

Nikon

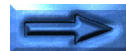
Scanner Control Software

Nikon Control Windows

User's Manual

Contents

1. Overview
2. Before You Begin
 - 2.1 System Requirements
 - 2.2 Software Installation
3. Getting Started
 - 3.1 Launching and Quitting
 - 3.2 Control Menu
 - 3.3 File Menu
 - 3.4 Image Menu
 - 3.5 Window Menu
 - 3.6 Control Palette
 - 3.7 Scanning Basics
4. Preferences
 - 4.1 TWAIN source
 - 4.2 Naming Files
 - 4.3 Export Plug-in
 - 4.4 Image Window Handling after Exporting
 - 4.5 Gamma Values
 - 4.6 Control Palette Size
5. Image Acquisition
6. Image Window Operations
 - 6.1 Zoom in/Zoom out
 - 6.2 Rotating the Image
 - 6.3 Scrolling the Image
 - 6.4 Flipping the Image Horizontally
 - 6.5 Flipping the Image Vertically



- 7. Saving Images
 - 7.1 Save As Window
 - 7.2 Quality Window
 - 7.3 Exporting Images
- 8. Loading Images
- 9. Sequential Image Acquisition
 - 9.1 Sequential Save Window
 - 9.2 Scanning Log
- 10. About Window
- Appendix A: Differences between Windows 3.1 and Windows 95 Versions
 - A.1 System Requirements
 - A.2 Software Installation
 - A.3 Control Palette
 - A.4 Control Menu
 - A.5 File Menu
 - A.6 View Menu
 - A.7 Image Menu
 - A.8 Window Menu
 - A.9 Preferences Window
 - A.10 Sequential Save Window
 - A.11 Quality Window
 - A.12 Log Window

Index

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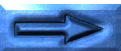
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I. Overview

Thank you for purchasing your Nikon scanner. This manual explains how to use Nikon scanners with the Nikon Control Windows application. Please read the documentation thoroughly to ensure proper operation and the best results from your scanner.

Nikon Control Windows is an application that runs on an IBM PC/AT or compatible computer, and supports scanning and saving image files with Nikon scanners.

Note for Windows 95 users: *The instructions in this manual are based on the Nikon Control Windows 3.1 version. The dialog boxes and operation of the Windows 95 version are different from those of the Windows 3.1 version. If you are going to use this product in the Windows 95 environment, please refer to [Appendix A](#) of this manual, which describes differences between the Windows 3.1 and Windows 95 versions.*

Nikon Control is extremely easy to operate, and offers the following functions.

- Image scanning and display using a TWAIN driver such as [Nikon Scan Windows](#)
- Opening and display of image files stored on disk
- Saving of the displayed image to disk
- Rotation, zoom in/zoom out, scrolling, and vertical or horizontal re-orientation of the displayed image
- Automated sequential scanning of a number of images using the optional Nikon SF-100 Auto Slide Feeder mounted on the LS-1000 or the optional AF-10 Auto Document Feeder mounted on the AX-110 or AX-210

Important !

Image sizes that can be handled are shown below.

Color images:

Horizontal pixels × vertical pixels < 5.3 M

Grayscale images:

The limits of the image size depend on your monitor setting.

16.7 M colors: (Horizontal pixels × vertical pixels) < 5.3 M

64K colors: (Horizontal pixels × vertical pixels) < 7.9M

32K colors: (Horizontal pixels × vertical pixels) < 8.5 M

256 colors: (Horizontal pixels × vertical pixels) < 15.9M

The aspect ratio of images must be less than 256:1 (width : height).

2. Before You Begin

2.1 System Requirements

To run Nikon Control Windows, the following minimum hardware and software is required:

- IBM PC/AT or compatible with i386SX or better
- MS-DOS 5.0 or later
- MS-Windows 3.1 or later
- 8MB or more of RAM (more than 12MB is recommended) (When launching this software as an application's TWAIN driver, you must take account of the amount of memory used by the application.)
- 1MB or more of hard disk capacity (a 300MB or larger hard disk is recommended)
- VGA (640 x 480 pixel) monitor or better
- Monitor with 16.7M colors, 64K colors, 32K colors, 256 colors, 256 grayscale, 16 grayscale (16.7M colors recommended for color scanning)

2.2 Software Installation

The Install disk provided with this product contains the Nikon Scan Windows TWAIN driver and the Nikon Control application.

Check the following before starting installation.

- Make sure that you have enough free space on the disk on which you are going to install the software.
- Write-protect (lock) the Install disk.
- Turn off any applications before starting installation.

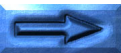
After checking the above points, begin installation as described below.

Step 1

After turning on your computer, launch Windows 3.1 and insert the Install disk into the floppy disk drive.

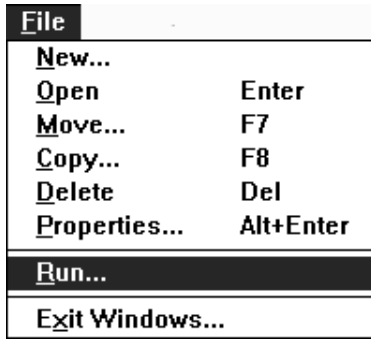
Step 2

Open the Program Manager window.



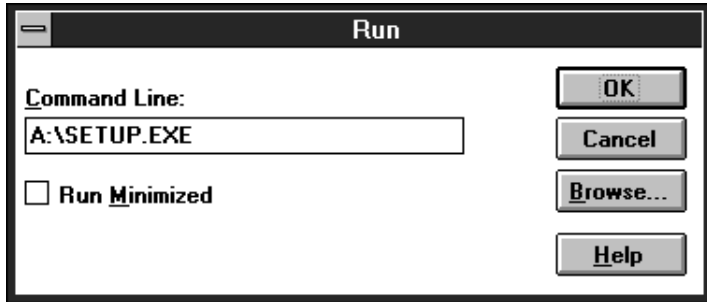
Step 3

Pull down the **File** menu and choose the **Run...** command.



Step 4

The Run window will appear.



Meaning of the buttons

- OK:** Executes the command specified in the **Command Line** box; the Nikon Software Setup window appears.
- Cancel:** Closes the Run window and quits installation.
- Browse...:** Opens the Browse window to let you choose a file from the list, displaying it in the **Command Line** box.
- Help:** Opens the Program Manager Help window.

If the Install disk is in drive A , enter **A:\SETUP.EXE** in the **Command Line** box and click the **OK** button. The Setup window will then appear during the initialization process.

Note: *Turn off any applications before starting SETUP.EXE.*



Step 5

After the initialization process is complete, the Welcome window will appear.



Meaning of the buttons

- C**ontinue: Opens the Nikon Software Setup window.
- E**xit: Quits installation.
- H**elp: Opens the Nikon Software Setup Help window shown below.

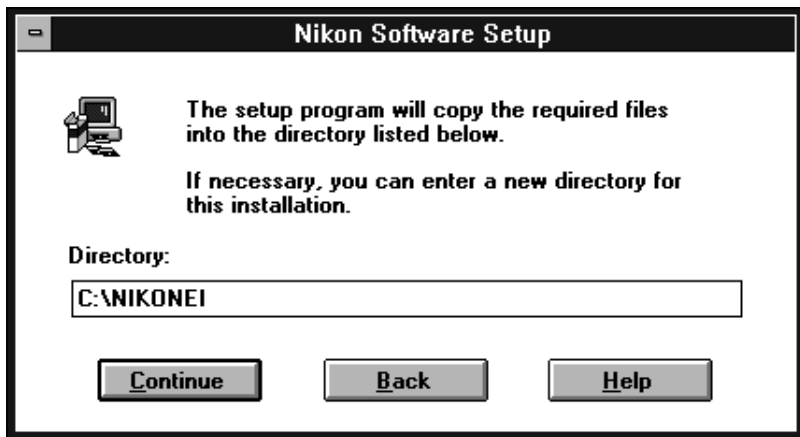


Click **OK** to return to the Welcome window.



Step 6

Clicking the **C**ontinue button in the Welcome window brings up the Nikon Software Setup window.



If the specified directory does not exist, a new directory will be created automatically.

Meaning of the buttons

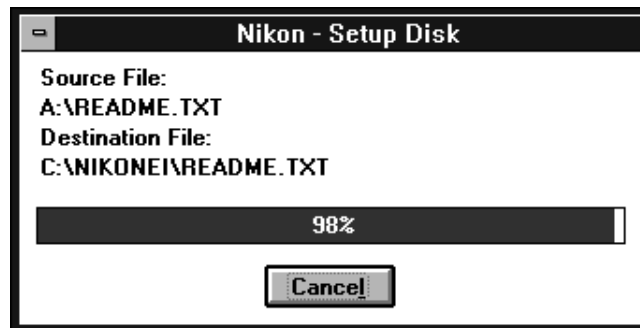
Continue: Starts the installation.

Back: Returns you to the Welcome window shown in **Step 5**.

Help: Opens the Nikon Software Setup Help window shown in **Step 5**.

When the window is opened, the Directory box shows the default drive and directory name where files are to be installed. You can change the drive and directory name by typing in the Directory box. After confirming or typing the drive and directory name, click the **C**ontinue button to start installation.

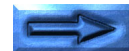
During installation the progress message window is displayed.



Installation can be stopped by clicking the **C**ancel button. Clicking the **C**ancel button brings up the following window.



Clicking **Y**es stops installation.



Step 7

When installation ends successfully, the following window is displayed.



If you want to see the README file, click the **Y**es button. Clicking the **N**o button skips opening of the README file.

Note: The README file may contain information that is not included in this manual.

Choose **E**xit from the **F**ile menu to close the README window.

Step 8



Clicking the **O**K button completes installation.

Note: *For US customers only.* After installation is finished, note the addition of the Scsichk.exe file in the directory to which Nikon Control Windows was installed. This utility can help Nikon's technical support staff diagnose problems with your system, should you experience difficulties. Prior to contacting Nikon Technical support, run the utility to generate a system configuration report, which can either be printed and faxed, or sent via e-mail to Nikon Support staff.

3. Getting Started

Before launching Nikon Control, connect the scanner as described in the hardware manual. First turn on any peripheral devices, including your scanner(s), then turn on the computer.

