redo the effects of the last operation. The number of consecutive operations that can be undone is limited only by the amount of memory available. Operations can not be undone after you have closed the active window or exited Nikon Capture.

Multi-Image Window

The Multi-Image window contains the following tool buttons:



When the thumbnail area is closed:

Button	Name	Function
	Back to previous folder	Return to the previous folder.
	Forward to next folder	Open the next folder.
	Previous Image	Display the previous image in the image area.
	Next Image	Display the next image in the image area.

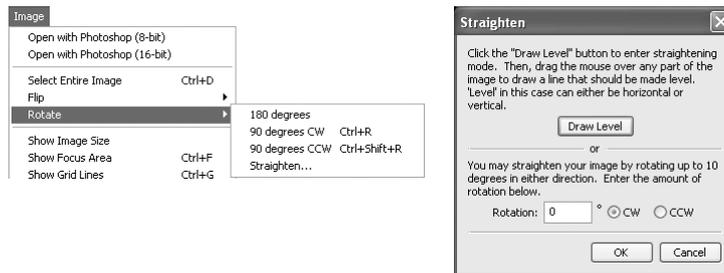
When the thumbnail area is open:

Button	Name	Function
	Select Folder	Open the Browse For Folder dialog to select a folder for display in the Multi-Image window.
	Back to previous folder	Return to the previous folder.
	Forward to next folder	Open the next folder.
	Remove selected image(s)	Delete the images selected in the thumbnail area.
	Match Settings	Apply the settings for the selected image to other images. After selecting a source image, select the target images with the shift key or with the Ctrl (Windows) or command (Macintosh) key and then click . The settings for the first image will be applied to the remaining images. To edit multiple images simultaneously, select the images and click . Changes to tool palette settings after the is clicked will apply to all the selected images.
	Switch thumbnail list	Toggle between single- and multi-line thumbnail displays.
	Sort	A menu of sort options will be displayed. Choose Sort Key to sort images by File Name , Date of Recording , Date Modified , File Name and Type , File Type and Date of Recording , or File Type and Date Modified (if File Type and Date of Recording , or File Type and Date Modified is selected, images will be sorted by file type in the order NEF, JPEG, and TIFF, with images of the same file type sorted by date of recording or date of modification). Choose Sort Order to sort images in ascending or descending order.
	Change Thumbnail Size	Adjust the size of the thumbnails displayed in the Multi-Image window in five steps.
	Favorite Folder	To add the current folder to your list of favorites, click this button and select Add to Favorites from the menu that appears. To access your favorites, click the button in the toolbar. To organize or delete favorites, click and select Organize Favorites .

Straightening Images

To straighten the image in the active image window by up to 10°:

- 1 Select **Straighten...** from the **Rotate** sub-menu
The Straighten dialog will be displayed.



- 2 Straighten the image
Straighten the image using the **Draw Level** button or by entering the desired rotation in the **Rotation** text box.

The Draw Level Button



Click **Draw Level**. The cursor changes to .



Choose a line in the image that should be either horizontal or vertical and drag the  cursor parallel to the chosen reference line.



The image will be rotated up to 10° to make the reference line horizontal or vertical. The degree of rotation is displayed in the **Rotation** text box.

The Rotation Text Box

Choose CW (clockwise) or CCW (counter-clockwise) and enter the degree of rotation in the text box. The image can be rotated up to 10°.

- 3 Click **OK**

Draw Level

If a message is displayed stating that the reference line is too short, choose a longer reference line.

Straightening Images

Straightening does not change the dimensions of the image. Any portions of the image that do not fit in its original dimensions are trimmed, while areas that have been added to the image are filled in black.

Restoring the Unrotated Image

To restore the unrotated image, enter a value of 0 in the **Rotation** text box.

The Histogram Palette

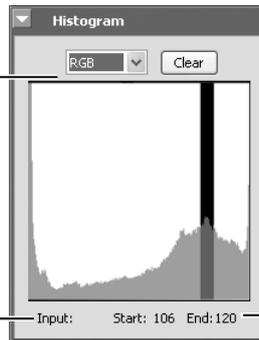
The histogram palette shows the level distribution for the image in the active window or, if a crop is selected, for the current crop. To display or hide the Histogram palette, click the triangle in the Histogram palette title bar. By default, the Histogram palette is in Tool Palette 3.

Channel

View the histogram for the entire image or selected channels.