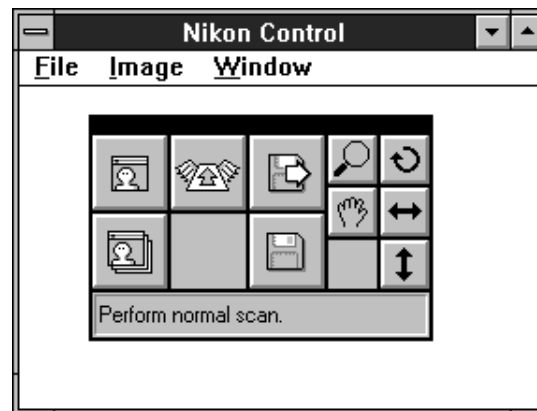
3.1 Launching and Quitting

Launching

Double-click the Nikon Control icon.

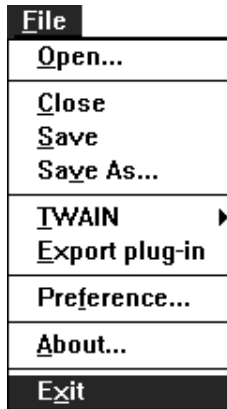


After Nikon Control is launched, the following Control palette and menu will appear. Nikon Control is controlled by means of these menus and the Control palette.

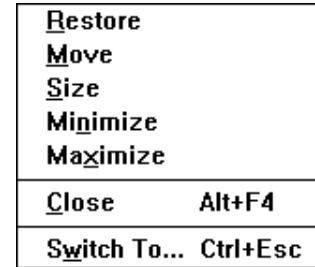


Quitting

To quit Nikon Control, choose **Exit** from the **File** menu.



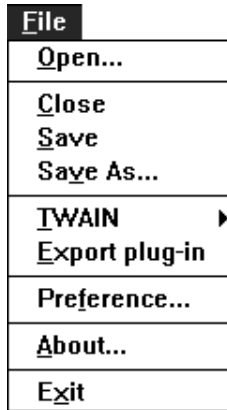
3.2 Control Menu



The Control menu offers the following functions;

- Restore:** Restores the window to its original size when it has been enlarged with the **Maximize** command.
- Move:** Lets you move the window.
- Size:** Lets you re-size the window.
- Minimize:** Reduces the window to an icon.
- Maximize:** Enlarges the window to fill the screen.
- Close:** Closes the window.
- Switch To...:** Lets you activate another window.

3.3 File Menu



The **File** menu includes the following items.

Open... : Opens an image file on disk and displays it on the monitor. This function is identical to that of the **Open** button on the **Control palette**.

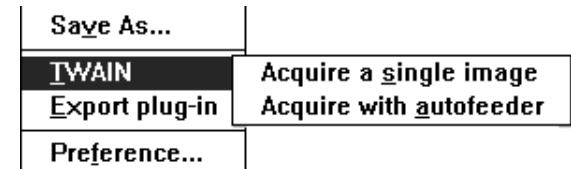
Close: Closes the display window. The display window is also closed by double-clicking the window's control box.

Save: Saves the displayed image to disk.

Save As... : Saves the displayed image to disk under a specified name. This function is identical to that of the **Save As** button on the **Control palette**.

TWAIN:

This item opens onto the following submenu:



Acquire a single image:

Performs a **scan of one image**. This function is identical to that of the **Acquire** button on the **Control palette**.

Acquire with autofeeder:

Performs **sequential scan** of images. This function is identical to that of the **Sequential Acquire** button on the **Control palette**. This function is available only when the optional autofeeder is connected to the scanner.

Export plug-in:

Exports a displayed image using Export plug-in software which conforms to the Adobe Photoshop Ver 2.0 plug-in specification.

Preference...:

Used to specify and select the TWAIN driver to be used, and to control the gamma value, file naming procedure for multiple scans, palette size, and export plug in.

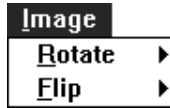
About...:

Shows the **About window**.

Exit:

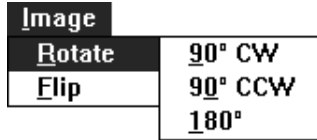
Quits Nikon Control.

3.4 Image Menu



The **Image** menu includes the following items.

Rotate: This command has the following sub-items:



90° CW:

Rotates the image clockwise, 90 degrees at a time. This function is identical to that of the **Rotate** button on the **Control palette**.

90° CCW:

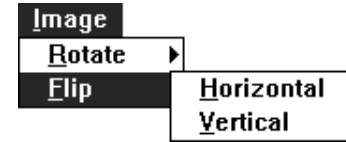
Rotates the image counter-clockwise, 90 degrees at a time.

180°:

Rotates the image 180 degrees at a time.

Flip:

This command includes the following sub-items:



Horizontal:

Flips the image horizontally. This function is identical to that of the **Horizontal Flip** button on the **Control palette**.

Vertical:

Flips the image vertically. This function is identical to that of the **Vertical Flip** button on the **Control palette**.

3.5 Window Menu

Window	
<u>C</u> ascade	Shift+F5
<u>T</u> ile	Shift+F4
<u>A</u> rrange Icon	
<u>C</u> lose All	
Zoom <u>I</u> n	
Zoom <u>O</u> t	
✓ <u>1</u> Scan0001.tif [1:1]	

Cascade: Arranges multiple image windows so they overlap.

Tile: Arranges all open images in windows that do not overlap on the screen.

Arrange Icon: Arranges image icons in the window.

Close All: Closes all open image windows.

Zoom In: **Zooms** in the view of an active image window. This function can also be performed by clicking the **Zoom** button on the **Control palette**.

Zoom Ot: Zooms out the view of an active image window. This function can also be performed by clicking the **Zoom** button on the Control palette while holding down the **Ctrl** key.

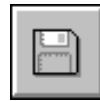
If you pull down the menu after acquiring images, you will see that the names of the images have been added at the end of the menu.

3.6 Control Palette

When Nikon Control is first launched after installation, the following Control palette appears. There are two **palette sizes** that can be displayed. The Large palette is shown below.



Buttons



Acquire: Performs a **scan of one image**, using the currently selected TWAIN driver. This function is identical to that of **Acquire a single image...** in the **File menu**.

Sequential Acquire: Performs **sequential scanning** of a number of images, using the currently selected TWAIN driver. This function is identical to that of **Acquire with autofeeder...** in the **File menu**. This function is available only when the autofeeder is connected to the scanner.

Export: Exports a displayed image using export plug-ins which conform to the Adobe Photoshop Ver 2.0 plug-in specification. This function is identical to that of **Export plug-in** in the **File menu**.

Open: **Opens** an image file on disk and displays it on the monitor. This function is identical to that of **Open...** in the **File menu**.

Save As: **Saves** the displayed image to disk. This function is identical to that of **Save As...** in the **File menu**.



Tool Buttons

Five tools are provided to perform zoom in/zoom out, rotation, scrolling, and vertical or horizontal flip of the image.



Zoom-in: An image can be **zoomed** in by clicking this button, then clicking the mouse button inside the image window. This function is identical to that of **Zoom In** in the **Window** menu.

Zoom-out: An image can be zoomed out by clicking this button while holding down the **Ctrl** key, then clicking the mouse button inside the image window. This function is identical to that of **Zoom Out** in the **Window** menu.



Rotate: Clicking this button **rotates** the image clockwise, 90 degrees at a time. This function is identical to that of **90° CW** in the **Rotate** submenu in the **Image** menu.



Scroll: The image is **scrolled** by clicking this button, then dragging the mouse inside the display window while holding down the mouse button.



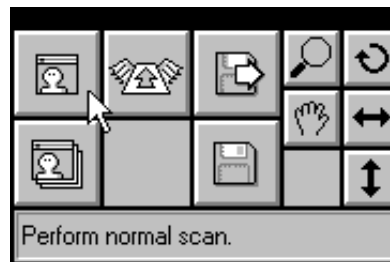
Horizontal Flip: Clicking this button flips the image horizontally. This function is identical to that of **Horizontal** in the **Flip** submenu in the **Image** menu.



Vertical Flip: Clicking this button flips the image vertically. This function is identical to **Vertical** in the **Image** menu's **Flip** submenu.

Help Message

In the large palette, you can see interactive help messages. Positioning the mouse cursor on a button will display a Help message in the message display area.



3.7 Scanning Basics

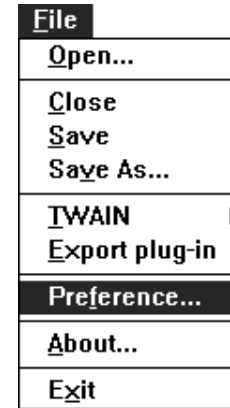
Basic operating procedure for Nikon Control is as follows.

- Step 1** Setup
Select preferences, such as the TWAIN driver to be used.
- Step 2** Scan and display an image.
Note: For sequential scanning, see *Chapter 9*.
To load an image from disk, see *Chapter 8*.
- Step 3** Save the displayed image to disk.
- Step 4** Quit, or repeat the procedure from Step 2 above.

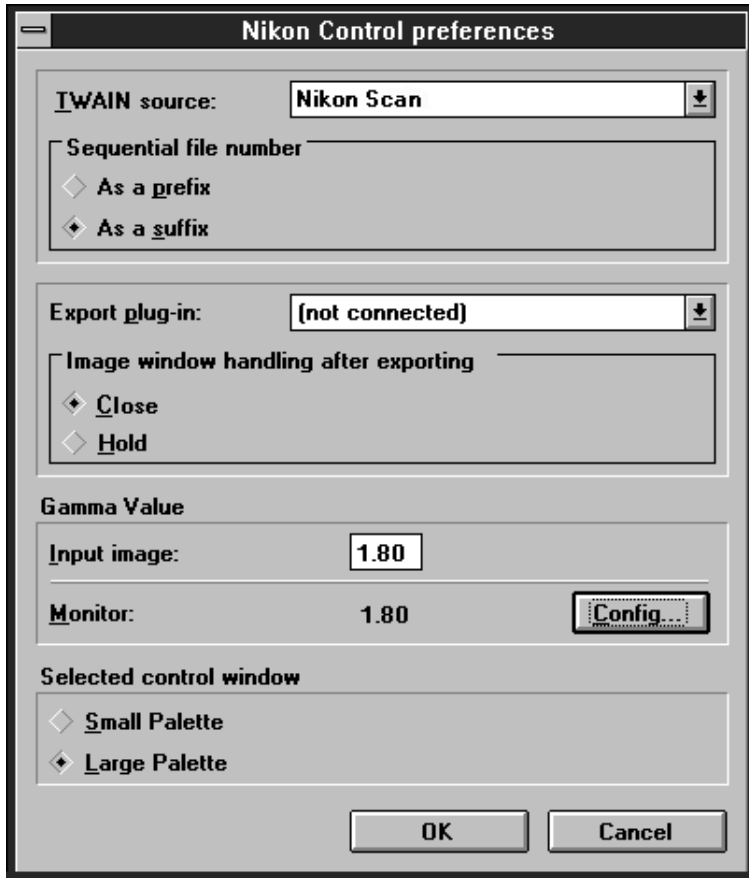
This section describes a simple procedure for scanning a single image and saving it to disk.