Input

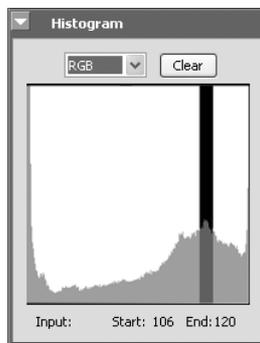
The level (brightness) of the point under the cursor.



Start/End

The range of values selected in the histogram display.

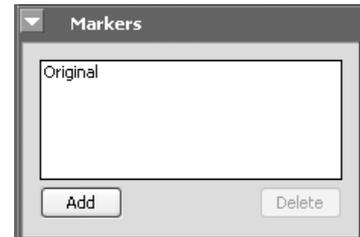
To select an area of the histogram, drag the mouse over the histogram display. The pixels with values in the selected range will blink in the image window. Click **Clear** to cancel the current selection.



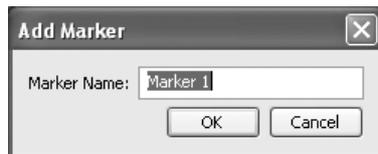
The Markers Palette

Changes to pictures can be recorded using the Markers palette. To display or hide the Markers palette, click the triangle in the Markers palette title bar. By default, the Information palette is in Tool Palette 3. To add a marker:

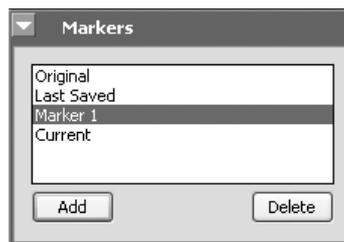
- 1 **Click Add**
After editing a picture, open the markers palette and click **Add**.
- 2 **Enter a marker name**



Enter a marker name and click **OK**. The new marker will be added to the markers palette.



Selecting the marker in the markers palette will now restore the picture to the state it was in when the marker was created. Preset markers are available for restoring pictures to their original or current state or to the state they were in when last saved.



To delete a marker, select it in the markers palette and click **Delete**.

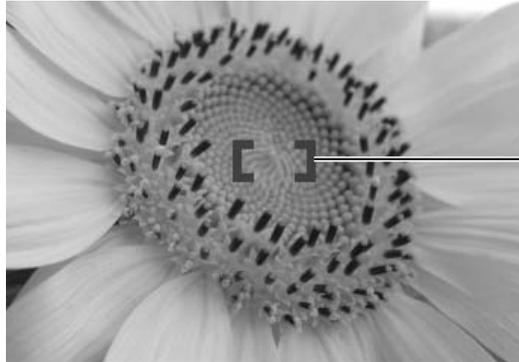
Markers

Markers for NEF images are saved with the image and recalled whenever the image is opened in Nikon Capture 4 Editor. Markers for JPEG and TIFF images are lost when the image window is closed.

Show Focus Area

To show the focus area used when the image in the active window was taken, select **Show Focus Area** from the **Image** menu.

Image	
Open with Photoshop (8-bit)	
Open with Photoshop (16-bit)	
Select Entire Image	Ctrl+D
Flip	▶
Rotate	▶
Show Image Size	
Show Focus Area	Ctrl+F
Show Grid Lines	Ctrl+G
Show Lost Highlights	L
Show Lost Shadows	S
Use for Camera Curve Sample	



The focus area is shown by red focus brackets.

Show Focus Area

The focus area will not be displayed if the image was created using a COOLPIX-series camera, a non-CPU lens, or manual focus.

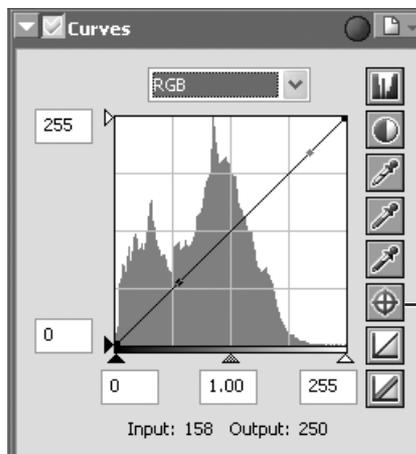
Color Mode (Advanced RAW)

Color Mode

Color Mode settings apply only to photographs taken with D2-series, D1-series D100, or D70 cameras. Modes I and Ia, which are adapted to the sRGB color space, are suited to portraits that will be printed or used "as is" with little or no modification. Mode II is adapted to the Adobe RGB color space. This color space is capable of expressing a wider gamut of colors than sRGB, making it the preferred choice for pictures that will be extensively processed or retouched. Modes III and IIIa, which are adapted to the sRGB color space, are suited to nature or landscape shots that will be printed or used "as is" with little or no modification.