Step 1

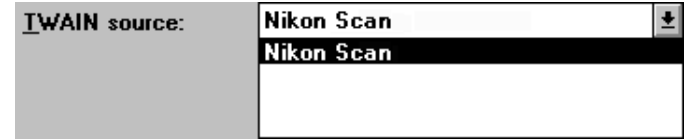
Specify the TWAIN driver to be used by Nikon Control. To specify the TWAIN driver, choose **Preference...** from the **File** menu.



The Nikon Control Preferences window appears.



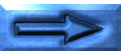
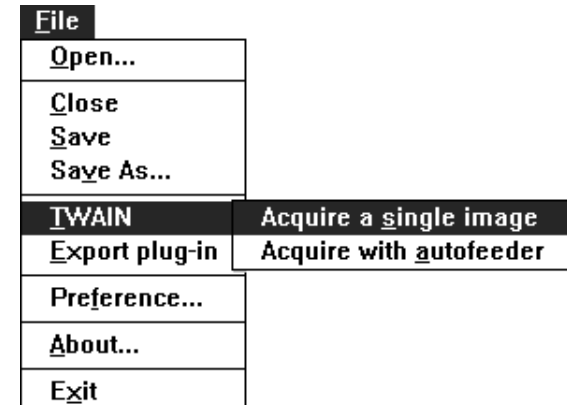
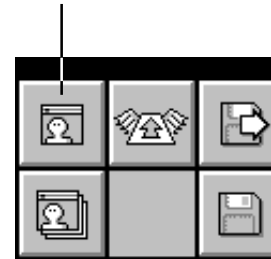
Select the required TWAIN driver from the TWAIN Source pop-up menu.



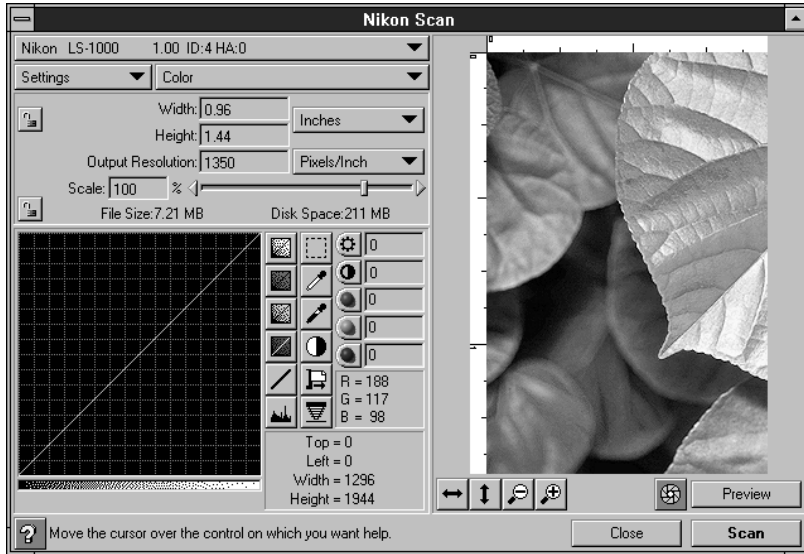
Step 2

Click the **Acquire** button on the Control palette, or choose **Acquire a single image** from the **File** menu.

Acquire button



If Nikon Scan has been selected, the following window will appear.



Note: The above window may differ depending on the scanner used.

When the TWAIN driver is used to acquire an image, the acquired image appears in a window. (See the manual supplied with the TWAIN driver for the acquisition procedure.)

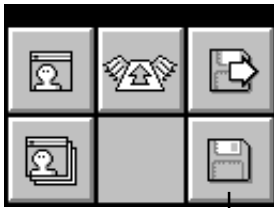


The image in the display window can be zoomed in/zoomed out, rotated, scrolled, or flipped vertically or horizontally by means of the five tools on the Control palette.

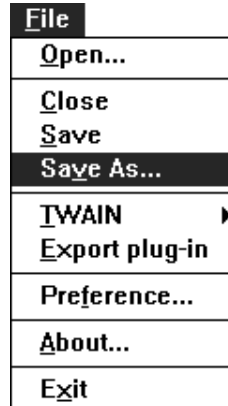


Step 3

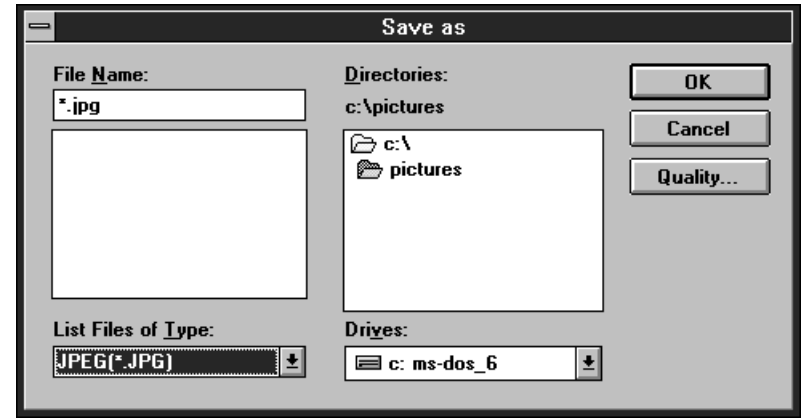
Save the acquired image to disk. To save an image to disk, either click the **Save As** button on the Control palette or choose **Save As...** from the **File** menu.



Save As button

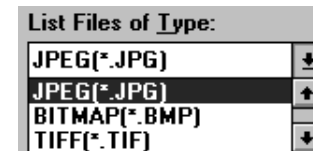


The Save as window shown below will appear.



Specify the drive and directory in which the image is to be saved, enter the file name, specify the file type, and click the **OK** button. The image is then saved.

The file type can be selected from the pop-up menu. The file types that can be specified are shown below.



If JPEG (*.JPG) is selected as the file type, the **Quality...** button is enabled, and the compression quality (and resulting file size) can be changed. If any other file type is selected, the **Quality...** button is dimmed and disabled. When the **Quality...** button is clicked, the Quality window is displayed. For details concerning the Quality window, see [Section 7.2](#).

4. Preferences

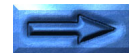
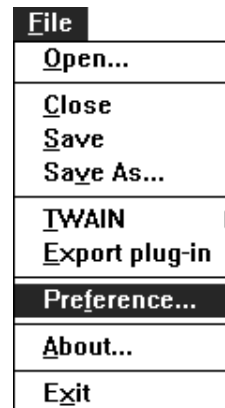
The Preferences window allows the user to specify settings for general control of scan operations. The following settings are possible.

- Select the TWAIN driver to be used for image acquisition.
- Set the position of the serial number (as a prefix or suffix) in the file name when sequential image acquisition is carried out.
- Select the Export plug-in to be used for image export.
- Decide whether the displayed images are to be closed or not after exporting the images.
- Set the gamma value of input images.
- Set the gamma value of the monitor being used.
- Select the palette size to be displayed.

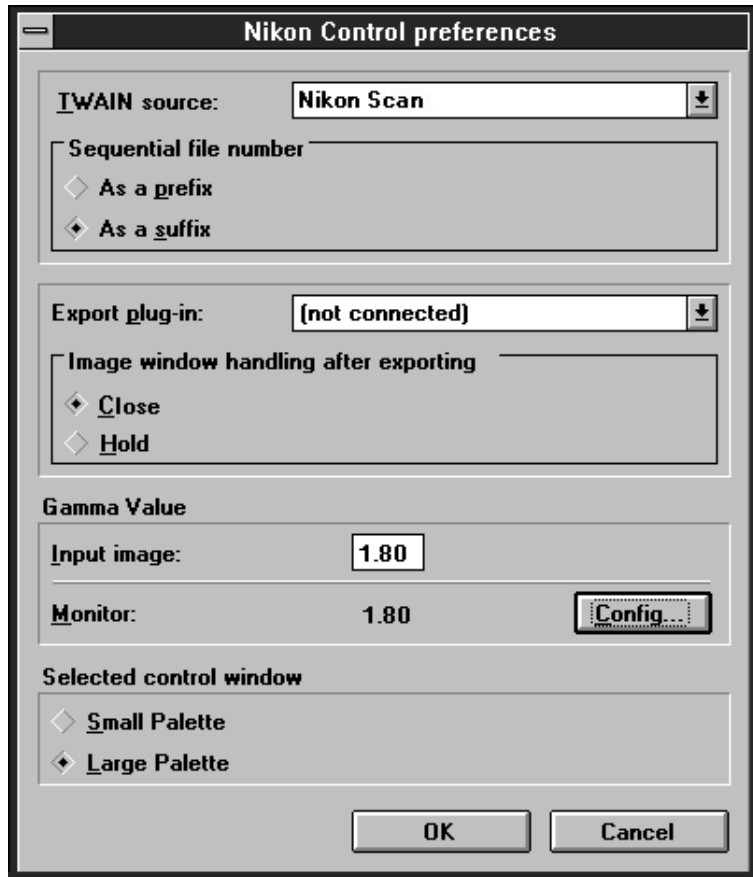
Selections made in the Preferences window are saved after exiting the window. The settings are recalled every time Nikon Control is launched.

Preferences window operations are described below.

First, choose **Preference...** from the **File** menu.



The Nikon Control Preferences window appears.



Description of items in the Preferences window

TWAIN source:

A pop-up menu lets you locate the TWAIN driver you wish to use.

Sequential file number:

Either of the buttons is selected to specify whether the numerical portion of the **file name** is to be appended before or after the fixed part of the file name, when performing continuous image acquisition.

Export plug-in:

A pop-up menu lets you locate Export plug-ins which conform to Adobe Photoshop Ver 2.0 plug-in specifications.

Image window handling after exporting:

Either of the buttons is selected to specify whether the original scanned images are to be closed or not after exporting the images.

Gamma Value: Allows you to set the **Gamma value** of the monitor being used.

Control palette:

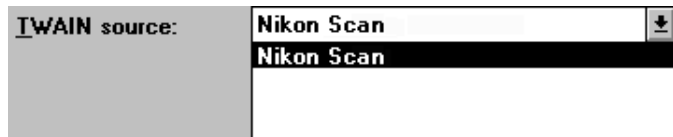
Either of the radio buttons is selected to specify whether a **Large or Small Control palette** is used.

Cancel: Changes are discarded and the Preferences window is closed.

OK: Changes are saved and the Preferences window is closed.

4.1 TWAIN source

If you want to change to another TWAIN driver, pull down the **TWAIN source** menu and choose the required TWAIN driver from the menu. The TWAIN driver is then selected and the newly selected TWAIN driver is displayed in the box.



4.2 Naming Files

The names of individual files saved by means of sequential image scanning consist of a fixed part and a serial number. This setting specifies whether the number is to be placed before or after the fixed part. The fixed part of the file name is specified in the Sequential save window as a “Prefix name” or “Suffix name” when the image files are saved.



For example, if the **As a suffix** button is selected here, and the fixed part “Image” is specified in the Sequential save window, the file names, in the order saved, will be “Image001”, “Image002”, “Image003” and so on.

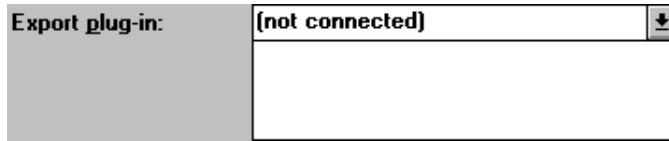
Naming Procedure Choices

As a prefix: The serial number precedes the fixed part.

As a suffix: The serial number follows the fixed part.

4.3 Export Plug-in

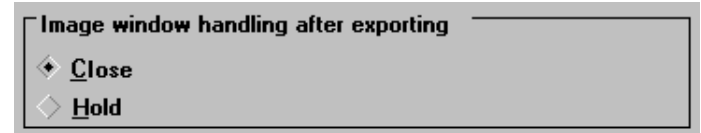
If you want to change to another Export plug-in, pull down the **Export plug-in** menu and choose the required Export plug-in which conforms to the Adobe Photoshop Ver 2.0 specification. The Export plug-in is then selected and the newly selected Export plug-in is displayed in the box.



Note: Some Export plug-ins which conform to the Adobe Photoshop Ver 2.0 plug-in specification might not be supported.

4.4 Image Window Handling after Exporting

The original scanned images can be automatically closed after exporting the images. Either of the buttons is selected to specify whether the displayed images are to be closed or not after exporting the images.



Meaning of the Buttons

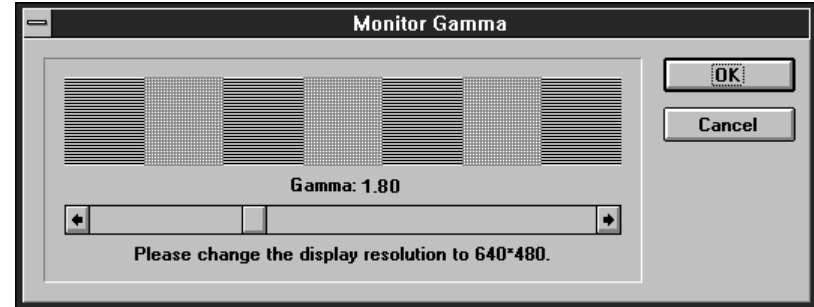
- Close:** The original scanned images are automatically closed after exporting.
- Hold:** The original scanned images are held on the monitor.

4.5 Gamma Values

Enter the Gamma values of the image. Acceptable values range from 0.80 to 3.00. The default setting is 1.80.



Clicking the **Config...** button brings up the Monitor Gamma window shown below.



Change the display resolution to 640 × 480 and set the gamma value while viewing the chart. The chart display shows a halftone gray patch made of black and white dots, and a mid-tone gray value calculated from the current monitor gamma value.

Try various monitor gamma values until the mid-tone gray value and the halftone gray match as closely as possible. The gamma value is now set.

Acceptable values range from 0.80 to 3.00. The default setting is 1.80.

Meaning of the Buttons

- OK:** Save changes and return to Preferences window.
- Cancel:** Discard changes and return to Preferences window.

4.6 Control Palette Size

The Nikon Control has two sizes of Control palette. You can select the palette size by clicking the appropriate button.

Selected control window

- ◇ Small Palette
- ◆ Large Palette

Meaning of the Buttons

Small Palette: The small control palette is displayed.

Large Palette: The large control palette is displayed.

Large Control Palette



Small Control Palette

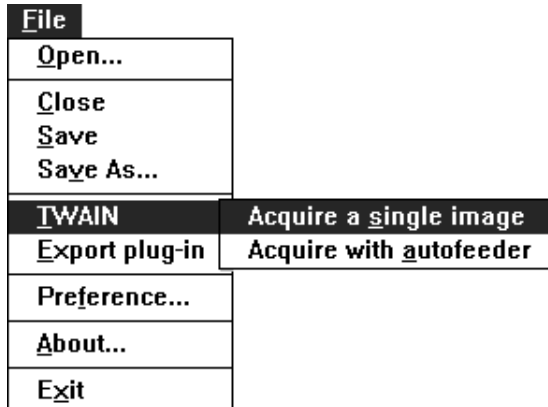
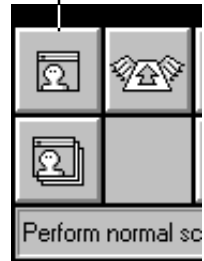


Note: The default setting is "Large Palette".

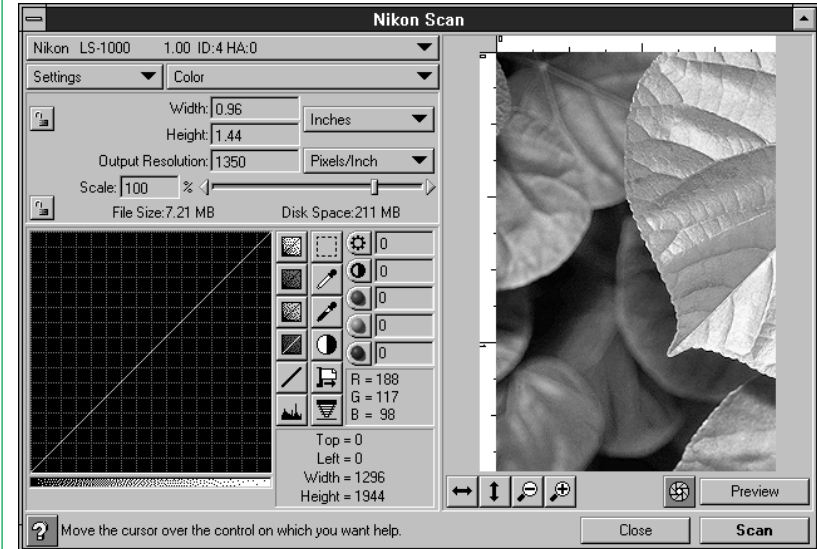
5. Image Acquisition

To acquire images one-by-one, click the **Acquire** button on the Control palette or choose **Acquire a single image** from the **File** menu.

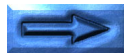
Acquire button



The TWAIN driver specified in the Preferences window is launched, and the operating window for that driver appears. If Nikon Scan (the Nikon TWAIN source) has been selected, the following window will appear. See the instruction manual of the selected TWAIN driver for set up details.



Note: The above dialog box is for the LS-1000 film scanner. The corresponding window for other scanners may be different.



After a preview is made and cropped, setting adjusted, and the **Scan** button is clicked, the scanned image is displayed in a window.



6. Image Window Operations

When an image is displayed, the image can be magnified or reduced, rotated, scrolled, or flipped vertically or horizontally by means of five tools or the **I**mage and **W**indow menus.

6.1 Zoom in/Zoom out



When the **Z**oom button is clicked, the mouse cursor changes to the shape of a magnifying glass. Clicking the magnifying cursor anywhere within the image display window will then zoom in the image. To zoom out the image, click the mouse button inside the display window while holding down the **C**trl key.



Zoom-in cursor



Zoom-out cursor

This function can be performed by choosing **Z**oom **I**n or **Z**oom **O**ut from the **W**indow menu.

W indow	
C ascade	S hift+F5
T ile	S hift+F4
A rrange I con	
C lose A ll	
Z oom I n	
Z oom O ut	
✓ 1 S can0001.tif [1:1]	

6.2 Rotating the Image



Clicking the **R**otate button rotates the image in the active window clockwise, 90 degrees at a time.



Rotating can be performed by choosing **R**otate from the **I**mage menu.

I mage	
R otate	9 0° C W
F lip	9 0° C CW
	1 80°

Meaning of the Items

90° CW: Rotates the image clockwise, 90 degrees at a time.

90° CCW: Rotates the image counter-clockwise, 90 degrees at a time.

180° : Rotates the image 180 degrees at a time.

6.3 Scrolling the Image

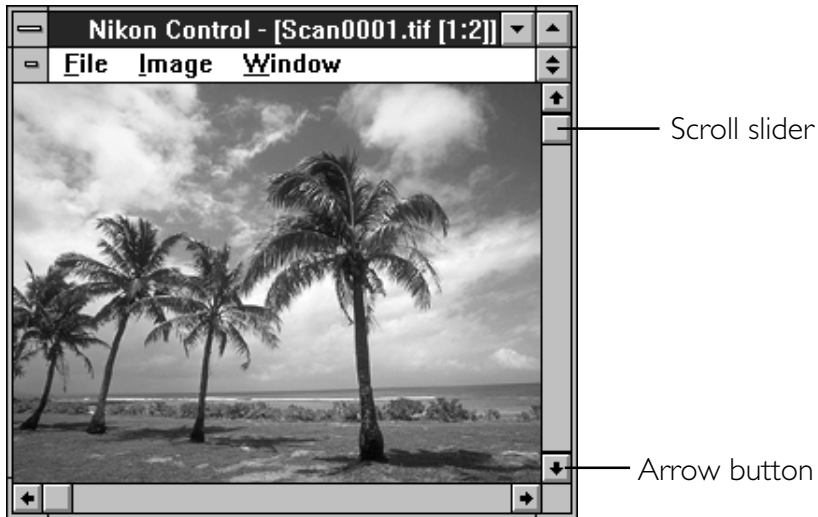


The Hand tool can be used to pan or scroll the image if it is too large to be completely displayed within the window.

When the **Scroll** button is clicked, the cursor changes to the shape of a hand.