Changes to the Curves Palette

A  ("Set Curve Point") button has been added to the Curves palette. To add a point to a curve corresponding to tones in the active image, click this button and then click the desired location in the active window.



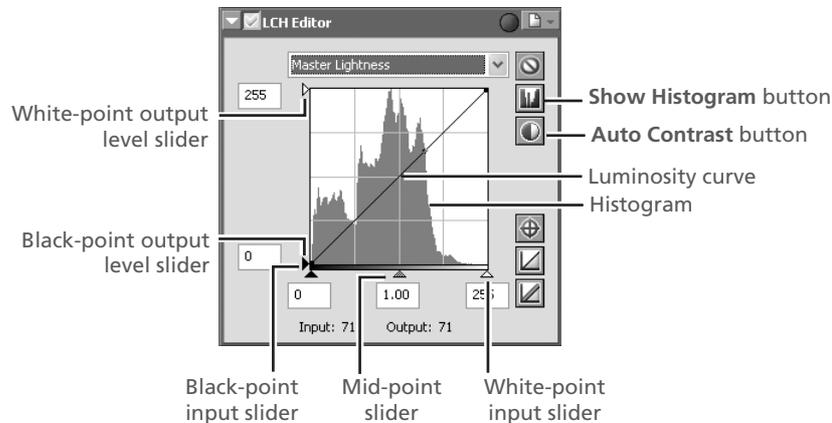
Tone Curve Point button

Changes to the LCH Editor Palette

The LCH Editor palette now contains the following channels:

The Master Lightness Channel

Although it affects brightness rather than color, editing luminosity has a similar effect to editing the master curve in the Curves palette.



Luminosity curve: Maps luminosity in the original image (input) to the luminosity of the image after editing (output). Any portion of the curve can be edited as described in “Curves”; steepening the curve increases the difference between light and dark areas of the image, increasing contrast.

Histogram: Shows the distribution of pixels of different luminosities in the input. The horizontal axis corresponds to luminosity (in the range 0–255), the vertical axis to the number of pixels.

Output level sliders: Choose the maximum (white point) and minimum (black point) values for output.

Input level sliders: Choose the maximum (white point) and minimum (black point) input levels.

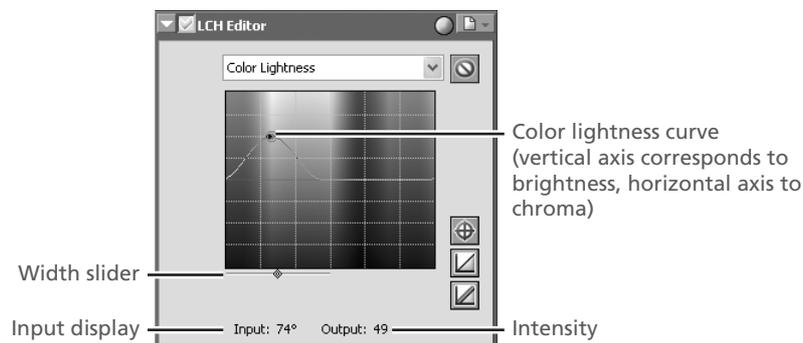
Mid-point slider: Set the mid-point (gamma value). Moving the mid-point alters the brightness of mid-tones while preserving detail in highlights and shadows.

Show Histogram button: Click to view the luminosity distribution for the final image. Click again to view the input luminosity distribution.

Auto Contrast button: Set the maximum and minimum input levels to exclude values for 0.5% of the brightest and darkest pixels in the crop. The percentage of pixels excluded can be adjusted in the Advanced Color tab in the Preferences dialog.

The Color Lightness Channel

The Color Lightness channel controls the brightness of colors without affecting chroma or hue. It can be used, for example, to brighten the blue of a dark sky.