The image can now be scrolled by dragging inside the display window with the mouse button held down.

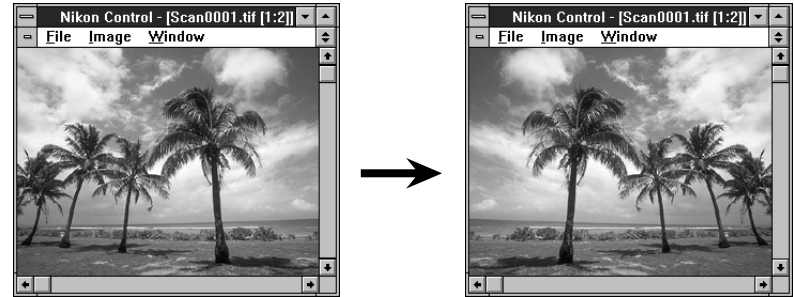


The image can also be scrolled by dragging the display window's scroll slider or clicking the arrow buttons at either end of the scroll bars.

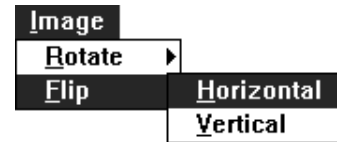
6.4 Flipping the Image Horizontally



Clicking the **Horizontal Flip** button flips the image in the active window horizontally.



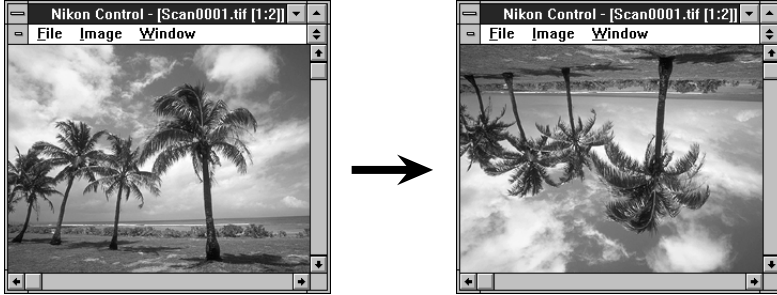
Flipping can also be performed by choosing **H**orizontal from the **F**lip submenu.



6.5 Flipping the Image Vertically



Clicking the **Vertical Flip** button flips the image in the active window vertically.

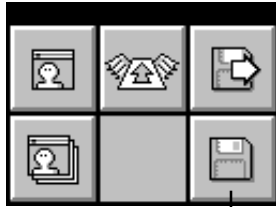


Flipping can also be performed by choosing **V**ertical from the **F**lip submenu.

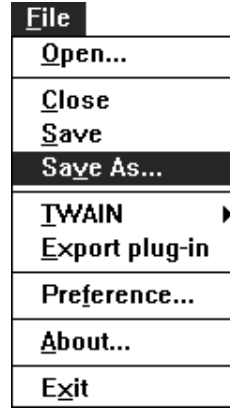


7. Saving Images

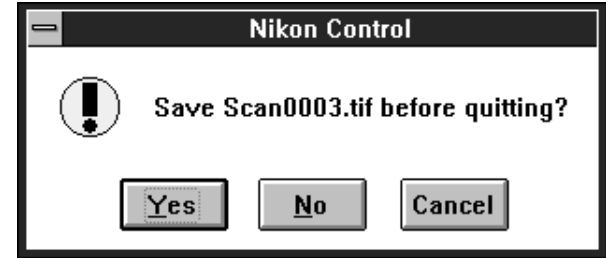
The image displayed in the display window is saved using the Save as window which appears when you click the **Save As** button on the Control palette or choose **Save As...** from the **File** menu.



Save As button

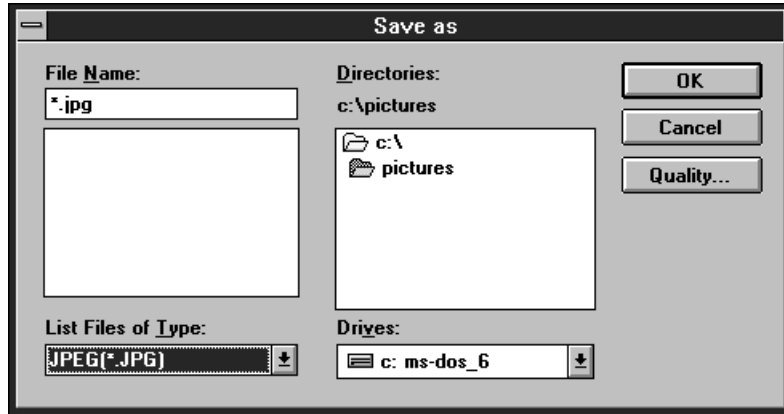


If the acquired image has not yet been saved, and you attempt to close the image window by choosing **C**lose from the **F**ile menu or double-clicking the image window's control box, an alert message window will appear, and you should then click the appropriate button.



7.1 Save As Window

When the Save window appears, specify the drive and directory in which the image is to be saved, the file name, and the file type, then click the **Save** button.



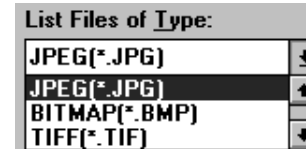
Meaning of Items in Save as window

Drives: Assigns a drive to save an image.

Directories: Assigns a directory to save an image.

List Files of Type:

JPEG (*.JPG), BITMAP (*.BMP), or TIFF (*.TIF) can be selected as the file type from the pop-up menu. The file type selected here is saved, and is then recalled the next time the window is opened.



Quality...:

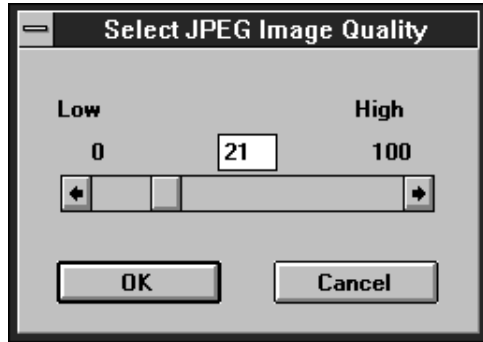
If JPEG (*.JPG) is selected as the file type, the **Quality...** button is enabled, and the compression quality (and resulting file size) can be changed. If any other file type is selected, the **Quality...** button is dimmed and disabled. When the **Quality...** button is clicked, the Quality window is displayed. For details concerning the Quality window, see [Section 7.2](#).

Cancel: Changes are discarded and the Save as window is closed.

OK: The image is saved.

7.2 Quality Window

If JPEG (*.JPG) is selected as the file type in the Save as window and the **Quality...** button is clicked, the Select JPEG Image Quality window appears.



The compression setting value can be set by dragging the slider with the mouse. (Dragging the slider changes the displayed number.) Moving the slider to the right decreases compression and increases the image quality; moving the slider to the left has the opposite effect. Permissible values range from 0 to 100.

Note: "Dragging" means to hold down the mouse button while moving the mouse.

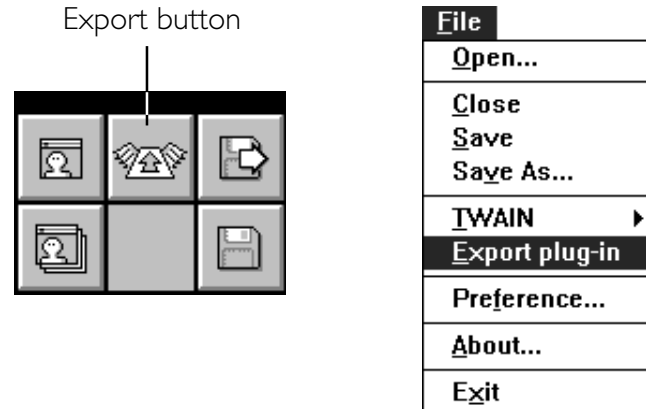
Meaning of Buttons

- Cancel:** Changes are discarded and the Quality window is closed.
- OK:** The value is saved and the Quality window is closed.

7.3 Exporting Images

Scanned images can be exported using an Export plug-in. You can specify the Export plug-in in the Preferences window. To specify the Export plug-in, see [Section 4.3](#).

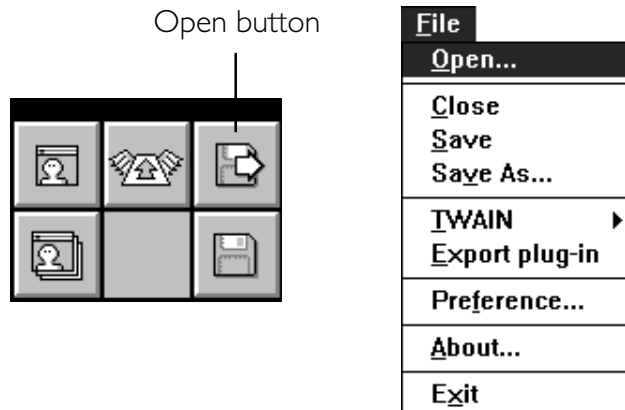
To export a scanned image, click the **Export** button on the Control palette, or choose **Export plug-in** from the **File** menu.



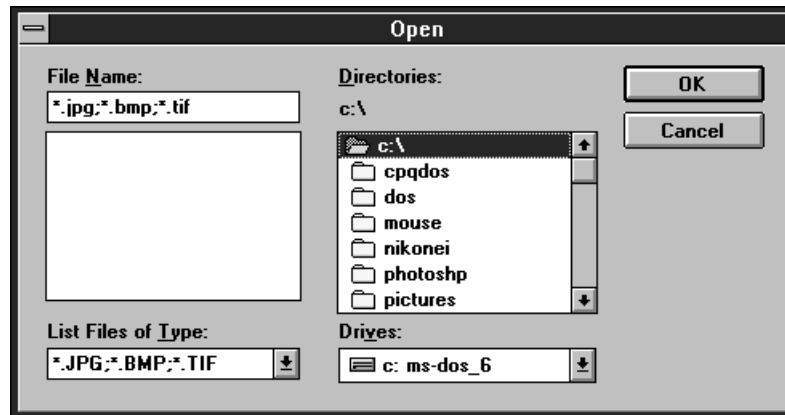
For information on the selected Export plug-in, please refer to the plug-in's software manual.

8. Loading Images

An image file saved to disk is loaded using the Open window which appears when you click the **Open** button on the Control palette or choose **Open...** from the **File** menu.



When either operation is performed, the Open window appears.



When the drive, directory, and file name are specified, the image is read and displayed in the display window.