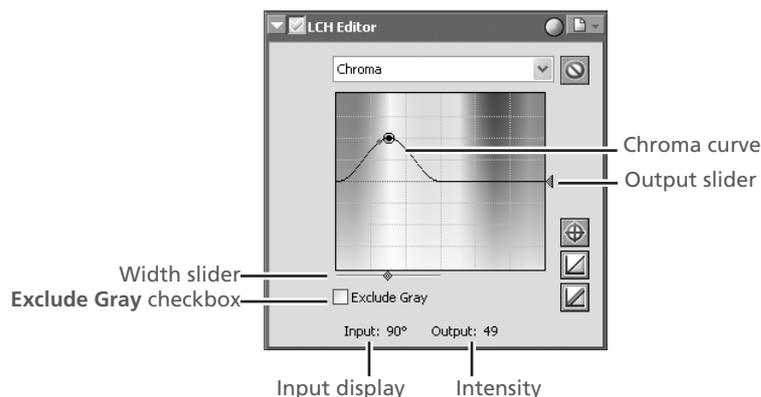
Color lightness curve: Maps the brightness of colors in the original image (input) to the brightness of colors after editing (output). Moving a point on the curve upward makes colors in the affected portion of the color range more brighter, while moving it downward makes the affected colors darker.

Width slider: Adjust the width of the curve that passes through the selected point, increasing or decreasing the range of colors affected by the change.

Intensity: The amount by which the brightness of colors under the selected point will be increased or decreased in the output image.

The Chroma Channel

The Chroma editor is useful tool for adjusting color saturation.



Chroma curve: Maps chroma in the original image (input) to the chroma of the image after editing (output). Moving a point on the curve upward makes colors in the affected portion of the color range more vivid, while moving it downward makes the affected colors less vivid, or grayer.

Width slider: Adjust the width of the curve that passes through the selected point, increasing or decreasing the range of colors affected by the change.

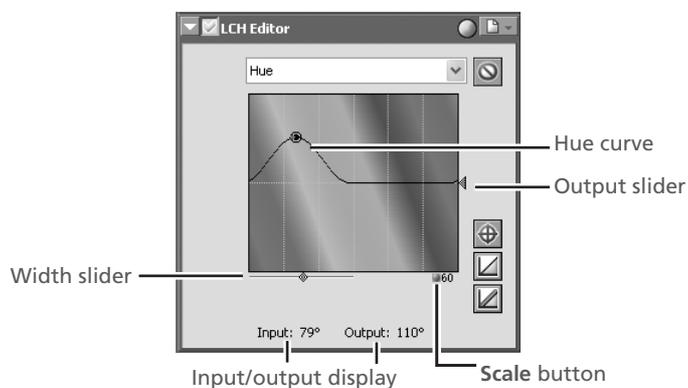
Exclude Gray: Neutral colors (grays) may seem over saturated when chroma is raised. Check this option to increase chroma without affecting grays. This option has no effect when chroma is reduced below the value in the original image.

Output slider: Moving the slider affects the saturation of all colors in the image.

Intensity: The amount by which the saturation of the selected point will be increased or decreased in the output image.

The Hue Channel

The hue editor is used to map selected colors in the original (input) image to a specific range of colors in the final (output) image. This can be used, for example, to make all reds in the image slightly more orange, or even green or blue.



Hue curve: Maps hue in the original image (input) to the hue of the image after editing (output). Select a point on the curve that corresponds to the desired input color and drag it up and down until it intersects with the desired output color.

Width slider: Adjust the width of the curve that passes through the selected point, increasing or decreasing the range of hues affected by the change.

Output slider: Moving the slider affects the hue of all colors in the image.

Scale button: Click to change the vertical scale from 60° through 120° to 180° and back again (the degrees in this scale refer to 360° color wheel). Increasing the scale increases the range of hues visible in the display, while decreasing the scale increases precision.

Photo Effects

The Photo Effects palette is used to convert pictures to black-and-white, sepia, or another monochrome tint, or to adjust the brightness of the cyan/red, magenta/green, and yellow/ blue channels.

1 Display the Photo Effects palette

Select the tool palette containing the Photo Effects palette from the **View** menu (the default location is Tool Palette 1) and click the triangle at the top left corner of the palette.

2 If the Apply button is off (☒), turn it on (☑)

3 Adjust settings

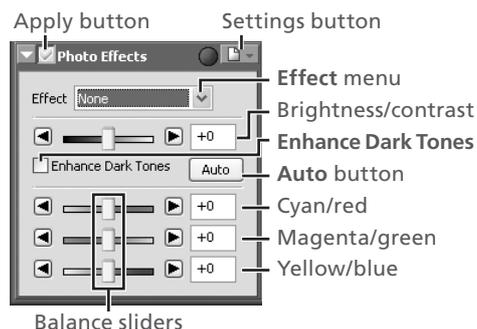
Effect: Choose **Black and White** to convert the image in the active window to black and white, **Sepia** to convert the image to sepia, or **Tinted** to convert the image to another monochrome tint by dragging the balance sliders. Select **None** to use the balance sliders to adjust the brightness and contrast of the cyan/red, magenta/green, and yellow/blue channels in the original image.

Brightness/contrast slider: Drag the slider to the right to increase overall brightness and contrast, to the left to reduce brightness and contrast, or enter a value between -100 and +100 directly in the text box to the right of the slider.

Enhance Dark Tones: Select this option to bring out details in shadows.

Auto: Click this button to optimize brightness and contrast without affecting color balance. **Enhance Dark Tones** is automatically selected.

Balance sliders: Use these sliders to adjust the brightness and contrast of the cyan/red, magenta/green, and yellow/ blue channels, or enter a value between -100 and +100 directly in the text boxes to their right. If the image has been converted to black-and-white or sepia, only the brightness of shades originally in the selected channels will be affected. If **Tinted** is selected, the balance sliders control the choice of monochrome tint.



The Photo Effects Settings Menu

Clicking the triangle  in the top right corner of the Photo Effects palette displays the Photo Effects settings menu.



Option	Description
Copy to Clipboard	Copy current Photo Effects settings to the clipboard.
Load...	Select this item to load settings previously saved using the Save... option (see below). A dialog will be displayed where you can navigate to the drive (volume) and directory containing the desired settings file (only files with the extension ".npe" will be displayed). The settings in the Photo Effects palette will instantly revert to the saved settings.
Save...	Select this item to save Photo Effects settings to a named file. These settings can later be recalled using the Load... option. Choosing Save... displays a dialog where you can choose a destination and file name for current Photo Effects settings. Photo Effects settings are saved with the extension ".npe".
Reset to Neutral	Reset Photo Effects settings to default values.
Recent files	Recent Photo Effects settings files (up to four) are listed at the end of the settings menu. Selecting a file from the list sets the controls in Photo Effects palette to the saved settings.

The Settings Menu

The Photo Effects Settings menu can also be displayed by selecting **Photo Effects** from the **Settings** menu.

Changes to the Noise Reduction Palette

The Noise Reduction palette now functions as follows:

Reducing Noise

1 Display the Noise Reduction palette
Select the tool palette containing the Noise Reduction palette from the **View** menu (the default location for the Noise Reduction palette is Tool Palette 2) and click the triangle at the top left corner of the palette.

2 If the Apply button is off (☒), turn it on (☑)

3 Adjust noise reduction options

Intensity: To reduce noise (a mottling phenomenon that occurs principally in photographs taken at high sensitivities), drag the slider to select a value from 0 (no noise reduction performed) to 100 (maximum noise reduction).

Sharpness: High levels of noise reduction may result in loss of definition. To increase sharpness, drag the slider to select a value from 0 (no sharpening performed) to 10 (maximum sharpness).

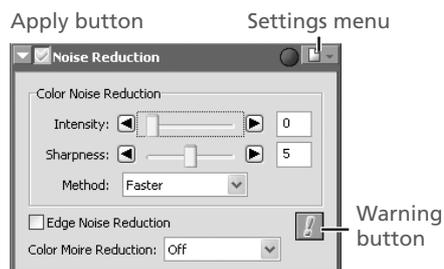
Method: Choose **Faster** for faster processing, **Better quality** for increased precision.

Edge Noise Reduction: Check this box to reduce noise along edges in the photo, making outlines more distinct.

Color Moiré Reduction (RAW images only): Color moiré (color interference caused by regular overlapping patterns) can be reduced using this option. Choose the amount of compensation performed from **Off**, **Low**, **Medium**, or **High**.

4 View the results

Confirm the effects of noise reduction on the entire image and adjust settings as necessary.



D-Lighting

D-Lighting reveals details in shadows and highlights, correcting for underexposure in back-lit subjects or shaded areas of images and for overexposure in brightly lit areas.

1 Display the D-Lighting palette

Select the tool palette containing the D-Lighting palette from the **View** menu (the default location for the D-Lighting palette is Tool Palette 1) and click the triangle at the top left corner of the palette.

2 Turn the Apply button on

Turn the Apply button on to enable D-Lighting.