Meaning of Items in the Open Window

- Drives:** Assigns a drive to load an image.
- Directories:** Assigns a directory to load an image.
- Cancel:** Cancels operation and closes the Open window.
- OK:** Opens the selected image.

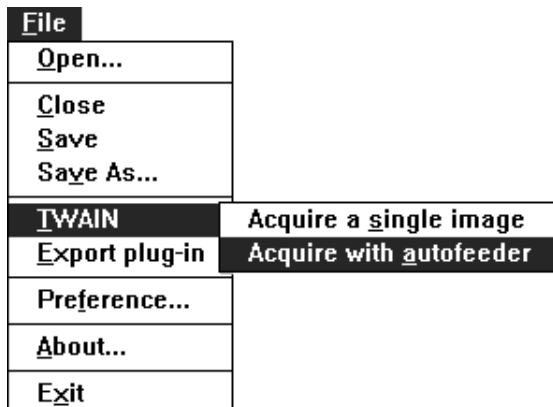
9. Sequential Image Acquisition

With the optional SF-100 Auto Slide Feeder mounted on the Nikon LS-1000 or optional AF-10 Auto Document Feeder mounted on the AX-110 or AX-210, images can be acquired sequentially, completely unattended.

Sequential acquisition is started by clicking the **Sequential Acquire** button on the Control palette or choosing **Acquire with autofeeder** from the **File** menu.

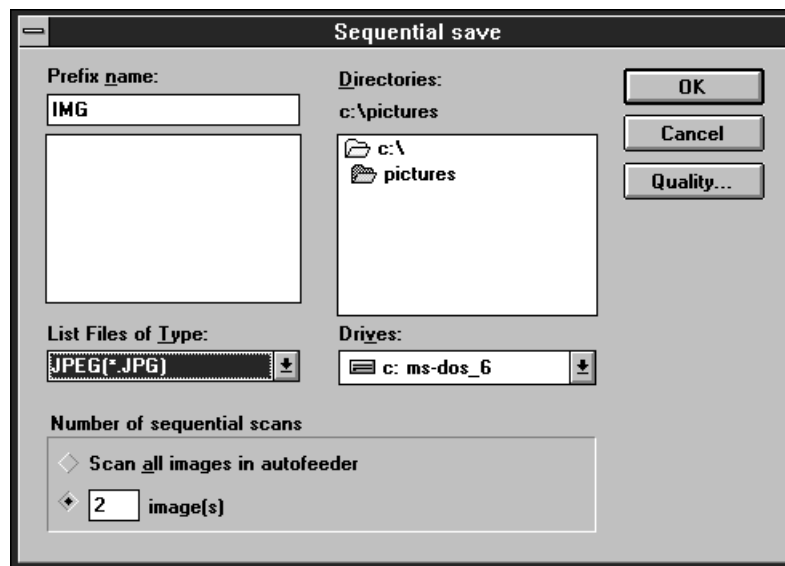


Sequential Acquire button

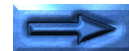


9.1 Sequential Save Window

When either operation is performed, the Sequential save window appears.



When the **OK** button on the Sequential save window is clicked after specifying the drive and directory in which the images are to be saved, the file name, file type, and the number of scans, sequential scan operation is started.



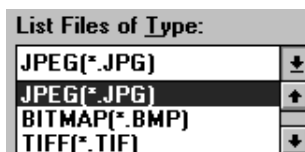
Meaning of Items in the Sequential save window

Drives: Assigns a drive to save images.

Directories: Assigns a directory to save images.

List Files of Type:

JPEG (*.JPG), BITMAP (*.BMP), or TIFF (*.TIF) can be selected as the file type from the pop-up menu. The file type selected here is saved, and is recalled when this window is next opened.



Prefix name (Suffix name):

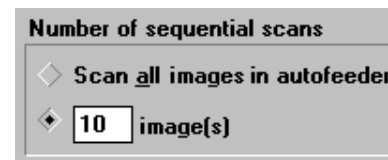
The name of each file saved during sequential image scanning consists of a fixed part and a serial number. The fixed part of the name is typed in this box. For example, if the **As a suffix** button is selected in the Preference window, and the fixed part "Image" is specified in the Sequential Scan dialog box, the file names will be, in the order saved, "Image001", "Image002", "Image003", and so on. See [Section 4.3](#) for a description of how to indicate whether the number is to precede or follow the fixed part of the file name.

Quality...:

If JPEG (*.JPG) is selected as the file type, the **Quality...** button is enabled, and the compression quality (and resulting file size) can be changed. If any other file type is selected, the **Quality...** button is dimmed and disabled. When the **Quality...** button is clicked the Quality window is displayed. For details concerning the Quality dialog box, see [Section 7.2](#).

Number of sequential scans:

Specifies the number of images to be scanned. If **Scan all images in autofeeder** is selected, all the documents in the autofeeder will be scanned. If a number is set in the box, that number of images will be scanned.



Cancel:

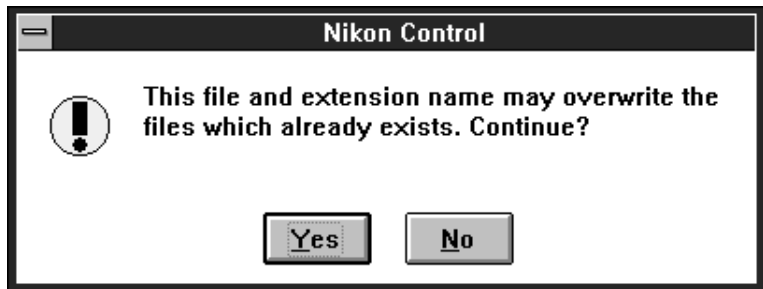
Changes are discarded and the Sequential save window is closed.

OK:

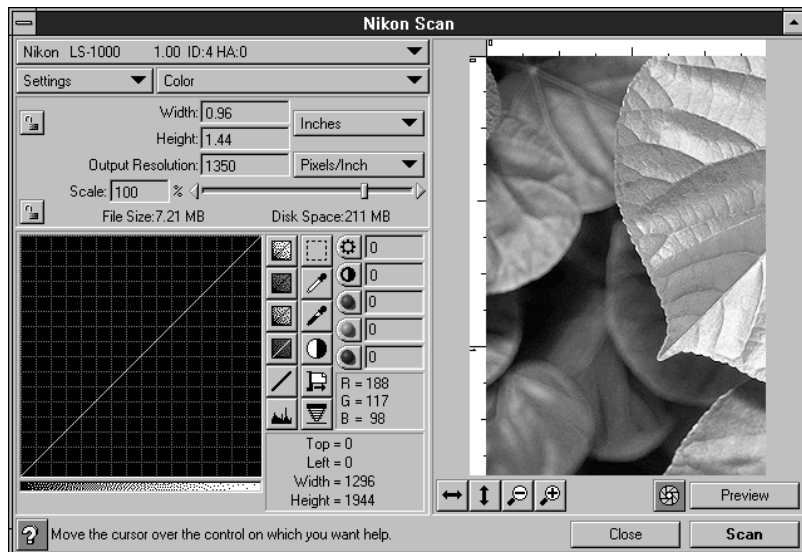
Sequential acquisition is started in accordance with the settings.



If a file already exists with the file name specified here, a message window will be displayed. You should then take appropriate action as indicated by the message.



When the **OK** button is clicked on the Sequential save window, sequential scan operation is started. The TWAIN driver specified in the Preferences window is launched, and the operating window for that software appears. If the Nikon TWAIN Source (Nikon Scan) has been selected, the following window will appear. See the instruction manual of the selected TWAIN driver for set up details.



Note: *The above window is for the LS-1000 film scanner. The corresponding window for other scanners may be different.*

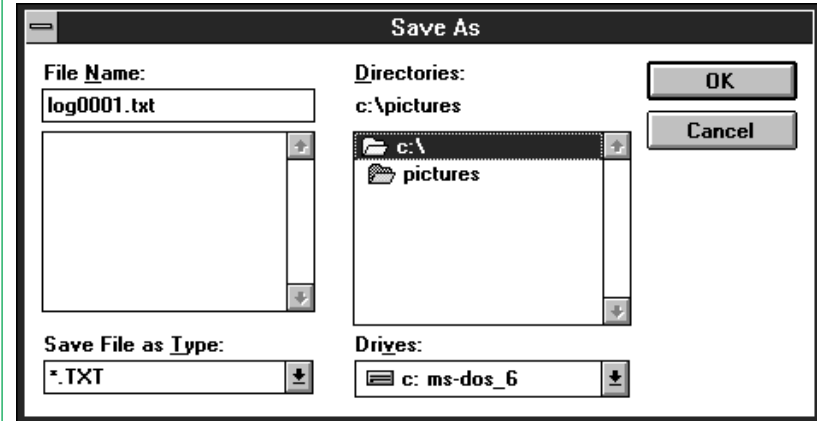
9.2 Scanning Log

When sequential scanning begins, the Log window appears and processing results are displayed image by image.



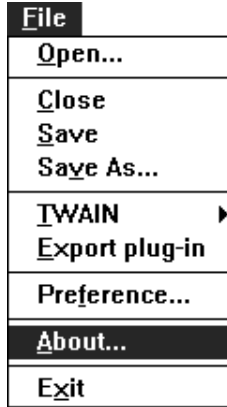
When you return after an unattended scanning session, consult the log first to get immediate feedback on scan completion. The contents of the Log window can be saved as a text file, and can be opened later using a text editor such as NotePad.

When the Log window is closed on completion of the sequential scan operation, the following window is displayed.



Specify the drive and directory in which the log file is to be saved, the file name, and file type, and click the **OK** button to save the log file.

10. About Window



When **A**bout... is chosen from the **F**ile menu, the About window appears.



The About window disappears the **O**K button is clicked.



Appendix A: Differences between Windows 3.1 and Windows 95 Versions

A.1 System Requirements

To run the Nikon Control Windows 95 version, the following minimum hardware and software is required:

- IBM PC/AT or compatible with i386DX or better
- Windows 95
- 8MB or more of RAM
(When launching this software as an application's TWAIN driver, you must take account of the amount of memory used by the application.)
- 1MB or more of hard disk capacity (a 300MB or larger hard disk is recommended)
- VGA (640 × 480) monitor or better
- 8-bit or more of video card and monitor with 16.7M colors, 64K colors, 32K colors, 256 colors

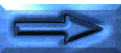
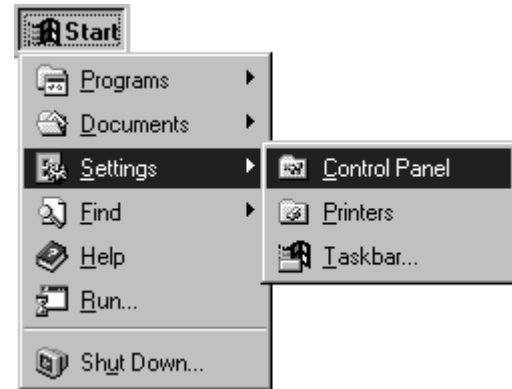
A.2 Software Installation

Step 1

After turning on your computer, start Windows 95 and insert the Install disk into the floppy disk drive.