3 Adjust settings

Method

Choose **Faster (HS)** for high-speed processing, **Better Quality (HQ)** for separate control of shadow and highlight adjustment.

Faster (HS)

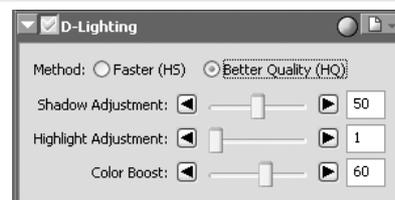
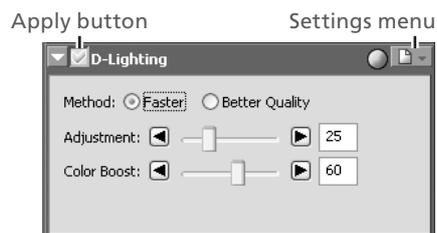
The following options are available when **Faster (HS)** is selected:

- **Adjustment:** Drag the slider to the right to enhance details in shadows and to reveal highlights where the subject is much brighter than the background or the background much brighter than the subject. An adjustment value between 0 and 100 can also be entered directly in the text box (the default setting is 25).
- **Color Boost:** Drag the slider to the right to increase color saturation, or enter a value between 0 and 100 directly in the text box to its right.

Better Quality (HQ)

Selecting **Better Quality (HQ)** displays the options shown at right.

- **Shadow Adjustment:** Drag the slider to the right to enhance details in shadows, or enter a value between 1 and 100 directly in the text box to its right (the default setting is 50).
- **Highlight Adjustment:** Drag the slider to reveal highlights where the subject is much brighter than the background or the background much brighter than the subject. An adjustment value between 1 and 100 can also be entered directly in the text box (the default setting is 1).
- **Color Boost:** Drag the slider to the right to increase color saturation, or enter a value between 0 and 100 directly in the text box to its right.



The D-Lighting Settings Menu

Clicking the  button in the D-Lighting palette displays the D-Lighting Settings menu.



Option	Description
Copy to Clipboard	Copy current D-Lighting settings to the clipboard.
Load...	Select this item to load D-Lighting settings previously saved using the Save... option (see below). A dialog will be displayed where you can navigate to the drive (volume) and directory containing the desired settings file (only files with the extension ".ndl" will be displayed). The settings in the D-Lighting palette will instantly revert to the saved settings.
Save...	Select this item to save D-Lighting settings to a named file. These settings can later be recalled using the Load... option. Choosing Save... displays a dialog where you can choose a destination and file name for the current D-Lighting settings. D-Lighting settings are saved with the extension ".ndl".
Reset to Default	Reset D-Lighting settings to default values.
Recent files	Recent D-Lighting settings files (up to four) are listed at the end of the settings menu. Selecting a file from the list sets the controls in D-Lighting palette to the saved settings.

Digital DEE

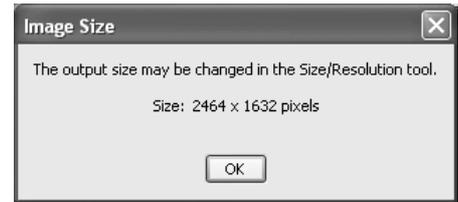
D-Lighting replaces the Digital DEE tool available in earlier versions of Nikon Capture 4. Note that Digital DEE settings are ignored when joint settings files created with earlier versions of Nikon Capture 4 are loaded into Nikon Capture 4 version 4.2 or later, while Digital DEE settings saved with NEF images in earlier versions of Nikon Capture 4 are lost when these images are opened in Nikon Capture 4 version 4.2 or later. Digital DEE settings files (extension ".ndd") can not be loaded into Nikon Capture 4 version 4.2 or later.

The Settings Menu

The D-Lighting Settings menu can also be displayed by selecting **D-Lighting** from the **Settings** menu.

Image Size

To view the final size of the image in pixels, select **Show Image Size** from the **Image** menu. The Image Size dialog shows the size of the original (input) image in pixels; if the output size has been changed, the dialog will also list the final (output) size of the image in pixels.



Saving Images in TIFF Format

LZW compression is now available when saving images in TIFF (RGB) format. Selecting the compression option reduces file size without affecting image quality (amount of compression varies; note that in some cases, LZW compression may actually increase file size).