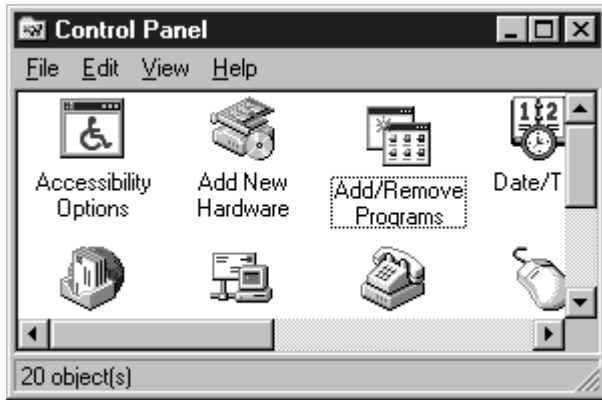
Step 2

Click the **Start** button.



Step 3

Open the **Control Panel** from the **Settings** menu and double-click "Add/Remove Programs".

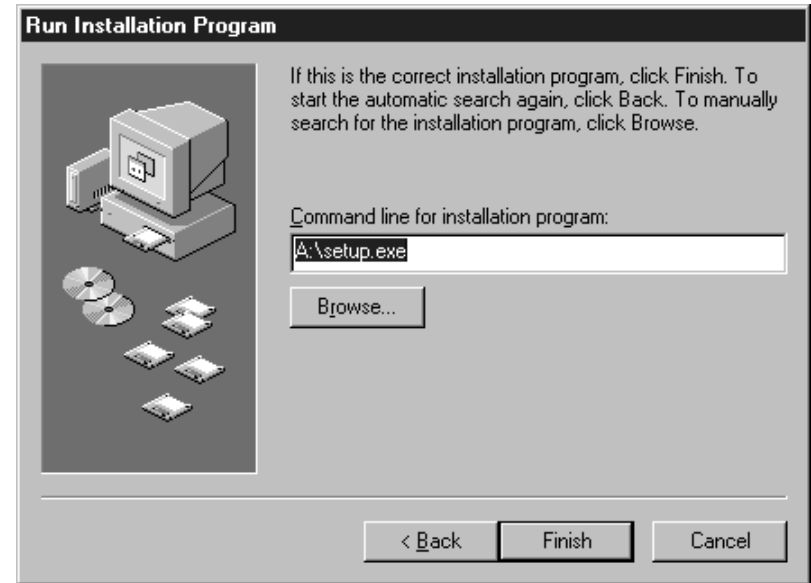


Step 4

Go to the **Install/Uninstall** tab and click **Install...**



Windows will prompt you to insert the installation disk into an appropriate drive. Make sure that the Install disk is inserted in the floppy disk drive and then click **Next**. The following window will appear.

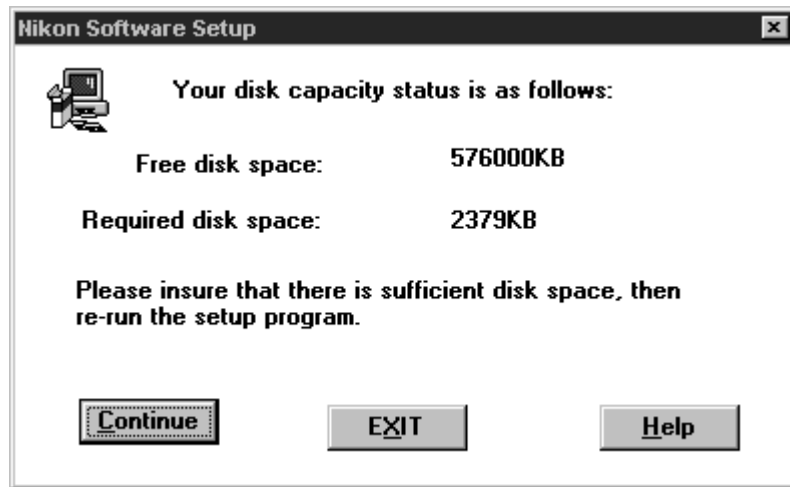


Step 5

In the **C**ommand line text box, enter the floppy disk drive's drive letter followed by "**\SETUP.EXE**" (if the floppy-disk drive is drive "A:", for example, enter "**A:\SETUP.EXE**") and then click **Finish**. The Welcome window will then appear.



After the Welcome window is closed, the following window appears to show the amount of Free and Required disk space.



Clicking the **C**ontinue button starts installation. The procedure from here on is the same as for the Windows 3.1 version. See [Section 2.2](#).

A.3 Control Palette

The control palette for the Windows 95 version is shown below.



- The Export plug-in button is omitted from the Control palette.
- Help messages are displayed on the Status bar of the Main Window.

A.4 Control Menu

The Control menu of the Windows 95 version is shown below.



- The **Switch To...** item is omitted from the Control menu.

A.5 File Menu

The **F**ile menu of the Windows 95 version is shown below.



- The **Export plug-in** command is omitted from the **F**ile menu.
- The names of image files recently acquired or opened are shown at the bottom of the **F**ile menu. You can open the image directly by choosing the file names without using the **O**pen command.

- The **Print Setup...** and the **Print...** commands are added on the **F**ile menu.

Using these commands, grayscale and color images can be printed on the printer you are using.

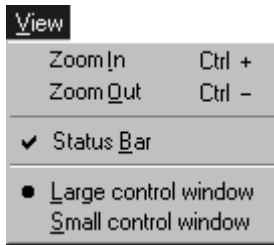
Choose the **Print Setup...** command to set up the printer and the **Print...** command to print images. Since the operation of these commands depends on the printer driver you are using, refer to the individual printer driver documentation for information on operation.

Note: *If the printer and image resolutions are not the same, the actual printed image size will be different from the original image size. For example, when a 5" x 5" image acquired at 600dpi is printed on a 300dpi printer, a 10" x 10" sized image is printed. In this case, part of the image may not be printed on letter size paper. To print the entire image on letter size paper, you should change the printer resolution if possible, or else change the image resolution by using the **Resolution** command from the **I**mage menu (see [Section A.7](#)).*

Note: *When printing on a color printer, the printed size may often be larger than the original image size, even if the image has the same resolution as the printer. We recommend setting an image resolution lower than the printer resolution when printing an image on a color printer.*

A.6 View Menu

The **V**iew menu of the Windows 95 version is shown below. The **V**iew menu has the following items.



The **Z**oom **I**n and **Z**oom **O**ut commands are added to the **V**iew menu. These commands are omitted from the **W**indow menu.

Control Palette

Nikon Control has two sizes of Control window. You can select the palette size by choosing the appropriate item.

Large control window: Selects the large control palette.

Small control window: Selects the small control palette.

Large control window



Small control window



Status Bar

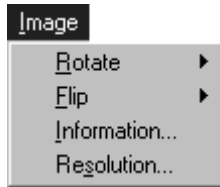
When the **S**tatus **B**ar item is checked, the Status bar appears at the bottom of Nikon Control Main window. Help messages are shown in the Status bar.



Status bar

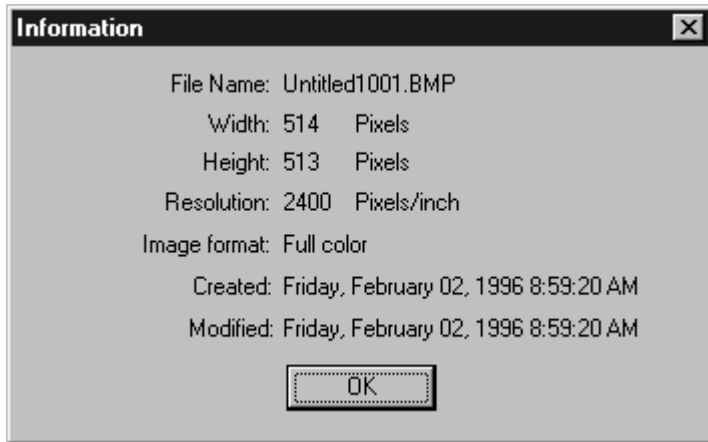
A.7 Image Menu

The **Image** menu of the Windows 95 version is shown below.

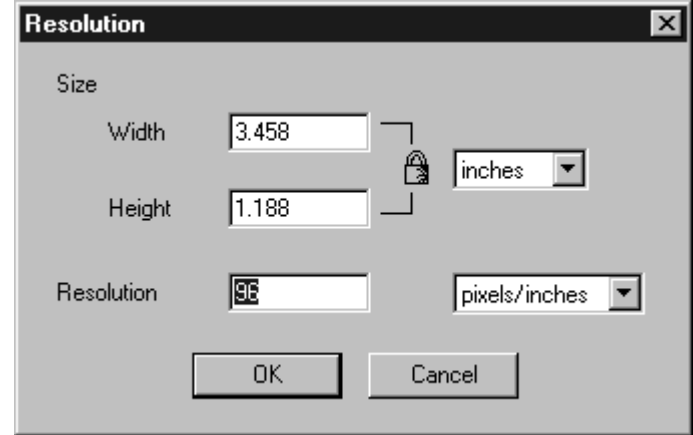


The **Information** and the **Resolution** commands are added to the **Image** menu. These commands provide or change information on the images.

Choosing the **Information** command brings up the Information window. This window shows information about the active image.

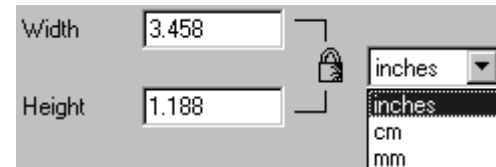


Choosing the **Resolution** command brings up the Resolution window. The Resolution window shows the size and the resolution of the active window image.



The width/height aspect is locked. If either width or height is entered, the other value is automatically calculated to maintain the locked width/height aspect, and the new value is displayed.

The units for width and height can be selected from the pop-up menu. When this selection is changed, the values in the boxes are converted to the equivalent new units.