The "Save As" Dialog

The following option has been added to the "Save As" dialog:

Embed ICC Profile: Select this option to embed the specified ICC profile when the image is saved. This option is automatically selected for images that have an ICC profile and for photographs that are being saved without first being edited. It is not available with NEF files.



Batch

The following options have been added to the "Batch" dialog:

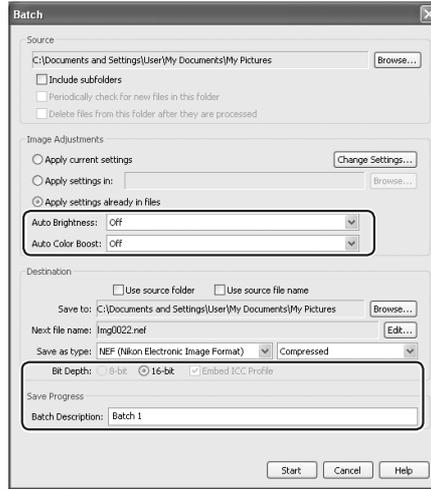


Image Adjustments section

Auto Brightness: Select **Always** to apply auto brightness and contrast, or **Only when related settings are neutral** to adjust contrast and brightness only if they have not already been adjusted manually using Photo Effects, Tone Curves, or Color Balance.

Auto Color Boost: Select **For People - Always** or **For Nature - Always** to apply the effects of the **Auto** button in the Color Booster palette, or **For people - only when related settings are neutral** or **For nature - only when related settings are neutral** to apply this effect only if Color Booster settings have not already been adjusted manually.

Destination section

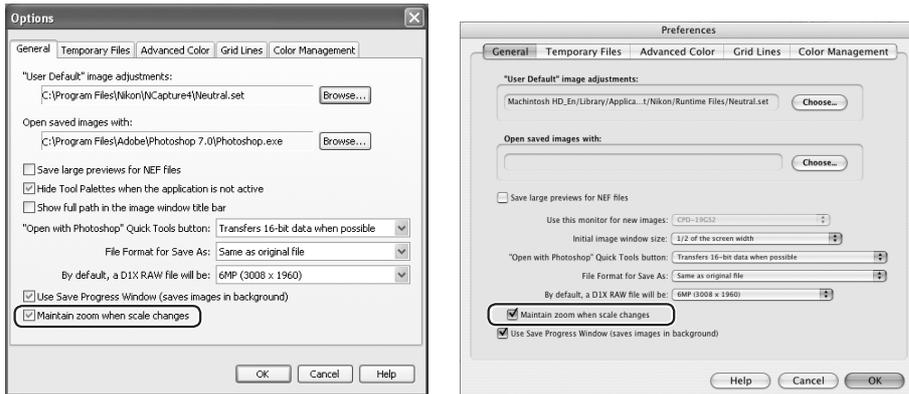
Embed ICC Profile: Select this option to embed an ICC profile in each image.

Save Progress section

Save Progress: Choose a name for the batch process displayed in the Save Progress window.

The Preferences ("Options") Dialog

The following option has been added to the Preferences ("Options") dialog:



Maintain zoom when scale changes: Select this option to keep the same zoom ratio when changing output size in the Size/Resolution palette. The window is resized to display the image at the new output size.

Original image



300-ppi image displayed at 16% zoom. If resolution is reduced to 150ppi...

"Maintain zoom when scale changes" on



...zoom remains 16%; window is resized to fit image.

"Maintain zoom when scale changes" off

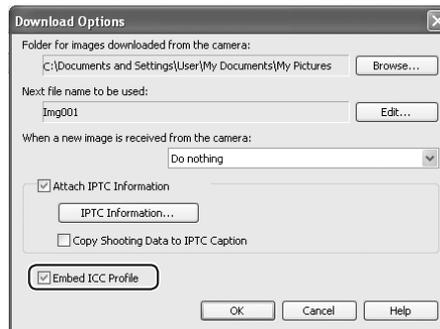


...zoom increases to 33% to fit image to window.

Download Options

The following option has been added to the "Download Options" dialog in Nikon Capture 4 Camera Control:

Embed ICC Profile: Select this option to embed an ICC profile in captured images.

**Color Matching in Adobe Photoshop (Version 7.0 or Later)**

From Nikon Capture 4.2, it is no longer necessary to manually match the Nikon Capture 4 monitor profile with that used in Adobe Photoshop if a monitor profile has already been selected in the operating system display property dialog. For more information, see "Choosing a Monitor Profile."