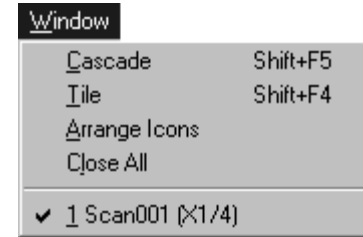
Entering a new value in the resolution box changes the image resolution. Using this function, you can print images on your printer in any size you want.

The unit for resolution can be selected from the pop-up menu. When this selection is changed, the values in the boxes are converted to the equivalent new units.



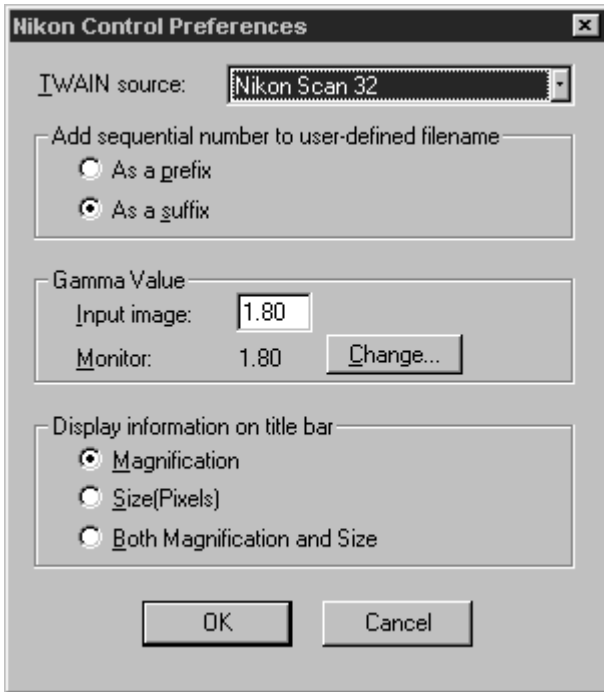
A.8 Window Menu

The **Window** menu of the Windows 95 version is shown below. The **Zoom In** and **Zoom Out** commands are omitted from the **Window** menu.



A.9 Preferences Window

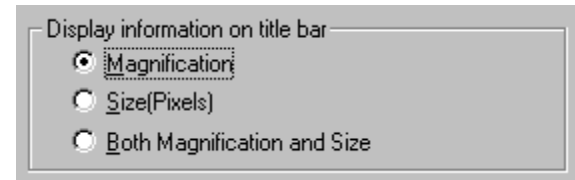
The Preferences window of the Windows 95 version is shown below.



The following items are omitted from the Preferences window:

- The Export plug-in selection menu
- Image window handling after exporting
- Control window selection (moved to the **View** menu)

The “**Display information on title bar**” item is added to the Preferences window. The magnification and/or pixel dimensions of an image can be added to the image window's title bar.



Meaning of the Radio Buttons

Magnification: The current magnification, or zoom level, of an image is displayed in its title bar when this button is pressed.

Size (pixels): The pixel dimensions of an image are displayed in its title bar when this button is pressed.

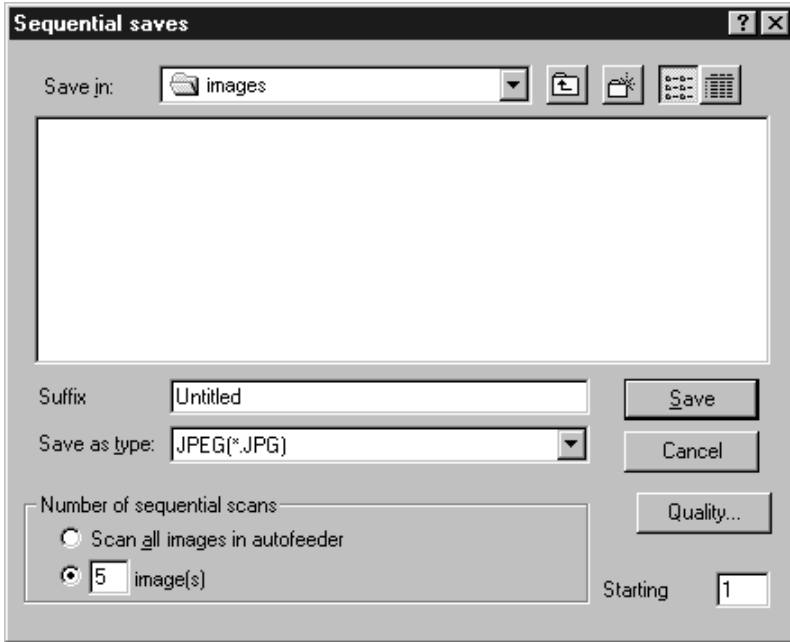
Both Magnification and Size:
The current magnification and pixel dimensions of an image are displayed in its title bar when this button is pressed.

When **Both Magnification and Size** is selected, the image window's title bar will appear as shown below.



A.10 Sequential Save Window

The Sequential Save window of the Windows 95 version is shown below. The Sequential Save window appears when the **Sequential Acquisition** button on the Control palette is clicked or the **Acquire with Autofeeder** command is chosen from the **File** menu.

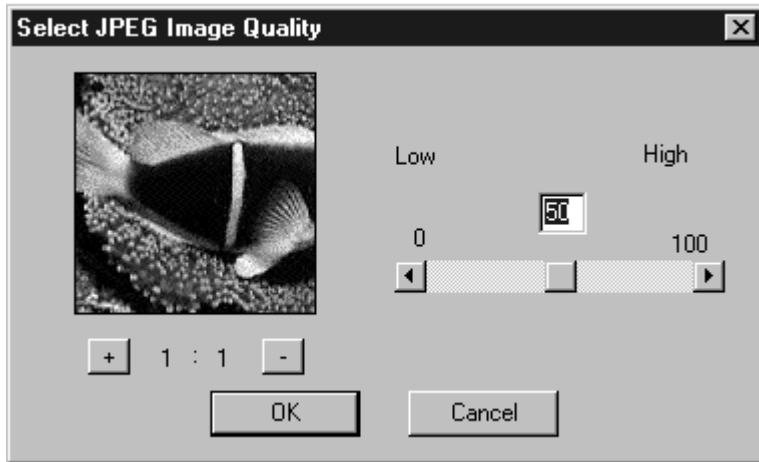


The “**Starting**” box is added to the Sequential Save window.

The **Starting** box specifies the initial file name number. For example, if the file name “ScanImage” is specified and the number “5” is typed in this box, the file names will be, in the order saved, “ScanImage005”, “ScanImage006”, “ScanImage007”, and so on.

A.11 Quality Window

The Quality window of the Windows 95 version is shown below. The Quality window appears when JPEG (*.JPG) is selected as the file type in the Save or Sequential Save window, and the **Quality...** button is clicked.

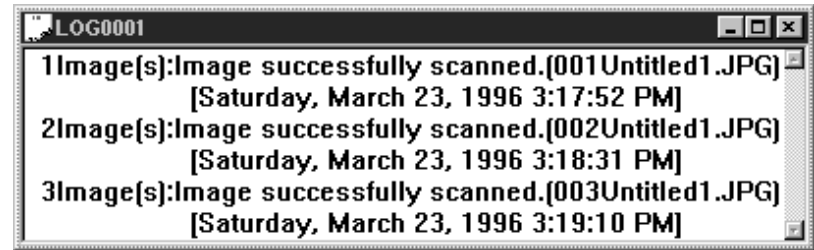


The compression setting value can be set by entering a value in the box or dragging the slider with the mouse. Moving the slider to the right decreases the compression and increases the image quality; moving the slider to the left has the opposite effect. Permissible values range from 0 to 100.

The preview area shows a part of the image. Clicking the + / - button enlarges/reduces the magnitude of the preview.

A.12 Log Window

The time and date are included in the Log window of the Windows 95 version.



Index

A

About command 12, 40
About window 40
Acquire a Single Image
 command 12, 18, 27
Acquire button 15, 18, 27
Acquire with Autofeeder
 command 12, 36
AF-10 auto document feeder
 4, 36
Arrange Icon command 14
As a prefix 23
As a suffix 23
Auto slide feeder 4, 36
AX-110 4, 36
AX-210 4, 36

C

Cascade command 14
Close All command 14
Close command 12, 32
Config... button 25
Control menu 11
 Windows 95 44
Control palette 15
 large 26, 46
 setting size of 26
 Windows 95 46
 small 26, 46
 Windows 95 44

E

Enlarging and reducing
 images 29
Exit command 12
Export button 15, 34
Export plug-in 22, 24
Export plug-in command
 12, 34
Exporting images 34

F

File menu 12
 Windows 95 45
Flip
 horizontal 30
 vertical 31
Flip command 13

G

Gamma value 22, 25

H

Help 16
Horizontal command 13, 30
Horizontal Flip button 16, 30

I

Image acquisition 27
Image menu 13
 Windows 95 47–48
Image window handling after
 exporting 22, 24
Image window operations 29
Installation 5
 Windows 95 41

L

Launching 10
List Files of Type text box
 33, 37
Loading images 35
LS-1000 4, 36

N

Naming files 23
Nikon Control icon 10
Number of sequential scans
 37

O

Open button 15, 35
Open command 12, 35

P

Preference... command
 12, 17, 21
Preferences 21
Preferences window 18, 22
 Windows 95 49
Prefix name 37

Q

Quality window 34
 Windows 95 51
Quality... button 33
Quitting 11

R

README file 9
Resolution 47
Rotate button 16, 29
Rotate command 13, 29
Rotating images 29

S

Save As button 15, 20, 32
Save As command
 12, 20, 32
Save As window 33
Save command 12
Saving images 32
Scanning basics 17
Scanning log 39
Scroll button 16, 30
Scrolling images 30
Scsichk.exe file 9
Sequential Acquire button
 15, 36
Sequential file number 22
Sequential image acquisition
 36
Sequential save window 36
 Windows 95 50
SF-100. *See* Auto slide feeder
Status bar 46
Suffix name 37
System requirements 5
 Windows 95 41



T

- Tile command 14
- Tool buttons 16
- TWAIN command 12
- TWAIN source 22, 23
- TWAIN source pop-up menu
18, 23

V

- Vertical command 31
- Vertical Flip button 16, 31

W

- Window menu 14
 - Windows 95 48
- Windows 95 4, 41-51

Z

- Zoom button 16
- Zoom cursors 29
- Zoom In command 14, 29
- Zoom Out command 14, 29